APPENDIX A

METHODOLOGY LETTER OF UNDERSTANDING

(MLOU)

SR-9/I-95 at PGA Boulevard/Central Boulevard PD&E Study

FM No. 413265 1 22 01

Methodology Letter of Understanding

March 31, 2014

INTERCHANGE JUSTIFICATION STUDY

Submitted to:
Florida Department of Transportation
District 4

Methodology Letter of Understanding (MLOU)

Type of request: ☒ IJR ☐ SIJR ☐ IMR ☐ SIMR ☐ IOAR ☐

SR-9/I-95 at Central Boulevard/PGA Boulevard

Interchange Justification/Project Development & Environmental Study

FPID: 413265 1 22 01

Determination of Engineering and Operational Acceptability

Signing this document does not constitute approval of the Interchange Access Request or commitment of funds. It is to be used as a guide and reference as the study progresses and is intended to establish initial expectations for the study. This document does not bind FDOT nor does it nullify the right to request changes to the study process, evaluation criteria or to request documentation above and beyond the items discussed in this document.

Requestor — Patrick R. Glass — 12/20/13

Patrick R. Glass, PE
Florida Department of Transportation, District 4

Date

N/A

☒ *Expressway Authority* — [Type Name Here] — *Date*

[Type Title Here]

Interchange Review Coordinator — Gustavo Schmidt — 12/20/13

Gustavo Schmidt, PE
District 4 Planning and Environmental Engineer

Date

☐ *Other* — *Date*

[Type Title Here]

State Interchange Review Coordinator — Martha Hodgson — 2/6/14

Martha Hodgson
Systems Planning Office – Central Office

Date

☐ *Federal Highway Administration* — for: Chad Thompson — 4/3/14

Chad Thompson, PE
Program Operations Engineer

Date

Type of request: ☒ **IJR** ☐ **SIJR** ☐ **IMR** ☐ **SIMR** ☐ **IOAR** ☐

- *Coordination of assumptions, procedures, data, networks, and outputs for project traffic review during the access request process will be maintained throughout the evaluation process.*
- *Full compliance with all MLOU requirements does not obligate the Acceptance Authorities to accept/approve the interchange access request.*

1.0 Introduction and Project Description

A. Provide background or supporting information that explains the basis for the request.

The Florida Department of Transportation (Requestor) is preparing an Interchange Justification Report (IJR) for the consideration of a proposed interchange with Interstate 95 (I-95) and Central Blvd. located in the City of Palm Beach Gardens, Palm Beach County, Florida. The purpose of this study is to establish the need and justification for the proposed interchange through the preparation of an IJR.

This document will serve as the Methodology Letter of Understanding (MLOU) between the Florida Department of Transportation (FDOT) District Four Interchange Review Committee (DIRC), and the Federal Highway Administration (FHWA). The MLOU has been developed in accordance with the FDOT Policy No. 000-525-015-g: Approval of New or Modified Access to Limited Access Facilities on the Strategic Intermodal System (SIS), FDOT Procedure No. 525-030-160-i: New or Modified Interchanges, and the FDOT Traffic Forecasting Handbook.

B. Purpose and Need Statement

Provide the Purpose, the Need, and the Goals and Objectives.

The purpose of the project is to improve regional mobility and overall traffic operations by examining improvements at the existing interchanges between Northlake Boulevard and Donald Ross Road along I-95, including at SR 786 (PGA Boulevard), as well as consideration of new interchange access within these limits, with focus on Central Boulevard and I-95, or Hood Road and I-95. The purpose is to achieve acceptable (LOS D) regional Levels of Service (LOS) in the future condition. The need for the project is based on the following primary and secondary criteria:

PRIMARY CRITERIA

CAPACITY/TRANSPORTATION DEMAND: Improve Operational Capacity and Overall Traffic Operations (Level of Service)

The project is anticipated to improve traffic operations at the PGA Boulevard interchange and study area roadways/intersections by implementing regional operational and capacity improvements to meet the future travel demand projected as a result of Palm Beach County population and employment growth. According to traffic data presented in the I-95 Area Wide Mobility Study, the northbound I-95 ramp terminal intersection at PGA Boulevard is currently operating at LOS E/F (AM/PM Peak Hours) and the intersection of PGA Boulevard at Military Trail is currently operating at LOS E (AM/PM Peak Hours). By year 2035, if no improvements occur, several additional locations are projected to deteriorate to unacceptable conditions, including the southbound I-95 ramp terminal intersection at PGA Boulevard to LOS F (PM Peak Hour), the intersection of PGA Boulevard and Central Boulevard to LOS F (AM/PM Peak Hours) and the intersection of PGA Boulevard at Florida's Turnpike to LOS F (AM/PM Peak Hours).

An Interchange Justification Report for a new interchange at Central Boulevard was completed in 2009 by Palm Beach County. It recommended the construction of a new

interchange along with the removal of the partial interchange ramps for I-95 at Military Trail to preserve interchange spacing requirements. At the two flanking interchanges (PGA Boulevard and Donald Ross Road), looking at intersection LOS at the two signalized ramp intersections (east side and west side), in two time periods (AM and PM) - a total of eight analyses, when comparing the No-Build and Build conditions in 2032, adding the new interchange at Central Boulevard improved the LOS by one letter grade in 3 instances, provided no change in 4, and degraded the LOS in one. The 2009 interchange proposal was not accepted by FDOT. In addition to revisiting the effect of a new interchange on existing interchange operations, this IJR will give additional attention to regional mobility issues

GROWTH MANAGEMENT: Accommodate Future Population and Employment Growth

The area surrounding the existing I-95 and PGA Boulevard interchange is urbanized containing a mixture of commercial, industrial, mixed-use and residential land uses with vacant land in the northeast quadrant. According to the City of Palm Beach Gardens Comprehensive Plan, future land use is to remain relatively unchanged, with the exception of the area east of the interchange which has been designated as part of the Bioscience Research Protection Overlay (BRPO). The BRPO was developed to protect portions of land for biotechnology/biosciences land uses and includes the Scripps Florida Phase II/Briger Tract DRI which consists of 82 acres located south of Donald Ross Road, north of Hood Road and east and west of I-95 (just north of the study area). The DRI includes 1,600,000 square feet of Biotech Research and Development, 2,400,000 square feet of biotechnological/ biomedical, pharmaceutical, and office space, 2,700 residential dwelling units, and 500,000 square feet of retail space. According to SERPM projections developed for Palm Beach County as part of the Palm Beach MPO 2035 LRTP development: - Population is projected to grow from 1,270,302 in 2005 to 1,677,170 in 2035 [32% increase]. - Employment is projected to grow from 544,496 in 2005 to 800,045 in 2035 [46.9% increase]. The improvements will be critical in supporting the growing bioscience industry and vision of the County, as well as the expanding residential, commercial and industrial uses in the vicinity of the interchange.

SECONDARY CRITERIA

MODAL INTERRELATIONSHIPS: Enhance Freight Mobility

I-95 is the primary interstate route along the east coast of the United States extending from Maine to Florida and serving some of the most populated urban areas in the country. In Florida, I-95 is a designated Strategic Intermodal System (SIS) highway. The SIS is a statewide network of highway, railway and waterway corridors as well as transportation hubs that handle the bulk of Florida's passenger and freight traffic. Highways that are designated as part of the SIS provide for movement of high volumes of goods and people at high speeds. Within southeast Florida, I-95 is a vital north-south transportation corridor providing important regional access to major east/west and north/south transportation corridors, as well as residential and employment activity centers and other regional destinations in the area. The proposed improvements at the I-95 and PGA Boulevard interchange and surrounding roadways/intersections are critical to enhance the mobility of goods by alleviating current and future congestion at the interchange and on the surrounding freight network. Reduced congestion will serve to maintain and improve viable access to the major transportation facilities and businesses of the area (including connectors to freight activity centers/local distribution facilities or between the regional freight corridors).

EMERGENCY EVACUATION: Enhance Emergency Evacuation and Response Times

I-95 and PGA Boulevard serve as part of the emergency evacuation route network designated by the Florida Division of Emergency Management. Also designated by Palm Beach County and the City of Palm Beach Gardens as evacuation facilities, I-95 and PGA Boulevard are critical in facilitating traffic during emergency evacuation periods as they connect other major arterials and highways of the state evacuation route network. The project is anticipated to:

- Improve emergency evacuation capabilities by enhancing connectivity and accessibility to I-95 and other major arterials designated on the state evacuation route network.
- Increase the operational capacity of traffic that can be evacuated during an emergency event.

C. *Project Location*

Provide a description of the interchange access request study area

Moving from south to north, the approximate milepost numbers along I-95 (Section 93220000) at the centerlines of the various cross roads (and the spacing between them in miles) are as follows:

Northlake Blvd. – 34.78
Spacing – 2.22
PGA Blvd. – 37.00
Spacing – 0.40
Military Trail – 37.40
Spacing – 1.02
Central Blvd. – 38.42
Spacing – 0.55
Hood Rd – 38.97
Spacing – 1.41
Donald Ross Rd. – 40.38

Exhibit /Figure #1 Project Location attached ☒

D. *Area of Influence*

Along mainline: Between Northlake Blvd. and Donald Ross Rd.

Along crossroads: The major intersections (minor ones such as Donald Ross Rd. at Heights Blvd., or PGA Blvd. at Shady Lakes Dr. were ignored) of:
Donald Ross Rd. between 64th Dr. N. and Military Trail;
Hood Rd. between Eastpointe Blvd. and Military Trail;
PGA Blvd. between the Turnpike and Lake Victoria Gardens;
Northlake Blvd. between Keating Dr. and Sandtree Ln; and
Central Blvd. between PGA Blvd. and Donald Ross Rd.

Exhibit/Figure #2 Area of Influence attached ☒

E. *Project Schedule*

Identify the schedule of production activities consistent with a proposed conceptual funding plan and opening year.

The anticipated schedule is aimed at submittal of the Final Interchange Proposal in early July, 2014, and completion of the Project Development and Environmental

(PD&E) report by June 1, 2015. The Final Interchange Proposal will be completed before the initiation of the PD&E Study, so that the scope of the PD&E can be established first. This is the reason for the separate completion dates of this phased improvement study.

2.0 Analysis Years

Traffic Operational Analysis will be conducted for the following years:

- Existing year **2013**
- Opening year 2020
- Interim year(s) 2030
- Design year 2040

Traffic Forecasting will be conducted on a 2040 model approved for use in the I-95 PD&E. Traffic will be Forecasted for the following years and then interpolated for the other traffic operational analysis years:

- Base year 2010
- Model Year 2040
- Horizon years 2040

3.0 Considered Alternatives

All Alternatives		Year of Analysis			
		Existing	*Opening*	*Interim*	*Design*
	No Build	☒	☒	☒	☒
Build	**Preferred Alternative**	☐	☒	☒	☒
Build	**Other Alternatives**	☐	☒	☒	☒
	TSM&O Alternative	☐	☒	☒	☒

☐ Requestor has developed specific alternative(s) at this point and the alternative(s) are described below.

Exhibit/Figure # attached ☐

☒ Build alternatives that were eliminated from consideration or evaluated within the PD&E process and discarded, will be documented as to why they were not carried forward.

4.0 Data Collection

The type of data that may be used should be identified.

A. Transportation System Data
Straight Line Diagrams, signal timing information, aerial photos, field inspection, Property Appraiser data, Comprehensive Plan Transportation Elements, Recently

adopted Functional Class determination have been assembled for use during this study.

B. Existing and Historical Traffic Data
Historical traffic data from FDOT and Palm Beach County. Existing traffic data (turning movement counts – some 8 hours on one day, some 24 hours over three days), 72 hour volume counts collected at selected arterial locations and some interchange ramps, and 72 hour classification counts collected at some interchange ramps. Counts were collected in April and May, 2013.

C. Land Use Data
Future Land Use Elements from the Palm Beach County and City of Palm Beach Gardens Comprehensive Plans. Model related socio-economic data forecasts agreed on by the MPO. Approved developments not reflected in any of the above.

D. Environmental Data
Environmental data contained in the Florida Natural Areas Inventory (FNAI), records documenting hazardous or contaminated properties from the Florida Department of Environmental Protection and Palm Beach County, and historical/cultural resource records of the State Historic Preservation Office, as well as the National Register of Historic Places will all be considered during this study.

E. Planned and Programmed Projects
Programmed Improvements: the MPO's current Transportation Improvement Program (TIP), and the Capital Improvement Elements from the Comprehensive Plans of Palm Beach County and the City of Palm Beach Gardens. Commitments from Development Agreements. Planned Improvements: the MPO's Long Range Transportation Plan (LRTP) and the SIS Cost Feasible Plan.

5.0 Travel Demand Forecasting

A. Selected Travel Demand Model(s)

The Southeast Regional Planning Model (SERPM) version 6.5 is the version that was used to update the three MPO LRTPs to 2035 conditions. It was validated to 2005 conditions. SERPM v6.5 was the basis for a subarea model used for the I-95 Corridor Planning Study (CPS), and that model bore the same name: I-95 CPS. For the I-95 PD&E effort, this sub-area model was further refined to a tight sub-area model. The I-95 PD&E tight sub-area model followed I-95 as far north as Linton Blvd., and included the first arterial intersections east and west of the ramp terminals at each interchange. The FDOT has extended the tight sub-area model northward to Indiantown Road for this IJR, and broadened it through the IJR study area to include *most* of the major intersections within it. This is a trip based model that contains no traffic analysis zones north of the Palm Beach County/Martin County border.

B. Project Traffic Forecast Development Methodology
Describe the methodology and assumptions in developing the future year alternative travel demand models and methodology and software to be applied to develop future year project traffic (AADTs and DDHVs).

This model produces three separate assignments: a three hour AM peak period, a three hour PM peak period, and a third assignment containing the sum of all the off-peak hours in the day. The directional balance in volumes typically observed in a daily model is absent here, and the directionality of traffic in the peak periods is evident in the assignment volumes.

C. Validation Methodology
☒ Utilizing current FDOT procedures in data collection.

Procedure: The validation work for the I-95 PD&E study was done on a 2010 network. The 2010 zonal contents used in this model were not Census based, but rather an interpolation between the 2005 zonal contents and 2035 zonal contents developed for SERPM 6.5 and approved by the respective MPOs as part of the last LRTP update process. 2010 Census based estimates at the TAZ level were not yet approved for use when this effort occurred. Similarly, the 2040 zonal contents used in the I-95 PD&E effort were not the same as the 2040 zonal contents being developed by the MPOs for the next update of their LRTPs; the work effort on the I-95 PD&E preceded the approval for use of the new 2040 data sets. Rather, the 2040 zonal data sets used in the I-95 PD&E work contain extrapolations beyond the approved 2035 zonal contents.
One of the refinements to this subarea model was the use of CUBE Analyst to make adjustments to the O-D table that is the output of the trip distribution step in ways that improved the agreement between the model assignment volumes in the validation year and traffic counts. Unlike historical models, for which validation was performed using daily traffic counts as the basis of comparison, the aforementioned adjustments to the O-D table were made seeking better agreement in peak period volumes (assignment versus counted). For this reason, peak period volumes are the most reliable output from this model.

- Identify how modifications to the travel demand forecasting model will be made, including modifications to the facility type and area type for links, modifications to socio-economic data and all input and output modeling files for review.

The FDOT has previously used this model for the I-95 PD&E (Stirling Rd. to Linton Blvd. – Corridor Design Traffic Report, November 2012), which was reviewed and accepted by the FHWA. Documentation of any modifications that were made to the model can be provided if needed under separate cover.

D. Adjustment Procedures
Identify the process used to adjust modeled future year traffic to the defined analysis years. Discuss how trends/growth-rates will be factored into this.

As mentioned above, because peak period volumes are the most reliable output of

the model, in the I-95 PD&E the traditional factoring of model daily volumes down to peak hour directional volumes through the use of K and D factors was not used. Peak period volumes were used directly, subject to reasonableness checks. This will also be the approach used in this IJR.

The model's peak period output does need to be converted to a peak hour volume. The developer of the tight sub-area model used the term "diurnal factor" to describe the peak hour's fraction of the three hour peak period. The developer noted sufficient spatial stability in this factor to use only one in all locations, with a separate factor for the AM and PM peak periods. This estimation work was done for mainline locations. Absent a suggestion from the model developer, the two diurnal factors for AM and PM from the PD&E work will be used for all peak period assignment volumes, mainline or arterial, in this IJR.

Opening (2020) and interim (2030) year peak hour volumes will be interpolations (assuming exponential growth) between 2013 existing condition peak hour volumes and 2040 horizon/design year peak hour volumes. The growth rate in traffic volumes necessary to reach 2040 model volumes will be compared with the growth rate in land use intensity implicit in a comparison of the 2010 and 2040 socio-economic data sets used in the base year and horizon year simulation models. The historic trend in traffic volume growth is not a reliable source for comparison here due to the influence of the recession and the impending limit on future development as the county approaches build out.

E. Traffic Factors

☒ Utilizing recommended ranges identified in the Project Traffic Forecasting Handbook and Procedure (525-030-120).

☒ Utilizing other factors, identified below

Roadway	K	D	T	T_f	PHF	MOCF
I-95	N/A	N/A	7.5	3.7	0.95	N/A
All Arterials	N/A	N/A	3.4	1.7	0.95	N/A

Source: I-95: FDOT Sta. 2187 (N of PGA Blvd), 2012. Arterials: FDOT Sta. 5300 (PGA Blvd. E. of I-95), 2012.

6.0 Traffic Operational Analysis

The area type, traffic conditions, and analysis tools to be used are summarized in this section.

A. Area Type/Traffic Conditions

Area Type	Conditions	
	Under-saturated	*Saturated*
Rural	☐	☐
Urban Areas/Transitioning Urbanized Areas	☐	☒
Urbanized Areas/Central Business District (CBD)	☐	☐

B. Traffic Analysis Software Used

Software		System Component					
		Freeways					
Name	*Version*	*Basic Segment*	*Weaving*	*Ramp Merge*	*Ramp Diverge*	*Arterials*	*Intersections*
LOSPLAN		☐	☐	☐	☐	☐	☐
HCS/HCM		☒	☒	☒	☒	☐	☐
Synchro		☐	☐	☐	☐	☒	☒
SimTraffic		☐	☐	☐	☐	☐	☐
Corsim		☐	☐	☐	☐	☐	☐
Vissim		☐	☐	☐	☐	☐	☐
		☐	☐	☐	☐	☐	☐

C. Calibration

☒ Calibration methodology and parameters utilized will be documented. Any deviations will be justified.

D. Selection of Measures of Effectiveness (MOE)

- *The Level of Service criteria for each roadway classification, including mainline, ramps, ramp terminal intersections and the cross road beyond the interchange ramp terminal intersections are identified below.*
  The LOS threshold will be consistent with FDOT procedures and be LOS "D" for all conditions. The methods used will be according to the 2010 Highway Capacity Manual.

- *In addition to the Level of Service criteria, state other operational criteria to be utilized for the evaluation of alternatives, including ramp queue lengths, arterial level of service, etc.*
  Average arterial speed, intersection delay, queue lengths.

7.0 Safety Analysis

☒ Detailed crash data within the study area will be analyzed and documented.
Years: 2006 - 2011
Source: FDOT Crash Analysis Report Database

8.0 Consistency with Other Plans/Projects

☒ The request will be reviewed for consistency with facility Master Plans, Actions Plans, SIS/ FIHS Plan, MPO Long Range Transportation Plans, Local Government Comprehensive Plans or development applications, etc.

☒ Where the request is inconsistent with any plan, steps to bring the plan into consistency will be developed.

☒ The operational relationship of this request to the other interchanges will be reviewed and documented. The following other Interchange Access Requests are located within the area of influence.

We are not aware of any other Interchange Access Requests currently under consideration within the area of influence.

9.0 Environmental Considerations

A. Status of Environmental Approval and permitting process

This interchange proposal is being conducted before initiating the NEPA process. Once the conclusions of this study are known, the NEPA study will commence, including determination of the class of action.

B. Identify the environmental considerations that could influence the outcome of the alternative development and selection process.

A cursory desktop review of the corridor conditions indicates low potential for environmental impact that cannot be minimized or effectively mitigated. Potential noise impacts have a moderate potential to require engagement during the NEPA phase for these improvements, but it is likely that mitigation of impacts will be possible.

10.0 Coordination

Yes	No	N/A	
☒	☐	☐	An appropriate effort of coordination will be made with appropriate proposed developments in the area.
☒	☐	☐	Request will identify and include (if applicable) a commitment to complete the other non-interchange/non-intersection improvements that are necessary for the interchange/intersection to function as proposed.
☒	☐	☐	Request will document whether the project requires financial or infrastructure commitments from other agencies, organizations, or private entities.
☒	☐	☐	Request will document any pre-condition contingencies required in regards to the timing of other improvements and their inclusion in a TIP/STIP/LRTP prior to the Interstate access acceptance (final approval of NEPA document).
☒	☐	☐	Request will document the funding and phasing.

11.0 Anticipated Design Exceptions and Variations

☒ Design exceptions are not anticipated, but as the PD&E phase of the project provides additional detail, any identified design exceptions will be noted.

☐ The following exceptions/variations to FDOT, AASHTO or FHWA rules, policies, standards, criteria or procedures have been identified:

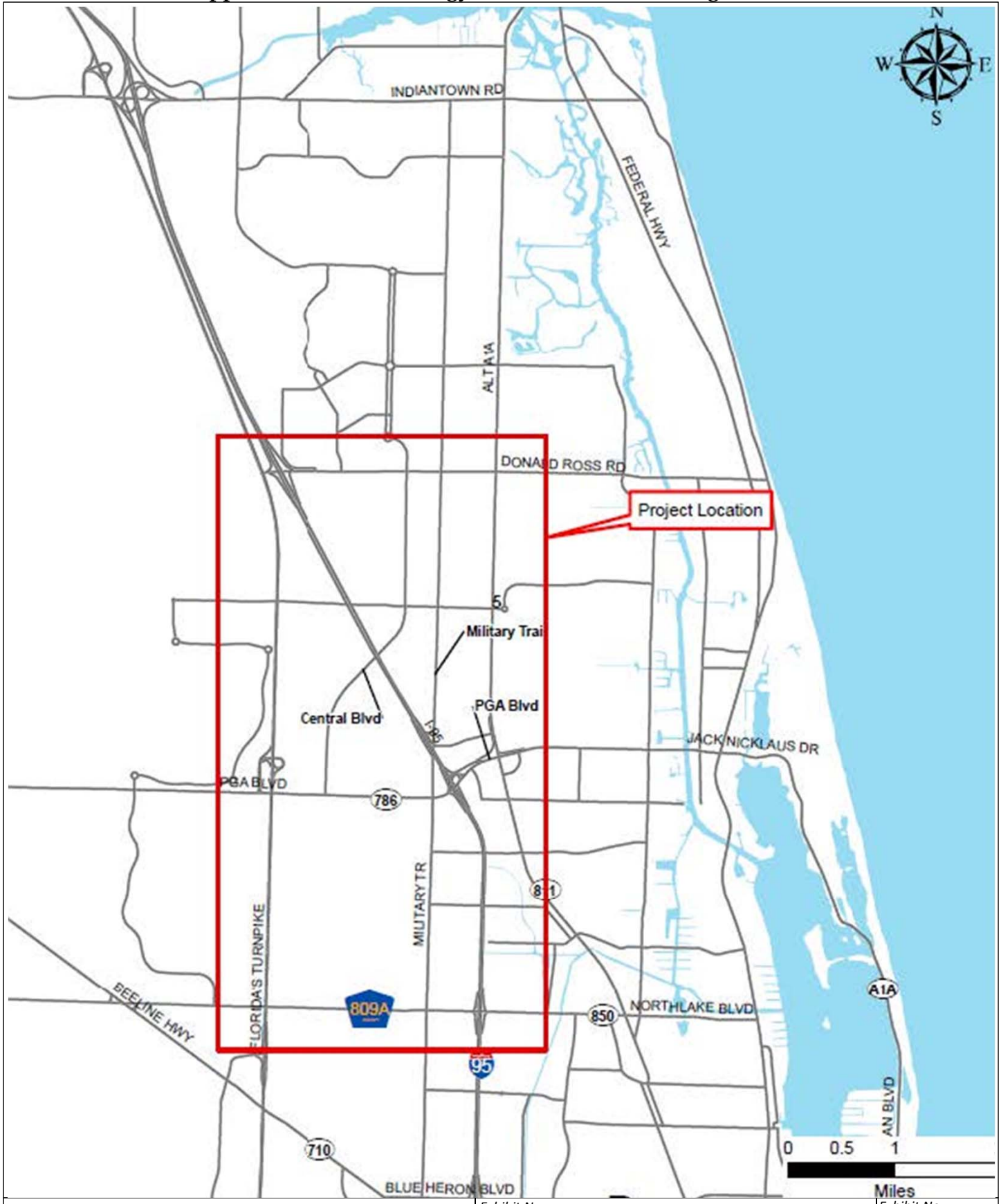
12.0 Conceptual Signing Plan

☒ A conceptual signing and marking plan shall be prepared and included.

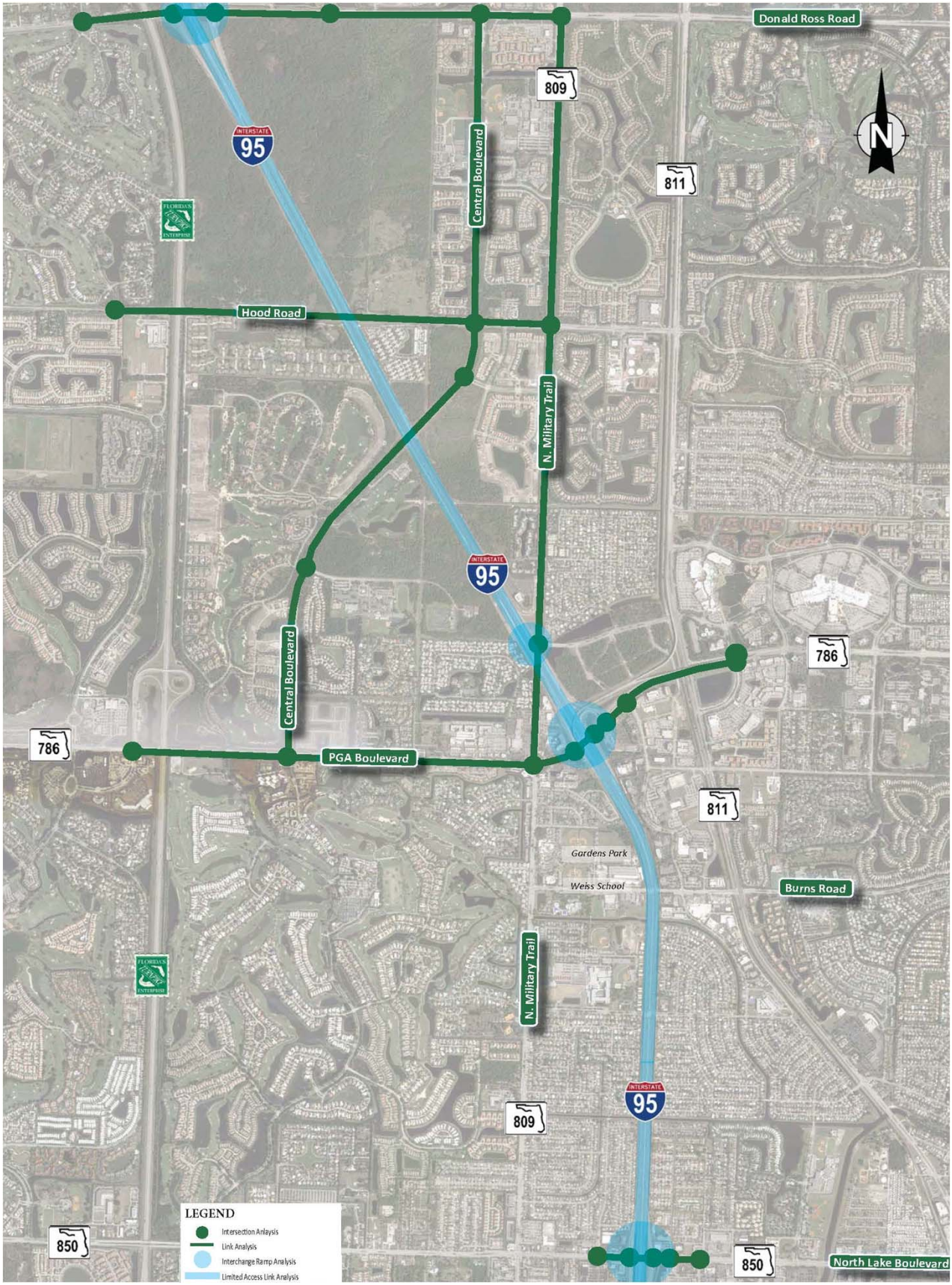
13.0 FHWA Policy Points

The following eight FHWA Policy Criteria (also known as 8 FHWA criteria, Doc E9-20679, dated August 22, 2009) will be specifically addressed within the requested unless identified as not applicable:

N/A	8 FHWA Criteria
☐	Policy Point 1: Need for the Access Point Revision
☐	Policy Point 2: Reasonable Alternatives
☐	Policy Point 3: Operational and Safety Analyses
☐	Policy Point 4: Access Connections and Design
☐	Policy Point 5: Land Use and Transportation Plans
☐	Policy Point 6: Future Interchanges
☐	Policy Point 7: Coordination
☐	Policy Point 8: Environmental Processes



Project Name: **SR 9 / I-95 at PGA Boulevard/ Central Boulevard** Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Project Location Map** *Report Title:* Methodology Letter of Understanding	*Exhibit No.* 1 *Page No.* Ex. 1 *Date:* 7/21/13



Project Name: **SR 9 / I-95 at PGA Boulevard/ Central Boulevard** Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Project Area of Influence** *Report Title:* Methodology Letter of Understanding	*Exhibit No.* 2 *Page No.* Ex-2 *Date:* 8/21/13

APPENDIX B

DATA COLLECTION

I-95 VOLUME COUNT REPORTS

County: 93
Station: 2209
Description: I-95 N\O INDIANTOWN
Start Date: 04/16/2013
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	107	113	96	86	402	69	64	61	39	233	635
0100	56	51	66	32	205	42	56	43	43	184	389
0200	39	32	31	39	141	44	41	33	49	167	308
0300	24	35	53	49	161	47	63	76	59	245	406
0400	50	55	65	76	246	94	100	145	150	489	735
0500	78	113	147	141	479	205	261	303	376	1145	1624
0600	215	248	302	297	1062	524	596	768	770	2658	3720
0700	379	406	463	468	1716	952	988	1124	1093	4157	5873
0800	414	446	360	370	1590	928	918	833	750	3429	5019
0900	370	412	445	430	1657	650	623	567	584	2424	4081
1000	432	439	442	464	1777	502	540	544	452	2038	3815
1100	442	458	463	471	1834	453	450	509	449	1861	3695
1200	450	436	481	450	1817	408	447	426	394	1675	3492
1300	482	449	480	495	1906	441	454	465	421	1781	3687
1400	508	538	567	577	2190	419	397	461	408	1685	3875
1500	567	655	686	713	2621	401	444	427	483	1755	4376
1600	759	865	886	988	3498	406	464	436	434	1740	5238
1700	1030	1088	1076	1003	4197	466	469	482	446	1863	6060
1800	816	747	666	559	2788	420	388	363	311	1482	4270
1900	487	463	365	367	1682	292	272	235	233	1032	2714
2000	392	328	334	291	1345	226	210	224	224	884	2229
2100	297	257	263	235	1052	185	174	169	135	663	1715
2200	215	184	191	168	758	167	124	124	101	516	1274
2300	146	173	128	120	567	103	90	92	83	368	935
24-Hour Totals:					35691					34474	70165

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	730	1791	700	4157	715	5884
P.M.	1700	4197	1700	1863	1700	6060
Daily	1700	4197	700	4157	1700	6060

Truck Percentage 7.72 7.08 7.41

Classification Summary Database

Dir	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TotTrk	TotVol
N	14	28146	4773	130	736	65	1	235	1499	10	49	32	0	0	1	2757	35691
S	89	20593	11351	70	1208	112	4	941	0	21	43	35	7	0	0	2441	34474

Generated by SPS 5.0.44P

County: 93
Station: 2209
Description: I-95 N\O INDIANTOWN
Start Date: 04/17/2013
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	96	120	90	80	386	68	57	61	60	246	632
0100	58	46	38	39	181	79	76	57	48	260	441
0200	33	50	39	41	163	67	56	54	52	229	392
0300	37	43	45	37	162	62	60	86	78	286	448
0400	43	58	66	83	250	93	97	132	154	476	726
0500	80	107	142	170	499	202	219	285	364	1070	1569
0600	209	258	305	300	1072	477	585	796	791	2649	3721
0700	391	385	452	437	1665	916	994	1064	1059	4033	5698
0800	446	437	420	419	1722	936	908	862	705	3411	5133
0900	386	390	444	434	1654	517	338	328	340	1523	3177
1000	419	471	423	418	1731	324	321	399	655	1699	3430
1100	452	447	420	464	1783	671	604	460	421	2156	3939
1200	423	445	455	446	1769	419	432	449	421	1721	3490
1300	423	446	468	511	1848	404	392	476	436	1708	3556
1400	530	535	552	582	2199	458	422	450	471	1801	4000
1500	604	704	673	764	2745	443	474	468	475	1860	4605
1600	834	978	850	952	3614	487	492	508	516	2003	5617
1700	987	1147	1106	926	4166	499	540	495	481	2015	6181
1800	809	808	639	549	2805	489	473	364	302	1628	4433
1900	483	431	441	378	1733	269	267	228	253	1017	2750
2000	357	370	377	318	1422	225	223	230	180	858	2280
2100	291	339	253	286	1169	176	182	200	143	701	1870
2200	240	244	226	175	885	178	145	146	145	614	1499
2300	153	167	149	125	594	102	83	84	81	350	944
24-Hour Totals:					36217					34314	70531

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	730	1772	715	4053	715	5773
P.M.	1645	4192	1630	2063	1645	6242
Daily	1645	4192	715	4053	1645	6242

Truck Percentage 7.47 6.99 7.24

Classification Summary Database

Dir	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TotTrk	TotVol
N	19	28834	4657	124	644	61	1	269	1529	11	40	26	2	0	0	2707	36217
S	533	20043	11340	66	1151	95	7	995	0	16	41	22	5	0	0	2398	34314

Generated by SPS 5.0.44P

County: 93
Station: 2209
Description: I-95 N\O INDIANTOWN
Start Date: 04/18/2013
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	126	107	112	87	432	87	70	88	86	331	763
0100	64	74	40	37	215	71	82	110	66	329	544
0200	38	36	43	58	175	60	49	58	49	216	391
0300	30	31	38	56	155	66	75	79	91	311	466
0400	58	55	67	81	261	97	115	136	163	511	772
0500	98	135	114	180	527	211	232	315	407	1165	1692
0600	202	271	283	303	1059	447	612	783	757	2599	3658
0700	378	436	468	475	1757	870	1025	1134	1074	4103	5860
0800	480	436	418	415	1749	915	859	841	744	3359	5108
0900	407	393	383	417	1600	589	599	551	536	2275	3875
1000	496	514	512	458	1980	511	501	533	483	2028	4008
1100	532	492	506	473	2003	499	435	493	435	1862	3865
1200	459	489	455	491	1894	470	424	503	441	1838	3732
1300	495	412	372	548	1827	437	443	416	472	1768	3595
1400	649	612	581	587	2429	532	468	455	447	1902	4331
1500	639	636	745	782	2802	454	446	505	488	1893	4695
1600	841	944	930	1055	3770	514	461	500	571	2046	5816
1700	988	1196	1103	942	4229	491	513	519	465	1988	6217
1800	802	785	675	528	2790	448	425	394	329	1596	4386
1900	510	519	419	396	1844	318	293	268	270	1149	2993
2000	404	376	335	334	1449	216	239	225	236	916	2365
2100	337	313	265	261	1176	203	166	204	185	758	1934
2200	249	267	234	217	967	199	164	197	154	714	1681
2300	183	183	141	129	636	116	114	100	133	463	1099
24-Hour Totals:					37726					36120	73846

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	715	1859	715	4148	715	6007
P.M.	1645	4342	1645	2094	1645	6436
Daily	1645	4342	715	4148	1645	6436

Truck Percentage 7.23 6.76 7.00

Classification Summary Database

Dir	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TotTrk	TotVol
N	30	30084	4886	106	715	68	6	272	1477	15	39	27	1	0	0	2726	37726
S	351	22260	11067	92	1157	113	2	978	0	13	50	28	9	0	0	2442	36120

Generated by SPS 5.0.44P

County: 93
Station: 2214
Description: I-95 S\O DONALD ROSS
Start Date: 04/16/2013
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	181	145	115	106	547	101	112	78	72	363	910
0100	77	87	53	54	271	48	76	67	59	250	521
0200	51	47	35	46	179	55	51	62	56	224	403
0300	43	55	59	59	216	56	67	97	82	302	518
0400	64	80	81	105	330	111	128	170	188	597	927
0500	125	149	191	254	719	232	294	406	481	1413	2132
0600	292	347	515	575	1729	581	759	984	1170	3494	5223
0700	647	762	872	833	3114	1214	1434	1646	1696	5990	9104
0800	812	746	759	729	3046	1484	1476	1291	1334	5585	8631
0900	728	657	746	688	2819	1051	1032	916	934	3933	6752
1000	681	680	705	751	2817	803	844	855	775	3277	6094
1100	692	748	779	779	2998	695	731	763	834	3023	6021
1200	766	702	781	775	3024	683	711	697	715	2806	5830
1300	715	832	816	813	3176	697	691	730	674	2792	5968
1400	851	859	906	941	3557	665	690	750	726	2831	6388
1500	1061	1076	1184	1168	4489	676	808	751	785	3020	7509
1600	1162	1395	1339	1480	5376	771	818	775	857	3221	8597
1700	1571	1632	1719	1434	6356	876	931	823	782	3412	9768
1800	1123	1141	1040	866	4170	709	718	641	587	2655	6825
1900	791	723	637	653	2804	481	486	418	392	1777	4581
2000	577	519	577	495	2168	362	358	360	375	1455	3623
2100	514	509	416	388	1827	306	302	269	208	1085	2912
2200	362	331	320	268	1281	206	230	179	150	765	2046
2300	250	202	194	176	822	150	137	128	129	544	1366
24-Hour Totals:					57835					54814	112649

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	715	3279	730	6302	730	9565
P.M.	1645	6402	1645	3487	1645	9889
Daily	1645	6402	730	6302	1645	9889

Truck Percentage 8.65 8.45 8.55

Classification Summary Database

Dir	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TotTrk	TotVol
N	144	43755	8923	422	1341	102	58	830	2100	39	69	40	2	0	10	5003	57835
S	48	43885	6251	329	1065	181	6	886	2034	29	57	40	3	0	0	4630	54814

Generated by SPS 5.0.44P

County: 93
Station: 2214
Description: I-95 S\O DONALD ROSS
Start Date: 04/17/2013
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	157	168	120	119	564	91	81	67	72	311	875
0100	89	69	70	63	291	50	46	49	43	188	479
0200	67	94	60	60	281	44	51	45	50	190	471
0300	57	55	62	49	223	45	66	100	93	304	527
0400	63	87	91	104	345	110	128	158	186	582	927
0500	135	131	220	266	752	232	270	357	464	1323	2075
0600	288	376	517	577	1758	560	735	1033	1187	3515	5273
0700	639	744	881	826	3090	1260	1481	1675	1697	6113	9203
0800	819	820	772	767	3178	1541	1503	1328	1283	5655	8833
0900	693	668	691	628	2680	1033	831	684	734	3282	5962
1000	708	690	723	725	2846	661	667	704	881	2913	5759
1100	688	712	699	765	2864	985	969	790	751	3495	6359
1200	689	767	736	750	2942	726	741	723	718	2908	5850
1300	757	833	905	863	3358	745	684	726	720	2875	6233
1400	841	889	988	972	3690	692	727	729	725	2873	6563
1500	1021	1040	1125	1258	4444	767	810	779	816	3172	7616
1600	1346	1375	1366	1463	5550	702	878	818	862	3260	8810
1700	1572	1844	1481	1409	6306	829	922	888	828	3467	9773
1800	1301	1222	1000	901	4424	749	753	650	542	2694	7118
1900	757	775	680	628	2840	527	509	410	389	1835	4675
2000	619	632	577	565	2393	344	387	354	334	1419	3812
2100	532	472	515	471	1990	324	346	306	265	1241	3231
2200	471	420	364	297	1552	265	234	244	212	955	2507
2300	297	253	229	200	979	185	155	127	105	572	1551
24-Hour Totals:					59340					55142	114482

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	730	3346	730	6416	730	9762
P.M.	1645	6360	1645	3501	1645	9861
Daily	1645	6360	730	6416	1645	9861

Truck Percentage 8.07 8.64 8.35

Classification Summary Database

Dir	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TotTrk	TotVol
N	240	45095	9195	395	1329	82	69	773	2015	35	55	34	4	0	19	4791	59340
S	107	43963	6302	342	1042	188	11	962	2106	28	57	27	4	0	3	4767	55142

Generated by SPS 5.0.44P

County: 93
Station: 2214
Description: I-95 S\O DONALD ROSS
Start Date: 04/18/2013
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	210	230	157	130	727	135	93	86	85	399	1126
0100	136	96	111	92	435	77	61	72	67	277	712
0200	85	103	110	80	378	47	65	48	47	207	585
0300	75	81	77	130	363	61	77	113	115	366	729
0400	128	117	128	138	511	125	145	179	172	621	1132
0500	178	177	228	256	839	257	318	392	447	1414	2253
0600	315	388	528	619	1850	600	731	1018	1162	3511	5361
0700	642	749	863	822	3076	1206	1431	1595	1781	6013	9089
0800	817	804	871	802	3294	1527	1424	1267	1293	5511	8805
0900	708	694	658	743	2803	1098	993	927	940	3958	6761
1000	755	798	752	751	3056	846	755	855	781	3237	6293
1100	792	816	748	773	3129	789	706	767	764	3026	6155
1200	804	743	864	815	3226	741	745	718	749	2953	6179
1300	722	649	759	1149	3279	708	772	735	758	2973	6252
1400	940	957	989	989	3875	744	776	751	790	3061	6936
1500	1036	1067	1174	1254	4531	761	836	852	844	3293	7824
1600	1235	1447	1361	1590	5633	846	859	812	915	3432	9065
1700	1548	1750	1537	1416	6251	871	937	860	915	3583	9834
1800	1248	1145	1017	861	4271	772	810	636	618	2836	7107
1900	818	742	678	645	2883	506	541	452	405	1904	4787
2000	615	613	544	577	2349	387	376	370	350	1483	3832
2100	496	524	445	439	1904	341	319	288	296	1244	3148
2200	394	376	369	309	1448	287	324	270	287	1168	2616
2300	270	210	169	187	836	208	204	170	148	730	1566
24-Hour Totals:					60947					57200	118147

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	745	3314	715	6334	730	9633
P.M.	1645	6425	1645	3583	1645	10008
Daily	1645	6425	715	6334	1645	10008

Truck Percentage 7.77 8.79 8.27

Classification Summary Database

Dir	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TotTrk	TotVol
N	260	46758	9176	389	1361	105	19	847	1896	30	58	29	4	0	15	4738	60947
S	109	45597	6465	406	1073	158	13	1001	2242	25	65	41	5	0	0	5029	57200

Generated by SPS 5.0.44P

County: 93
Station: 2172
Description: I-95 S\O 45TH ST
Start Date: 04/16/2013
Start Time: 0000

	Direction: S				
Time	1st	2nd	3rd	4th	Total
0000	204	187	142	140	673
0100	100	100	112	73	385
0200	74	98	96	74	342
0300	95	128	111	119	453
0400	157	199	242	284	882
0500	322	381	464	597	1764
0600	697	991	1200	1407	4295
0700	1453	1864	1942	2141	7400
0800	2101	2072	1961	1795	7929
0900	1586	1540	1448	1372	5946
1000	1353	1353	1369	1374	5449
1100	1276	1317	1378	1400	5371
1200	1325	1377	1404	1257	5363
1300	1284	1337	1407	1368	5396
1400	1440	1405	1457	1486	5788
1500	1543	1657	1811	1733	6744
1600	1685	1801	1828	1832	7146
1700	1990	2090	1983	1871	7934
1800	1487	1547	1281	1123	5438
1900	1090	1030	871	789	3780
2000	828	819	764	728	3139
2100	688	629	577	515	2409
2200	527	543	440	325	1835
2300	360	321	309	241	1231
24-Hour Totals:					97092

Peak Volume Information

	Hour	Volume
A.M.	745	8275
P.M.	1700	7934
Daily	745	8275

Generated by SPS 5.0.44P

County: 93
Station: 2172
Description: I-95 S\O 45TH ST
Start Date: 04/17/2013
Start Time: 0000

	Direction: S				
Time	1st	2nd	3rd	4th	Total
0000	228	187	136	134	685
0100	138	93	105	98	434
0200	106	97	86	100	389
0300	105	126	106	137	474
0400	175	188	239	259	861
0500	305	371	447	576	1699
0600	692	909	1194	1470	4265
0700	1592	2038	2128	2181	7939
0800	2239	2180	2030	1807	8256
0900	1521	1540	1348	1249	5658
1000	1166	1211	1230	1314	4921
1100	1460	1521	1421	1423	5825
1200	1383	1421	1357	1367	5528
1300	1342	1352	1425	1432	5551
1400	1391	1474	1434	1546	5845
1500	1522	1729	1845	1706	6802
1600	1705	1816	1866	1921	7308
1700	2059	2128	2076	1902	8165
1800	1657	1623	1362	1156	5798
1900	1054	1030	923	857	3864
2000	760	820	795	743	3118
2100	700	690	686	628	2704
2200	581	550	477	455	2063
2300	383	351	299	270	1303
24-Hour Totals:					99455

Peak Volume Information

	Hour	Volume
A.M.	730	8728
P.M.	1645	8184
Daily	730	8728

Generated by SPS 5.0.44P

County: 93
Station: 2172
Description: I-95 S\O 45TH ST
Start Date: 04/18/2013
Start Time: 0000

	Direction: S				
Time	1st	2nd	3rd	4th	Total
0000	280	221	170	153	824
0100	141	149	105	125	520
0200	103	106	105	98	412
0300	113	130	127	148	518
0400	169	222	253	265	909
0500	326	377	447	586	1736
0600	700	956	1197	1461	4314
0700	1570	2062	2075	2317	8024
0800	2103	2178	1913	1804	7998
0900	1634	1559	1464	1442	6099
1000	1300	1354	1372	1436	5462
1100	1350	1415	1479	1403	5647
1200	1396	1427	1334	1395	5552
1300	1343	1451	1360	1356	5510
1400	1403	1467	1456	1526	5852
1500	1555	1734	1784	1838	6911
1600	1754	1841	1902	1908	7405
1700	2043	2154	2002	1788	7987
1800	1633	1577	1494	1242	5946
1900	1135	1083	975	910	4103
2000	877	838	802	740	3257
2100	766	740	634	673	2813
2200	621	632	544	447	2244
2300	455	391	349	282	1477
24-Hour Totals:					101520

Peak Volume Information

	Hour	Volume
A.M.	730	8673
P.M.	1645	8107
Daily	730	8673

Generated by SPS 5.0.44P

County: 93
Station: 2177
Description: I-95 S\O BLUE HERON
Start Date: 04/16/2013
Start Time: 0000

Direction: N

Time	1st	2nd	3rd	4th	Total
0000	241	211	155	159	766
0100	152	188	84	75	499
0200	70	60	50	74	254
0300	96	174	140	127	537
0400	169	268	300	333	1070
0500	295	309	503	439	1546
0600	485	601	853	1066	3005
0700	1021	1271	1413	1448	5153
0800	1245	1405	1309	1273	5232
0900	1098	1153	1145	1061	4457
1000	1027	995	1027	1041	4090
1100	1077	1134	1127	1098	4436
1200	1056	1132	1068	949	4205
1300	1063	1027	1089	1174	4353
1400	1118	1078	1244	1256	4696
1500	1196	1210	1423	1356	5185
1600	1420	1483	1520	1575	5998
1700	1700	1755	1609	1479	6543
1800	1322	1306	1217	1165	5010
1900	976	865	810	793	3444
2000	763	753	663	590	2769
2100	611	627	521	556	2315
2200	594	589	432	420	2035
2300	388	328	303	234	1253
24-Hour Totals:					78851

Peak Volume Information

	Hour	Volume
A.M.	730	5511
P.M.	1645	6639
Daily	1645	6639

Generated by SPS 5.0.44P

County: 93
Station: 2177
Description: I-95 S\O BLUE HERON
Start Date: 04/17/2013
Start Time: 0000

Direction: N

Time	1st	2nd	3rd	4th	Total
0000	288	269	233	220	1010
0100	222	300	180	83	785
0200	103	128	205	192	628
0300	144	108	96	153	501
0400	161	142	213	226	742
0500	218	340	407	514	1479
0600	497	621	880	969	2967
0700	1106	1374	1606	1636	5722
0800	1447	1464	1413	1383	5707
0900	1331	1109	1140	1045	4625
1000	997	1012	1065	1063	4137
1100	1008	977	1038	1123	4146
1200	1172	1269	1203	1257	4901
1300	1116	1210	1209	1284	4819
1400	1213	1285	1459	1485	5442
1500	1365	1264	1586	1626	5841
1600	1548	1711	1789	1871	6919
1700	2101	2217	1963	1824	8105
1800	1668	1548	1359	1141	5716
1900	1038	967	887	829	3721
2000	805	750	764	693	3012
2100	654	676	704	596	2630
2200	603	604	497	411	2115
2300	435	355	312	266	1368
24-Hour Totals:					87038

Peak Volume Information

	Hour	Volume
A.M.	730	6153
P.M.	1645	8152
Daily	1645	8152

Generated by SPS 5.0.44P

County: 93
Station: 2177
Description: I-95 S\O BLUE HERON
Start Date: 04/18/2013
Start Time: 0000

Direction: N

Time	1st	2nd	3rd	4th	Total
0000	258	280	173	158	869
0100	166	108	94	102	470
0200	86	92	113	85	376
0300	56	76	96	98	326
0400	105	127	155	207	594
0500	191	260	406	411	1268
0600	511	593	955	1089	3148
0700	1072	1257	1511	1552	5392
0800	1447	1370	1384	1363	5564
0900	1185	1055	1106	1203	4549
1000	1132	1182	1133	1198	4645
1100	1148	1196	1201	1248	4793
1200	1247	1139	1257	1220	4863
1300	698	808	1271	1627	4404
1400	1516	1343	1375	1408	5642
1500	1479	1507	1677	1756	6419
1600	1717	1790	1893	1842	7242
1700	2061	2168	2064	1826	8119
1800	1620	1545	1273	1144	5582
1900	1058	989	903	811	3761
2000	848	797	791	723	3159
2100	684	716	648	633	2681
2200	614	577	550	504	2245
2300	405	392	318	306	1421
24-Hour Totals:					87532

Peak Volume Information

	Hour	Volume
A.M.	730	5880
P.M.	1645	8135
Daily	1645	8135

Generated by SPS 5.0.44P

County: 93
Station: 2187
Description: I-95 S\O PGA
Start Date: 04/16/2013
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	217	179	142	133	671	146	126	111	103	486	1157
0100	89	91	59	66	305	72	92	80	71	315	620
0200	59	53	47	51	210	58	58	68	56	240	450
0300	51	65	73	75	264	74	67	101	102	344	608
0400	78	91	107	150	426	119	142	198	246	705	1131
0500	149	208	260	384	1001	273	321	451	552	1597	2598
0600	383	487	717	856	2443	652	870	1204	1358	4084	6527
0700	942	1167	1485	1517	5111	1405	1709	1972	2028	7114	12225
0800	1419	1422	1365	1363	5569	1924	1862	1670	1489	6945	12514
0900	1201	1076	1080	1082	4439	1213	1191	1222	1164	4790	9229
1000	993	963	1048	1124	4128	1115	1102	1125	1103	4445	8573
1100	989	1085	1138	1135	4347	995	1063	1068	1097	4223	8570
1200	1118	1051	1136	1150	4455	1034	1075	1077	1086	4272	8727
1300	998	1189	1218	1167	4572	1068	1092	1084	1058	4302	8874
1400	1122	1181	1290	1276	4869	1077	1114	1138	1197	4526	9395
1500	1367	1458	1520	1556	5901	1162	1292	1264	1286	5004	10905
1600	1520	1748	1653	1898	6819	1209	1372	1306	1359	5246	12065
1700	1920	2118	1930	1816	7784	1382	1563	1448	1381	5774	13558
1800	1499	1536	1348	1139	5522	1223	1151	1031	926	4331	9853
1900	1004	933	777	735	3449	812	789	688	649	2938	6387
2000	696	684	658	571	2609	630	636	622	614	2502	5111
2100	598	577	539	455	2169	570	550	501	396	2017	4186
2200	446	460	435	320	1661	406	390	318	249	1363	3024
2300	320	274	256	206	1056	305	246	228	191	970	2026
24-Hour Totals:					79780					78533	158313

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	730	5843	730	7786	730	13629
P.M.	1645	7866	1700	5774	1645	13618
Daily	1645	7866	730	7786	730	13629

Generated by SPS 5.0.44P

County: 93
Station: 2187
Description: I-95 S\O PGA
Start Date: 04/17/2013
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	182	200	153	132	667	161	115	102	104	482	1149
0100	118	78	84	67	347	83	59	68	54	264	611
0200	72	77	74	63	286	65	61	57	62	245	531
0300	64	62	71	62	259	70	74	97	110	351	610
0400	69	106	115	148	438	126	146	178	208	658	1096
0500	162	181	298	375	1016	253	321	410	533	1517	2533
0600	385	511	708	860	2464	641	830	1231	1423	4125	6589
0700	941	1202	1458	1588	5189	1578	1770	2025	2103	7476	12665
0800	1401	1501	1383	1374	5659	2015	1936	1665	1615	7231	12890
0900	1231	1084	1051	1035	4401	1309	1155	1042	996	4502	8903
1000	984	952	1053	1097	4086	916	995	1011	1103	4025	8111
1100	972	1014	1018	1132	4136	1263	1233	1133	1061	4690	8826
1200	1044	1110	1055	1157	4366	1051	1172	1052	1083	4358	8724
1300	1055	1123	1234	1241	4653	1083	1047	1119	1092	4341	8994
1400	1125	1169	1315	1373	4982	1100	1239	1117	1217	4673	9655
1500	1347	1406	1539	1641	5933	1210	1307	1284	1269	5070	11003
1600	1698	1734	1725	1900	7057	1186	1310	1351	1358	5205	12262
1700	1937	2301	1924	1806	7968	1435	1496	1502	1441	5874	13842
1800	1652	1588	1266	1128	5634	1197	1226	991	920	4334	9968
1900	985	989	841	773	3588	815	827	721	662	3025	6613
2000	779	725	731	703	2938	623	666	638	588	2515	5453
2100	597	584	594	542	2317	600	616	562	479	2257	4574
2200	525	525	402	371	1823	468	417	358	351	1594	3417
2300	357	292	277	216	1142	327	264	235	197	1023	2165
24-Hour Totals:					81349					79835	161184

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	730	5948	730	8079	730	14027
P.M.	1645	8062	1700	5874	1645	13853
Daily	1645	8062	730	8079	730	14027

Generated by SPS 5.0.44P

County: 93
Station: 2187
Description: I-95 S\O PGA
Start Date: 04/18/2013
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	215	226	181	130	752	202	163	139	122	626	1378
0100	137	115	74	78	404	101	96	106	102	405	809
0200	92	77	93	81	343	74	86	73	60	293	636
0300	54	63	80	87	284	73	91	124	129	417	701
0400	82	95	117	168	462	133	170	208	207	718	1180
0500	159	206	297	361	1023	288	340	441	529	1598	2621
0600	390	496	730	864	2480	666	854	1183	1401	4104	6584
0700	934	1228	1448	1547	5157	1474	1745	1950	2150	7319	12476
0800	1425	1436	1469	1391	5721	1977	1809	1639	1577	7002	12723
0900	1156	1174	1047	1142	4519	1347	1329	1218	1187	5081	9600
1000	1053	1166	1060	1145	4424	1136	1050	1150	1138	4474	8898
1100	1127	1128	1131	1183	4569	1120	1092	1138	1086	4436	9005
1200	1180	1071	1193	1214	4658	1082	1136	1037	1112	4367	9025
1300	988	842	1115	1604	4549	1037	1108	1132	1148	4425	8974
1400	1293	1259	1319	1344	5215	1183	1213	1220	1240	4856	10071
1500	1385	1433	1584	1689	6091	1214	1299	1353	1329	5195	11286
1600	1584	1813	1746	2002	7145	1282	1357	1331	1333	5303	12448
1700	1917	2223	1973	1892	8005	1474	1576	1492	1354	5896	13901
1800	1602	1545	1270	1149	5566	1153	1154	1069	971	4347	9913
1900	1045	979	868	783	3675	839	888	747	751	3225	6900
2000	796	750	678	732	2956	664	711	624	619	2618	5574
2100	624	645	593	580	2442	661	607	553	537	2358	4800
2200	539	490	467	419	1915	508	495	413	394	1810	3725
2300	334	284	248	248	1114	337	294	288	196	1115	2229
24-Hour Totals:					83469					81988	165457

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	745	5877	730	7886	730	13742
P.M.	1645	8115	1700	5896	1645	13990
Daily	1645	8115	730	7886	1645	13990

Generated by SPS 5.0.44P

County: 93
Station: 0217
Description: I-95 0.8 MI N/O DONALD ROSS RD
Start Date: 04/16/2013
Start Time: 0000

Time	NB	SB	Total
0000	493	333	826
0100	250	241	491
0200	169	221	390
0300	207	312	519
0400	312	620	932
0500	686	1446	2132
0600	1560	3442	5002
0700	2524	5556	8080
0800	2403	4837	7240
0900	2412	3287	5699
1000	2397	2856	5253
1100	2545	2679	5224
1200	2593	2428	5021
1300	2728	2491	5219
1400	3048	2462	5510
1500	3876	2645	6521
1600	4842	2725	7567
1700	5601	2773	8374
1800	3500	2138	5638
1900	2326	1526	3852
2000	1845	1246	3091
2100	1496	906	2402
2200	1014	660	1674
2300	706	476	1182
24-Hr Tot.	49533	48306	97839

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	1100	2545	0700	5556	0700	8080
P.M.	1700	5601	1700	2773	1700	8374
Daily	1700	5601	0700	5556	1700	8374
Truck Percentage		10.0		10.1		10.1

Classification Summary Database

Dir	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TotTrk	TotVol
N	52	32889	10125	125	1416	151	57	516	2538	39	74	39	2	0	1510	4957	49533
S	71	31152	10592	86	1446	184	6	506	2529	30	54	43	3	0	1604	4887	48306

County: 93
Station: 0217
Description: I-95 0.8 MI N/O DONALD ROSS RD
Start Date: 4/17/2013
Start Time: 0000

Time	NB	SB	Total
0000	486	275	761
0100	246	184	430
0200	239	180	419
0300	213	326	539
0400	325	594	919
0500	722	1358	2080
0600	1594	3473	5067
0700	2524	5693	8217
0800	2441	4756	7197
0900	2253	2637	4890
1000	2446	2737	5183
1100	2436	2954	5390
1200	2537	2549	5086
1300	2756	2496	5252
1400	3160	2536	5696
1500	3890	2711	6601
1600	5008	2884	7892
1700	5590	2891	8481
1800	3727	2222	5949
1900	2359	1552	3911
2000	1964	1258	3222
2100	1660	1020	2680
2200	1182	836	2018
2300	803	450	1253
24-Hr Tot.	50561	48572	99133

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	0700	2524	0700	5693	0700	8217
P.M.	1700	5590	1700	2891	1700	8481
Daily	1700	5590	0700	5693	1700	8481
Truck Percentage		9.7		10.3		10.0

Classification Summary Database

Dir	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TotTrk	TotVol
N	36	33856	10293	120	1401	151	90	525	2489	24	60	36	6	0	1474	4902	50561
S	72	31342	10564	103	1337	227	12	530	2666	24	57	31	4	0	1603	4991	48572

County: 93
Station: 0217
Description: I-95 0.8 MI N/O DONALD ROSS RD
Start Date: 4/17/2013
Start Time: 0000

Time	NB	SB	Total
0000	532	356	888
0100	278	218	496
0200	237	207	444
0300	224	359	583
0400	353	615	968
0500	731	1330	2061
0600	1596	3268	4864
0700	2634	5519	8153
0800	2527	4838	7365
0900	2391	3415	5806
1000	2662	2910	5572
1100	2673	2680	5353
1200	2767	2590	5357
1300	2787	2583	5370
1400	3336	2657	5993
1500	4047	2780	6827
1600	5102	2953	8055
1700	5625	2951	8576
1800	3695	2429	6124
1900	2512	1703	4215
2000	2055	1301	3356
2100	1625	1092	2717
2200	1234	1073	2307
2300	720	671	1391
24-Hr Tot.	52343	50498	102841

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	1100	2673	0700	5519	0700	8153
P.M.	1700	5625	1600	2953	1700	8576
Daily	1700	5625	0700	5519	1700	8576
Truck Percentage		9.4		10.3		9.8

Classification Summary Database

Dir	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TotTrk	TotVol
N	53	35092	10605	138	1484	181	12	579	2393	29	58	36	5	0	1678	4915	52343
S	85	32672	10976	116	1449	187	13	538	2750	26	66	35	3	0	1582	5183	50498

County: 93
Station: 9952
Description: I-95 0.8 MI N/O DONALD ROSS RD
Start Date: 04/16/2013
Start Time: 0000

Time	NB	SB	Total
0000	525	352	877
0100	252	234	486
0200	181	222	403
0300	195	292	487
0400	310	581	891
0500	654	1323	1977
0600	1465	3238	4703
0700	2517	5446	7963
0800	3493	4926	8419
0900	3311	3366	6677
1000	2545	2823	5368
1100	2574	2623	5197
1200	2730	2365	5095
1300	2948	2460	5408
1400	3748	2434	6182
1500	4571	2607	7178
1600	5789	2721	8510
1700	3945	2770	6715
1800	352	2224	2576
1900	2401	1543	3944
2000	1886	1261	3147
2100	1563	927	2490
2200	1067	691	1758
2300	750	485	1235
24-Hr Tot.	49772	47914	97686

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	0800	3493	0700	5446	0800	8419
P.M.	1600	5789	1700	2770	1600	8510
Daily	1600	5789	0700	5446	1600	8510
Truck Percentage		9.2		9.5		9.3

Classification Summary Database

Dir	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TotTrk	TotVol
N	235	34864	9452	88	1119	160	61	441	2554	42	73	41	9	0	633	4588	49772
S	43	34193	8972	42	1109	170	12	537	2537	28	56	43	3	0	169	4537	47914

County: 93
Station: 9952
Description: I-95 0.8 MI N/O DONALD ROSS RD
Start Date: 04/16/2013
Start Time: 0000

Time	NB	SB	Total
0000	511	286	797
0100	259	180	439
0200	233	181	414
0300	214	308	522
0400	316	553	869
0500	649	1258	1907
0600	1557	3260	4817
0700	2507	5561	8068
0800	2504	4873	7377
0900	2263	2746	5009
1000	2459	2581	5040
1100	2451	2992	5443
1200	2581	2552	5133
1300	2743	2484	5227
1400	3093	2509	5602
1500	3881	2716	6597
1600	4910	2790	7700
1700	5768	2919	8687
1800	3895	2316	6211
1900	2445	1597	4042
2000	1999	1256	3255
2100	1707	1033	2740
2200	1247	851	2098
2300	819	470	1289
24-Hr Tot.	51011	48272	99283

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	0700	2507	0700	5561	0700	8068
P.M.	1700	5768	1600	2919	1700	8687
Daily	1700	5768	0700	5561	1700	8687
Truck Percentage		8.7		9.9		9.3

Classification Summary Database

Dir	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TotTrk	TotVol
N	332	35787	9655	75	1105	157	93	389	2505	25	60	38	9	0	781	4456	51011
S	50	33976	9312	67	1035	238	18	537	2750	27	56	32	6	0	168	4766	48272

County: 93
Station: 9952
Description: I-95 0.8 MI N/O DONALD ROSS RD
Start Date: 04/16/2013
Start Time: 0000

Time	NB	SB	Total
0000	568	374	942
0100	289	254	543
0200	244	201	445
0300	220	355	575
0400	336	616	952
0500	676	1331	2007
0600	1523	3276	4799
0700	2586	5516	8102
0800	2538	4815	7353
0900	2405	3388	5793
1000	2687	2893	5580
1100	2712	2672	5384
1200	2789	2578	5367
1300	2760	2561	5321
1400	3347	2645	5992
1500	4045	2773	6818
1600	5047	2951	7998
1700	5745	2950	8695
1800	3859	2412	6271
1900	2522	1704	4226
2000	2130	1291	3421
2100	1661	1093	2754
2200	1290	1064	2354
2300	764	668	1432
24-Hr Tot.	52743	50381	103124

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	1100	2712	0700	5516	0700	8102
P.M.	1700	5745	1600	2951	1700	8695
Daily	1700	5745	0700	5516	1700	8695
Truck Percentage		8.4		10.1		9.2

Classification Summary Database

Dir	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TotTrk	TotVol
N	349	37235	9900	75	1179	189	14	436	2427	29	58	35	9	0	808	4451	52743
S	44	35354	9787	72	1164	187	17	585	2906	27	66	39	11	0	122	5074	50381

RAMP VOLUME COUNT REPORTS

County: 93
Station: 1030
Description: I-95 NB TO DONALD ROSS
Start Date: 04/23/2013
Start Time: 0000

Time	Direction: N 1st	2nd	3rd	4th	Total
0000	19	26	22	16	83
0100	14	10	7	7	38
0200	5	7	3	2	17
0300	1	6	8	3	18
0400	7	8	4	13	32
0500	10	23	44	31	108
0600	40	58	90	142	330
0700	137	180	226	268	811
0800	251	284	237	279	1051
0900	210	196	167	161	734
1000	138	152	168	164	622
1100	163	180	145	189	677
1200	151	188	160	179	678
1300	166	186	194	185	731
1400	207	197	193	255	852
1500	213	241	288	312	1054
1600	259	289	306	314	1168
1700	285	387	412	387	1471
1800	298	290	263	226	1077
1900	195	185	148	137	665
2000	137	112	145	125	519
2100	122	132	105	97	456
2200	73	59	53	68	253
2300	75	53	45	32	205
24-Hour Totals:					13650

Peak Volume Information

	Hour	Volume
A.M.	800	1051
P.M.	1715	1484
Daily	1715	1484

Truck Percentage 3.87 NaN 3.87

Classification Summary Database

Dir	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TotTrk	TotVol
N	41	10753	2328	51	336	25	24	63	24	5	0	0	0	0	0	528	13650

Generated by SPS 5.0.44P

County: 93
Station: 1030
Description: I-95 NB TO DONALD ROSS
Start Date: 04/24/2013
Start Time: 0000

Time	Direction: N 1st	2nd	3rd	4th	Total
0000	34	20	11	19	84
0100	12	5	7	6	30
0200	7	11	6	3	27
0300	12	9	6	1	28
0400	9	6	8	14	37
0500	11	16	24	41	92
0600	46	52	80	139	317
0700	150	172	233	286	841
0800	246	268	257	260	1031
0900	194	186	176	176	732
1000	153	161	143	165	622
1100	149	164	158	183	654
1200	176	167	172	148	663
1300	162	195	194	203	754
1400	192	217	191	227	827
1500	221	269	258	273	1021
1600	285	314	287	326	1212
1700	285	408	384	360	1437
1800	307	276	240	196	1019
1900	184	183	127	150	644
2000	133	151	151	139	574
2100	155	142	111	89	497
2200	86	80	67	61	294
2300	52	58	41	26	177
24-Hour Totals:					13614

Peak Volume Information

	Hour	Volume
A.M.	745	1057
P.M.	1715	1459
Daily	1715	1459

Truck Percentage 3.44 NaN 3.44

Classification Summary Database

Dir	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TotTrk	TotVol
N	43	10964	2138	49	271	22	26	71	24	6	0	0	0	0	0	469	13614

Generated by SPS 5.0.44P

County: 93
Station: 1030
Description: I-95 NB TO DONALD ROSS
Start Date: 04/25/2013
Start Time: 0000

	Direction: N				
Time	1st	2nd	3rd	4th	Total
0000	36	25	14	18	93
0100	16	10	7	4	37
0200	5	14	8	5	32
0300	6	6	7	8	27
0400	8	11	8	18	45
0500	16	16	33	35	100
0600	41	49	88	140	318
0700	136	178	229	256	799
0800	250	258	281	249	1038
0900	192	187	166	189	734
1000	153	178	176	182	689
1100	148	204	195	207	754
1200	189	191	200	201	781
1300	192	215	206	197	810
1400	209	203	199	233	844
1500	194	241	275	314	1024
1600	312	301	310	311	1234
1700	322	373	402	316	1413
1800	349	276	269	250	1144
1900	205	179	164	161	709
2000	162	141	156	127	586
2100	113	126	103	108	450
2200	96	98	80	66	340
2300	62	57	51	43	213
24-Hour Totals:					14214

Peak Volume Information

	Hour	Volume
A.M.	745	1045
P.M.	1715	1440
Daily	1715	1440

Truck Percentage	3.19	NaN	3.19

Classification Summary Database

Dir	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TotTrk	TotVol
N	70	11508	2183	44	267	20	11	81	29	1	0	0	0	0	0	453	14214

Generated by SPS 5.0.44P

County: 93
Station: 1031
Description: I-95 NB TO DONALD ROSS
Start Date: 04/23/2013
Start Time: 0000

Direction: N

Time	1st	2nd	3rd	4th	Total
0000	8	7	6	3	24
0100	3	2	3	4	12
0200	5	3	2	4	14
0300	3	3	1	0	7
0400	0	0	2	3	5
0500	1	2	3	8	14
0600	13	5	11	17	46
0700	10	31	29	33	103
0800	46	29	42	46	163
0900	32	34	26	38	130
1000	29	48	27	27	131
1100	26	36	38	28	128
1200	35	54	30	31	150
1300	33	30	42	37	142
1400	43	31	47	38	159
1500	38	56	69	63	226
1600	46	47	70	72	235
1700	63	102	102	86	353
1800	60	75	59	55	249
1900	50	53	34	42	179
2000	27	30	29	39	125
2100	44	31	20	29	124
2200	19	10	11	16	56
2300	19	4	4	6	33
24-Hour Totals:					2808

Peak Volume Information

	Hour	Volume
A.M.	800	163
P.M.	1700	353
Daily	1700	353

Generated by SPS 5.0.44P

County: 93
Station: 1031
Description: I-95 NB TO DONALD ROSS
Start Date: 04/24/2013
Start Time: 0000

	Direction: N				
Time	1st	2nd	3rd	4th	Total
0000	7	7	1	3	18
0100	1	0	0	2	3
0200	1	0	0	1	2
0300	4	3	0	1	8
0400	1	1	0	3	5
0500	3	1	3	6	13
0600	16	6	11	22	55
0700	13	21	28	32	94
0800	31	34	37	39	141
0900	40	40	28	34	142
1000	30	29	22	23	104
1100	39	22	18	44	123
1200	36	48	27	25	136
1300	20	41	43	28	132
1400	40	43	39	38	160
1500	51	49	61	45	206
1600	68	72	65	80	285
1700	73	71	92	67	303
1800	62	81	66	55	264
1900	55	48	29	41	173
2000	37	46	43	37	163
2100	46	46	31	21	144
2200	22	19	17	12	70
2300	20	11	10	3	44
24-Hour Totals:					2788

Peak Volume Information

	Hour	Volume
A.M.	830	156
P.M.	1645	316
Daily	1645	316

Generated by SPS 5.0.44P

County: 93
Station: 1031
Description: I-95 NB TO DONALD ROSS
Start Date: 04/25/2013
Start Time: 0000

	Direction: N				
Time	1st	2nd	3rd	4th	Total
0000	14	4	2	1	21
0100	6	1	0	0	7
0200	2	4	0	0	6
0300	1	0	1	3	5
0400	0	2	0	6	8
0500	0	4	9	4	17
0600	11	2	20	13	46
0700	10	27	12	26	75
0800	29	38	38	34	139
0900	40	54	40	28	162
1000	18	34	39	29	120
1100	36	23	40	32	131
1200	38	35	29	36	138
1300	46	38	34	24	142
1400	47	26	34	54	161
1500	32	55	58	48	193
1600	61	71	58	77	267
1700	75	61	89	73	298
1800	89	74	52	60	275
1900	64	49	37	46	196
2000	39	28	42	32	141
2100	25	30	17	25	97
2200	31	16	17	16	80
2300	13	12	13	7	45
24-Hour Totals:					2770

Peak Volume Information

	Hour	Volume
A.M.	845	168
P.M.	1730	325
Daily	1730	325

Generated by SPS 5.0.44P

County: 93
Station: 1032
Description: DONALD ROSS TO NB I-95
Start Date: 04/23/2013
Start Time: 0000

Time	Direction: N 1st	2nd	3rd	4th	Total
0000	2	2	1	0	5
0100	1	0	1	0	2
0200	0	1	0	1	2
0300	0	1	0	4	5
0400	1	2	1	3	7
0500	3	0	8	7	18
0600	6	9	17	21	53
0700	24	40	36	28	128
0800	28	24	27	24	103
0900	20	30	26	33	109
1000	22	14	27	18	81
1100	13	14	19	7	53
1200	20	19	9	20	68
1300	20	17	19	23	79
1400	18	22	21	29	90
1500	32	36	24	27	119
1600	30	19	25	21	95
1700	13	33	17	35	98
1800	34	15	17	13	79
1900	18	17	14	10	59
2000	6	6	8	11	31
2100	6	3	7	2	18
2200	5	4	2	1	12
2300	2	4	3	1	10
24-Hour Totals:					1324

Peak Volume Information

	Hour	Volume
A.M.	715	132
P.M.	1445	121
Daily	715	132

Generated by SPS 5.0.44P

County: 93
Station: 1032
Description: DONALD ROSS TO NB I-95
Start Date: 04/24/2013
Start Time: 0000

Direction: N

Time	1st	2nd	3rd	4th	Total
0000	3	0	0	1	4
0100	0	0	1	1	2
0200	0	0	0	0	0
0300	2	0	0	0	2
0400	0	1	5	2	8
0500	3	1	2	6	12
0600	12	12	10	31	65
0700	26	33	28	40	127
0800	25	23	23	26	97
0900	26	17	19	17	79
1000	32	22	17	21	92
1100	21	33	19	27	100
1200	13	18	20	12	63
1300	21	18	18	22	79
1400	22	20	16	46	104
1500	29	35	28	46	138
1600	26	28	21	33	108
1700	15	42	31	31	119
1800	29	34	19	16	98
1900	13	9	11	14	47
2000	4	6	5	6	21
2100	10	7	5	1	23
2200	4	2	2	2	10
2300	4	8	1	3	16
24-Hour Totals:					1414

Peak Volume Information

	Hour	Volume
A.M.	700	127
P.M.	1445	138
Daily	1445	138

Generated by SPS 5.0.44P

County: 93
Station: 1032
Description: DONALD ROSS TO NB I-95
Start Date: 04/25/2013
Start Time: 0000

Time	Direction: N 1st	2nd	3rd	4th	Total
0000	4	0	0	2	6
0100	1	0	0	0	1
0200	0	0	0	0	0
0300	0	2	0	0	2
0400	1	1	3	4	9
0500	1	3	3	12	19
0600	8	9	16	24	57
0700	33	31	28	27	119
0800	32	22	22	39	115
0900	19	13	26	29	87
1000	30	22	20	27	99
1100	12	20	22	14	68
1200	12	17	18	21	68
1300	17	20	21	22	80
1400	22	26	21	31	100
1500	26	26	29	34	115
1600	24	28	38	29	119
1700	27	37	30	24	118
1800	23	21	29	23	96
1900	14	15	16	23	68
2000	17	14	12	10	53
2100	11	6	6	4	27
2200	3	3	2	2	10
2300	4	4	4	2	14
24-Hour Totals:					1450

Peak Volume Information

	Hour	Volume
A.M.	700	119
P.M.	1630	131
Daily	1630	131

Generated by SPS 5.0.44P

County: 93
Station: 1033
Description: DONALD ROSS TO NB I-95
Start Date: 04/23/2013
Start Time: 0000

Time	Direction: N 1st	2nd	3rd	4th	Total
0000	10	3	3	2	18
0100	1	2	1	1	5
0200	1	0	0	0	1
0300	1	2	2	0	5
0400	3	1	6	9	19
0500	7	9	10	10	36
0600	24	31	32	52	139
0700	62	76	100	89	327
0800	76	78	74	67	295
0900	57	71	55	51	234
1000	69	73	57	69	268
1100	53	71	61	69	254
1200	46	48	59	56	209
1300	53	73	66	68	260
1400	77	99	81	116	373
1500	106	116	110	119	451
1600	137	155	120	163	575
1700	188	222	177	143	730
1800	125	127	78	67	397
1900	80	61	52	47	240
2000	44	41	37	40	162
2100	63	65	34	21	183
2200	18	16	12	20	66
2300	17	19	9	7	52
24-Hour Totals:					5299

Peak Volume Information

	Hour	Volume
A.M.	730	343
P.M.	1645	750
Daily	1645	750

Truck Percentage	6.17	NaN	6.17

Classification Summary Database

Dir	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TotTrk	TotVol
N	24	3956	992	39	189	37	4	38	20	0	0	0	0	0	0	327	5299

Generated by SPS 5.0.44P

County: 93
Station: 1033
Description: DONALD ROSS TO NB I-95
Start Date: 04/24/2013
Start Time: 0000

Time	Direction: N 1st	2nd	3rd	4th	Total
0000	13	5	3	5	26
0100	4	3	3	0	10
0200	0	3	0	2	5
0300	0	0	4	1	5
0400	2	4	3	6	15
0500	6	11	10	21	48
0600	25	27	38	54	144
0700	72	84	91	90	337
0800	84	83	64	89	320
0900	57	65	62	69	253
1000	62	60	56	51	229
1100	49	67	70	49	235
1200	59	71	46	64	240
1300	50	66	50	54	220
1400	80	93	71	91	335
1500	99	111	108	115	433
1600	119	155	146	166	586
1700	168	217	187	133	705
1800	156	109	110	78	453
1900	76	71	61	76	284
2000	47	51	44	41	183
2100	50	30	34	35	149
2200	37	19	19	10	85
2300	14	20	13	9	56
24-Hour Totals:					5356

Peak Volume Information

	Hour	Volume
A.M.	715	349
P.M.	1645	738
Daily	1645	738

Truck Percentage	5.88	NaN	5.88

Classification Summary Database

Dir	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TotTrk	TotVol
N	24	4000	1017	39	188	27	1	38	21	1	0	0	0	0	0	315	5356

Generated by SPS 5.0.44P

County: 93
Station: 1033
Description: DONALD ROSS TO NB I-95
Start Date: 04/25/2013
Start Time: 0000

Time	Direction: N 1st	2nd	3rd	4th	Total
0000	17	10	6	4	37
0100	6	0	2	0	8
0200	0	1	1	3	5
0300	2	4	4	2	12
0400	1	5	4	4	14
0500	9	13	11	15	48
0600	30	23	36	57	146
0700	57	82	106	88	333
0800	71	92	74	73	310
0900	59	86	75	90	310
1000	63	76	68	54	261
1100	49	52	63	70	234
1200	77	88	55	81	301
1300	75	76	74	63	288
1400	72	72	99	72	315
1500	109	103	128	116	456
1600	122	176	125	143	566
1700	154	206	194	130	684
1800	135	124	86	89	434
1900	50	72	68	54	244
2000	43	54	53	38	188
2100	58	36	42	35	171
2200	32	30	20	16	98
2300	16	10	12	10	48
24-Hour Totals:					5511

Peak Volume Information

	Hour	Volume
A.M.	730	357
P.M.	1645	697
Daily	1645	697

Truck Percentage	6.39	NaN	6.39

Classification Summary Database

Dir	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TotTrk	TotVol
N	30	4079	1050	49	213	35	1	42	11	1	0	0	0	0	0	352	5511

Generated by SPS 5.0.44P

County: 93
Station: 1034
Description: I-95 SB TO DONALD ROSS
Start Date: 04/23/2013
Start Time: 0000

Time	Direction: S 1st	2nd	3rd	4th	Total
0000	11	9	8	5	33
0100	4	2	4	1	11
0200	0	1	1	0	2
0300	5	0	2	3	10
0400	1	0	6	6	13
0500	8	9	14	22	53
0600	29	36	71	104	240
0700	107	199	206	229	741
0800	195	145	150	177	667
0900	121	89	71	91	372
1000	62	58	58	73	251
1100	75	69	57	58	259
1200	70	69	69	60	268
1300	60	63	62	71	256
1400	74	65	77	63	279
1500	72	73	76	99	320
1600	76	77	84	88	325
1700	88	117	71	98	374
1800	92	87	87	73	339
1900	64	54	68	58	244
2000	62	35	36	24	157
2100	23	35	27	24	109
2200	21	12	5	10	48
2300	18	11	6	16	51
24-Hour Totals:					5422

Peak Volume Information

	Hour	Volume
A.M.	715	829
P.M.	1715	378
Daily	715	829

Truck Percentage	5.29	NaN	5.29

Classification Summary Database

Dir	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TotTrk	TotVol
S	22	4133	980	40	176	20	2	37	10	2	0	0	0	0	0	287	5422

Generated by SPS 5.0.44P

County: 93
Station: 1034
Description: I-95 SB TO DONALD ROSS
Start Date: 04/24/2013
Start Time: 0000

Time	Direction: S 1st	2nd	3rd	4th	Total
0000	14	6	7	2	29
0100	5	3	1	1	10
0200	4	2	1	1	8
0300	1	1	0	0	2
0400	3	2	5	6	16
0500	5	10	19	16	50
0600	21	35	66	108	230
0700	119	186	190	241	736
0800	189	173	142	165	669
0900	124	95	78	83	380
1000	81	69	91	80	321
1100	69	68	85	66	288
1200	44	49	65	67	225
1300	61	67	63	67	258
1400	64	82	75	85	306
1500	56	99	79	88	322
1600	68	83	99	88	338
1700	97	109	115	92	413
1800	109	94	67	68	338
1900	72	66	61	56	255
2000	40	48	49	31	168
2100	35	47	37	24	143
2200	19	17	15	23	74
2300	12	10	17	12	51
24-Hour Totals:					5630

Peak Volume Information

	Hour	Volume
A.M.	715	806
P.M.	1715	425
Daily	715	806

Truck Percentage	5.36	NaN	5.36

Classification Summary Database

Dir	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TotTrk	TotVol
S	31	4231	1066	45	193	9	2	37	14	2	0	0	0	0	0	302	5630

Generated by SPS 5.0.44P

County: 93
Station: 1034
Description: I-95 SB TO DONALD ROSS
Start Date: 04/25/2013
Start Time: 0000

Direction: S

Time	1st	2nd	3rd	4th	Total
0000	13	15	2	3	33
0100	3	1	2	2	8
0200	1	0	1	1	3
0300	4	6	2	1	13
0400	2	3	8	8	21
0500	4	9	15	19	47
0600	30	32	79	90	231
0700	135	198	202	219	754
0800	195	169	138	154	656
0900	117	100	87	97	401
1000	59	69	68	84	280
1100	75	72	77	76	300
1200	91	64	88	72	315
1300	70	72	66	67	275
1400	76	88	80	74	318
1500	75	82	90	97	344
1600	89	63	80	101	333
1700	90	90	107	91	378
1800	100	81	81	69	331
1900	62	57	34	38	191
2000	49	38	34	53	174
2100	32	54	28	22	136
2200	32	27	26	20	105
2300	15	9	13	12	49
24-Hour Totals:					5696

Peak Volume Information

	Hour	Volume
A.M.	715	814
P.M.	1645	388
Daily	715	814

Truck Percentage	5.86	NaN	5.86

Classification Summary Database

Dir	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TotTrk	TotVol
S	31	4303	1028	44	203	30	3	36	16	2	0	0	0	0	0	334	5696

Generated by SPS 5.0.44P

County: 93
Station: 1035
Description: I-95 SB TO DONALD ROSS
Start Date: 04/23/2013
Start Time: 0000

	Direction: S				
Time	1st	2nd	3rd	4th	Total
0000	7	3	3	6	19
0100	3	1	2	1	7
0200	0	0	0	0	0
0300	2	1	2	1	6
0400	0	0	5	4	9
0500	8	6	8	18	40
0600	28	26	63	88	205
0700	87	158	185	190	620
0800	171	130	144	134	579
0900	96	70	52	74	292
1000	52	45	46	49	192
1100	59	49	36	44	188
1200	53	49	49	40	191
1300	48	43	52	57	200
1400	46	49	58	52	205
1500	40	58	45	61	204
1600	55	54	47	65	221
1700	53	86	55	73	267
1800	61	59	64	46	230
1900	46	27	43	34	150
2000	40	22	25	11	98
2100	11	22	15	16	64
2200	14	8	3	5	30
2300	15	9	5	9	38
24-Hour Totals:					4055

Peak Volume Information

	Hour	Volume
A.M.	715	704
P.M.	1715	275
Daily	715	704

Generated by SPS 5.0.44P

County: 93
Station: 1035
Description: I-95 SB TO DONALD ROSS
Start Date: 04/24/2013
Start Time: 0000

	Direction: S				
Time	1st	2nd	3rd	4th	Total
0000	9	4	2	3	18
0100	3	3	1	1	8
0200	3	1	1	0	5
0300	1	0	1	0	2
0400	2	1	5	4	12
0500	4	7	11	15	37
0600	16	30	50	95	191
0700	104	147	166	213	630
0800	182	154	132	132	600
0900	108	76	57	51	292
1000	64	47	68	61	240
1100	55	50	50	43	198
1200	31	30	45	46	152
1300	34	58	42	49	183
1400	42	58	51	51	202
1500	44	80	63	62	249
1600	41	53	72	60	226
1700	62	73	57	69	261
1800	71	63	42	50	226
1900	43	43	40	27	153
2000	20	25	31	21	97
2100	20	21	20	12	73
2200	14	10	9	11	44
2300	8	6	11	8	33
24-Hour Totals:					4132

Peak Volume Information

	Hour	Volume
A.M.	730	715
P.M.	1715	270
Daily	730	715

Generated by SPS 5.0.44P

County: 93
Station: 1035
Description: I-95 SB TO DONALD ROSS
Start Date: 04/25/2013
Start Time: 0000

Direction: S

Time	1st	2nd	3rd	4th	Total
0000	6	11	1	2	20
0100	1	1	2	1	5
0200	2	0	1	1	4
0300	3	2	9	0	14
0400	1	5	8	7	21
0500	4	6	7	18	35
0600	26	25	70	81	202
0700	118	160	173	188	639
0800	176	154	118	119	567
0900	101	75	73	66	315
1000	51	45	40	61	197
1100	58	60	58	61	237
1200	61	52	66	58	237
1300	56	53	49	45	203
1400	56	64	58	51	229
1500	45	59	71	66	241
1600	55	42	57	67	221
1700	60	66	65	58	249
1800	64	53	48	52	217
1900	37	36	27	30	130
2000	28	24	22	31	105
2100	20	31	22	15	88
2200	15	24	14	13	66
2300	10	6	8	8	32
24-Hour Totals:					4274

Peak Volume Information

	Hour	Volume
A.M.	715	697
P.M.	1645	258
Daily	715	697

Generated by SPS 5.0.44P

County: 93
Station: 1039
Description: DONALD ROSS TO SB I-95
Start Date: 04/23/2013
Start Time: 0000

	Direction: S				
Time	1st	2nd	3rd	4th	Total
0000	14	8	3	4	29
0100	6	1	3	3	13
0200	1	0	3	2	6
0300	5	5	8	7	25
0400	13	10	10	17	50
0500	23	21	41	44	129
0600	55	84	128	170	437
0700	213	186	287	251	937
0800	239	246	189	205	879
0900	175	150	119	154	598
1000	128	128	99	123	478
1100	114	91	135	103	443
1200	110	93	110	136	449
1300	101	124	97	123	445
1400	135	133	134	125	527
1500	172	128	147	123	570
1600	147	190	172	152	661
1700	219	187	204	167	777
1800	125	140	117	114	496
1900	87	78	76	56	297
2000	74	65	59	61	259
2100	53	83	59	39	234
2200	32	29	18	24	103
2300	27	19	19	10	75
24-Hour Totals:					8917

Peak Volume Information

	Hour	Volume
A.M.	730	1023
P.M.	1700	777
Daily	730	1023

Generated by SPS 5.0.44P

County: 93
Station: 1039
Description: DONALD ROSS TO SB I-95
Start Date: 04/24/2013
Start Time: 0000

	Direction: S				
Time	1st	2nd	3rd	4th	Total
0000	12	9	7	3	31
0100	3	7	4	4	18
0200	7	2	6	1	16
0300	5	4	7	6	22
0400	7	7	12	13	39
0500	25	24	41	34	124
0600	63	86	147	148	444
0700	205	190	280	264	939
0800	229	231	196	213	869
0900	176	146	117	142	581
1000	116	137	129	124	506
1100	127	112	130	124	493
1200	129	121	112	114	476
1300	107	126	112	122	467
1400	124	119	128	123	494
1500	155	140	157	134	586
1600	129	183	175	161	648
1700	227	187	195	145	754
1800	144	125	143	83	495
1900	110	71	78	65	324
2000	76	51	56	68	251
2100	47	46	52	40	185
2200	53	36	19	24	132
2300	39	21	17	13	90
24-Hour Totals:					8984

Peak Volume Information

	Hour	Volume
A.M.	730	1004
P.M.	1645	770
Daily	730	1004

Generated by SPS 5.0.44P

County: 93
Station: 1039
Description: DONALD ROSS TO SB I-95
Start Date: 04/25/2013
Start Time: 0000

	Direction: S				
Time	1st	2nd	3rd	4th	Total
0000	15	7	8	4	34
0100	7	8	4	7	26
0200	5	5	8	2	20
0300	2	6	10	11	29
0400	6	16	12	19	53
0500	18	27	41	30	116
0600	62	65	147	138	412
0700	213	178	255	245	891
0800	241	236	152	224	853
0900	165	166	123	169	623
1000	121	143	122	126	512
1100	116	98	146	116	476
1200	124	140	127	138	529
1300	95	140	113	129	477
1400	108	138	182	157	585
1500	164	145	182	171	662
1600	123	192	199	180	694
1700	232	244	173	165	814
1800	166	148	117	102	533
1900	100	86	96	67	349
2000	78	63	69	67	277
2100	90	74	92	73	329
2200	70	41	25	20	156
2300	46	30	21	9	106
24-Hour Totals:					9556

Peak Volume Information

	Hour	Volume
A.M.	730	977
P.M.	1630	855
Daily	730	977

Generated by SPS 5.0.44P

County: 93
Station: 1040
Description: DONALD ROSS TO SB I-95
Start Date: 04/23/2013
Start Time: 0000

	Direction: S				
Time	1st	2nd	3rd	4th	Total
0000	16	9	4	5	34
0100	8	1	3	3	15
0200	1	1	3	2	7
0300	6	7	11	8	32
0400	13	13	15	22	63
0500	28	32	53	61	174
0600	71	118	172	238	599
0700	290	279	368	331	1268
0800	309	323	255	282	1169
0900	215	188	159	185	747
1000	179	159	129	154	621
1100	164	132	167	141	604
1200	143	118	129	160	550
1300	129	148	132	151	560
1400	174	154	165	157	650
1500	197	159	183	172	711
1600	182	224	210	192	808
1700	264	217	233	200	914
1800	158	173	132	151	614
1900	120	103	95	67	385
2000	88	89	74	68	319
2100	60	87	63	48	258
2200	38	32	20	30	120
2300	29	22	22	11	84
24-Hour Totals:					11306

Peak Volume Information

	Hour	Volume
A.M.	730	1331
P.M.	1700	914
Daily	730	1331

Truck Percentage	4.61	NaN	4.61

Classification Summary Database

Dir	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TotTrk	TotVol
S	36	8999	1744	78	315	33	4	52	32	7	0	0	0	0	6	521	11306

Generated by SPS 5.0.44P

County: 93
Station: 1040
Description: DONALD ROSS TO SB I-95
Start Date: 04/24/2013
Start Time: 0000

Time	Direction: S 1st	2nd	3rd	4th	Total
0000	15	13	7	5	40
0100	3	7	5	5	20
0200	7	2	6	1	16
0300	5	5	9	5	24
0400	7	11	15	17	50
0500	33	38	55	42	168
0600	83	117	196	221	617
0700	289	277	361	335	1262
0800	324	300	261	281	1166
0900	225	179	148	184	736
1000	152	161	167	149	629
1100	160	160	176	162	658
1200	161	157	134	142	594
1300	135	153	151	147	586
1400	150	137	165	154	606
1500	202	178	192	169	741
1600	158	218	200	202	778
1700	257	232	237	187	913
1800	176	171	177	116	640
1900	131	94	97	83	405
2000	87	69	71	76	303
2100	60	53	60	52	225
2200	60	43	21	33	157
2300	45	25	23	15	108
24-Hour Totals:					11442

Peak Volume Information

	Hour	Volume
A.M.	730	1320
P.M.	1645	928
Daily	730	1320

Truck Percentage	4.50	NaN	4.50

Classification Summary Database

Dir	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TotTrk	TotVol
S	42	9158	1724	85	290	39	1	50	44	6	0	0	0	0	3	515	11442

Generated by SPS 5.0.44P

County: 93
Station: 1040
Description: DONALD ROSS TO SB I-95
Start Date: 04/25/2013
Start Time: 0000

Time	Direction: S 1st	2nd	3rd	4th	Total
0000	16	8	8	4	36
0100	7	10	4	6	27
0200	6	6	9	3	24
0300	3	6	10	11	30
0400	5	18	16	25	64
0500	27	37	47	43	154
0600	83	102	186	204	575
0700	278	257	354	301	1190
0800	321	323	206	307	1157
0900	217	218	165	200	800
1000	155	173	169	157	654
1100	165	173	155	171	664
1200	163	179	195	164	701
1300	134	162	143	149	588
1400	138	163	213	200	714
1500	190	172	222	205	789
1600	170	222	234	223	849
1700	257	290	207	206	960
1800	203	175	146	137	661
1900	116	108	109	88	421
2000	86	79	73	89	327
2100	101	81	103	78	363
2200	86	53	32	33	204
2300	48	32	27	17	124
24-Hour Totals:					12076

Peak Volume Information

	Hour	Volume
A.M.	730	1299
P.M.	1630	1004
Daily	730	1299

Truck Percentage	4.93	NaN	4.93

Classification Summary Database

Dir	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TotTrk	TotVol
S	46	9654	1777	107	342	19	0	72	46	9	0	0	0	0	4	595	12076

Generated by SPS 5.0.44P

County: 93
Station: 1041
Description: I-95 SB TO MILITARY TRAIL
Start Date: 04/23/2013
Start Time: 0000

Direction: S

Time	1st	2nd	3rd	4th	Total
0000	11	10	5	5	31
0100	4	2	2	0	8
0200	4	0	4	1	9
0300	4	0	2	1	7
0400	5	5	5	5	20
0500	7	9	9	17	42
0600	18	25	41	58	142
0700	60	69	66	101	296
0800	102	102	87	82	373
0900	70	64	56	49	239
1000	36	39	48	37	160
1100	37	43	39	49	168
1200	40	32	37	45	154
1300	31	38	38	48	155
1400	35	32	49	39	155
1500	35	49	41	57	182
1600	53	52	57	73	235
1700	80	78	67	70	295
1800	66	60	57	60	243
1900	46	39	32	31	148
2000	25	25	24	21	95
2100	18	25	20	19	82
2200	15	14	14	11	54
2300	12	13	4	3	32
24-Hour Totals:					3325

Peak Volume Information

	Hour	Volume
A.M.	745	392
P.M.	1645	298
Daily	745	392

Truck Percentage	4.78	NaN	4.78

Classification Summary Database

Dir	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TotTrk	TotVol
S	29	2636	501	43	90	5	0	14	7	0	0	0	0	0	0	159	3325

Generated by SPS 5.0.44P

County: 93
Station: 1041
Description: I-95 SB TO MILITARY TRAIL
Start Date: 04/24/2013
Start Time: 0000

Direction: S					
Time	1st	2nd	3rd	4th	Total
0000	8	9	2	4	23
0100	2	1	2	4	9
0200	1	2	1	4	8
0300	4	0	0	1	5
0400	0	5	5	5	15
0500	4	3	16	19	42
0600	19	33	50	58	160
0700	78	81	83	109	351
0800	110	104	75	86	375
0900	84	48	46	65	243
1000	34	34	37	52	157
1100	42	48	54	61	205
1200	59	54	59	46	218
1300	34	45	42	51	172
1400	39	32	44	39	154
1500	42	66	52	42	202
1600	49	69	55	67	240
1700	61	65	68	80	274
1800	47	66	59	62	234
1900	58	43	19	25	145
2000	26	31	22	26	105
2100	14	17	15	12	58
2200	20	19	21	11	71
2300	13	7	9	8	37
24-Hour Totals:					3503

Peak Volume Information

	Hour	Volume
A.M.	730	406
P.M.	1700	274
Daily	730	406

Truck Percentage	3.88	NaN	3.88

Classification Summary Database

Dir	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TotTrk	TotVol
S	10	2773	584	9	89	6	0	22	10	0	0	0	0	0	0	136	3503

Generated by SPS 5.0.44P

County: 93
Station: 1041
Description: I-95 SB TO MILITARY TRAIL
Start Date: 04/25/2013
Start Time: 0000

Direction: S

Time	1st	2nd	3rd	4th	Total
0000	5	3	6	4	18
0100	3	3	0	2	8
0200	1	1	2	2	6
0300	5	4	0	3	12
0400	2	9	4	7	22
0500	2	9	12	13	36
0600	13	30	46	70	159
0700	60	72	78	105	315
0800	108	97	75	91	371
0900	76	82	48	52	258
1000	48	51	36	42	177
1100	41	38	43	65	187
1200	45	45	37	47	174
1300	41	43	51	40	175
1400	38	39	51	41	169
1500	44	60	48	49	201
1600	60	52	55	74	241
1700	83	56	74	86	299
1800	82	61	44	48	235
1900	40	47	26	37	150
2000	33	26	29	24	112
2100	21	28	27	21	97
2200	25	18	18	18	79
2300	10	9	10	9	38
24-Hour Totals:					3539

Peak Volume Information

	Hour	Volume
A.M.	730	388
P.M.	1730	303
Daily	730	388

Truck Percentage 3.67 NaN 3.67

Classification Summary Database

Dir	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TotTrk	TotVol
S	13	2796	600	12	75	11	0	20	12	0	0	0	0	0	0	130	3539

Generated by SPS 5.0.44P

County: 93
Station: 1046
Description: MILITARY TRAIL TO NB I-95
Start Date: 04/23/2013
Start Time: 0000

Direction: N

Time	1st	2nd	3rd	4th	Total
0000	13	7	1	0	21
0100	1	1	3	2	7
0200	0	1	1	0	2
0300	2	1	2	1	6
0400	7	2	1	1	11
0500	5	1	7	4	17
0600	5	15	18	18	56
0700	29	23	39	36	127
0800	39	50	44	27	160
0900	27	31	24	34	116
1000	16	40	26	18	100
1100	28	27	26	31	112
1200	41	39	44	25	149
1300	42	31	37	48	158
1400	34	36	42	44	156
1500	50	53	79	59	241
1600	64	75	86	98	323
1700	149	115	129	95	488
1800	69	71	66	67	273
1900	62	50	46	51	209
2000	41	34	49	47	171
2100	46	26	38	18	128
2200	23	18	14	14	69
2300	14	9	9	2	34
24-Hour Totals:					3134

Peak Volume Information

	Hour	Volume
A.M.	745	169
P.M.	1645	491
Daily	1645	491

Generated by SPS 5.0.44P

County: 93
Station: 1046
Description: MILITARY TRAIL TO NB I-95
Start Date: 04/24/2013
Start Time: 0000

Direction: N

Time	1st	2nd	3rd	4th	Total
0000	11	0	5	3	19
0100	1	1	4	1	7
0200	0	0	2	3	5
0300	1	1	2	1	5
0400	4	0	4	0	8
0500	4	4	5	3	16
0600	7	15	16	15	53
0700	30	36	37	32	135
0800	33	47	36	23	139
0900	39	19	26	32	116
1000	26	18	23	30	97
1100	41	23	41	48	153
1200	40	35	34	30	139
1300	32	21	37	44	134
1400	37	39	48	51	175
1500	45	62	73	62	242
1600	78	79	83	100	340
1700	122	117	137	82	458
1800	79	75	58	61	273
1900	64	44	44	47	199
2000	54	62	52	46	214
2100	36	50	58	28	172
2200	26	22	16	14	78
2300	9	8	6	9	32
24-Hour Totals:					3209

Peak Volume Information

	Hour	Volume
A.M.	730	149
P.M.	1645	476
Daily	1645	476

Generated by SPS 5.0.44P

County: 93
Station: 1046
Description: MILITARY TRAIL TO NB I-95
Start Date: 04/25/2013
Start Time: 0000

Direction: N

Time	1st	2nd	3rd	4th	Total
0000	8	8	5	2	23
0100	5	6	2	2	15
0200	1	5	0	2	8
0300	1	1	1	3	6
0400	1	1	2	2	6
0500	4	2	7	4	17
0600	6	16	11	13	46
0700	30	41	32	31	134
0800	34	39	34	39	146
0900	42	21	37	26	126
1000	26	25	35	31	117
1100	35	24	35	34	128
1200	30	38	39	39	146
1300	33	34	29	32	128
1400	27	39	51	44	161
1500	53	55	81	70	259
1600	76	67	84	78	305
1700	132	109	115	108	464
1800	84	65	66	50	265
1900	65	56	50	51	222
2000	47	59	52	36	194
2100	53	35	24	36	148
2200	30	27	16	14	87
2300	20	18	9	13	60
24-Hour Totals:					3211

Peak Volume Information

	Hour	Volume
A.M.	815	154
P.M.	1700	464
Daily	1700	464

Generated by SPS 5.0.44P

County: 93
Station: 1047
Description: MILITARY TRAIL TO NB I-95
Start Date: 04/23/2013
Start Time: 0000

Time	Direction: N 1st	2nd	3rd	4th	Total
0000	15	7	1	0	23
0100	1	1	4	2	8
0200	0	1	1	1	3
0300	2	1	3	1	7
0400	5	3	0	2	10
0500	6	2	7	6	21
0600	5	14	11	30	60
0700	42	27	37	49	155
0800	42	38	67	36	183
0900	26	36	26	33	121
1000	19	31	29	28	107
1100	28	31	32	32	123
1200	46	43	40	33	162
1300	35	42	37	49	163
1400	41	41	42	51	175
1500	52	61	84	63	260
1600	68	79	76	105	328
1700	138	120	135	114	507
1800	76	84	64	68	292
1900	65	55	50	52	222
2000	47	32	52	42	173
2100	48	26	42	22	138
2200	22	20	14	16	72
2300	13	12	9	3	37
24-Hour Totals:					3350

Peak Volume Information

	Hour	Volume
A.M.	745	196
P.M.	1700	507
Daily	1700	507

Truck Percentage 2.69 NaN 2.69

Classification Summary Database

Dir	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TotTrk	TotVol
N	13	2789	458	6	62	5	0	13	4	0	0	0	0	0	0	90	3350

Generated by SPS 5.0.44P

County: 93
Station: 1047
Description: MILITARY TRAIL TO NB I-95
Start Date: 04/24/2013
Start Time: 0000

	Direction: N				
Time	1st	2nd	3rd	4th	Total
0000	9	3	5	3	20
0100	2	1	5	1	9
0200	0	1	2	2	5
0300	3	1	2	1	7
0400	3	0	4	0	7
0500	5	2	7	6	20
0600	7	13	17	24	61
0700	40	41	38	40	159
0800	36	42	44	32	154
0900	35	26	29	30	120
1000	34	18	18	37	107
1100	33	33	42	38	146
1200	55	37	36	38	166
1300	26	33	40	34	133
1400	52	39	49	56	196
1500	48	65	75	51	239
1600	88	76	90	104	358
1700	115	133	129	117	494
1800	83	76	71	67	297
1900	59	47	52	46	204
2000	45	68	57	47	217
2100	43	44	59	34	180
2200	27	26	15	15	83
2300	9	8	6	9	32
24-Hour Totals:					3414

Peak Volume Information

	Hour	Volume
A.M.	745	162
P.M.	1700	494
Daily	1700	494

Truck Percentage	2.11	NaN	2.11

Classification Summary Database

Dir	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TotTrk	TotVol
N	11	2859	472	12	41	3	0	11	5	0	0	0	0	0	0	72	3414

Generated by SPS 5.0.44P

County: 93
Station: 1047
Description: MILITARY TRAIL TO NB I-95
Start Date: 04/25/2013
Start Time: 0000

	Direction: N				
Time	1st	2nd	3rd	4th	Total
0000	9	7	6	2	24
0100	5	6	3	2	16
0200	1	5	0	2	8
0300	1	1	1	3	6
0400	1	1	2	1	5
0500	4	4	7	5	20
0600	7	15	11	25	58
0700	37	43	33	40	153
0800	36	39	44	48	167
0900	39	30	39	30	138
1000	25	24	34	33	116
1100	31	28	41	29	129
1200	37	34	39	44	154
1300	25	48	36	24	133
1400	42	40	44	49	175
1500	46	71	88	64	269
1600	81	75	83	81	320
1700	131	114	132	117	494
1800	88	79	65	58	290
1900	68	55	53	57	233
2000	45	59	59	39	202
2100	51	37	27	35	150
2200	33	28	14	16	91
2300	21	19	9	15	64
24-Hour Totals:					3415

Peak Volume Information

	Hour	Volume
A.M.	815	170
P.M.	1700	494
Daily	1700	494

Truck Percentage	2.02	NaN	2.02

Classification Summary Database

Dir	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TotTrk	TotVol
N	14	2870	462	7	46	0	0	12	4	0	0	0	0	0	0	69	3415

Generated by SPS 5.0.44P

County: 93
Station: 1125
Description: I-95 NB TO NORTHLAKE
Start Date: 04/30/2013
Start Time: 0000

Direction: N

Time	1st	2nd	3rd	4th	Total
0000	33	35	24	23	115
0100	15	16	7	15	53
0200	15	15	7	9	46
0300	11	12	18	13	54
0400	11	8	20	29	68
0500	32	48	56	79	215
0600	39	76	141	217	473
0700	249	286	321	374	1230
0800	349	360	360	362	1431
0900	255	250	262	281	1048
1000	232	243	264	256	995
1100	239	262	248	294	1043
1200	302	309	306	253	1170
1300	259	269	256	278	1062
1400	264	213	283	354	1114
1500	334	355	333	380	1402
1600	377	422	377	383	1559
1700	399	483	426	388	1696
1800	353	355	270	288	1266
1900	237	192	178	147	754
2000	145	172	161	149	627
2100	112	135	110	131	488
2200	135	104	89	65	393
2300	83	62	63	45	253
24-Hour Totals:					18555

Peak Volume Information

	Hour	Volume
A.M.	745	1443
P.M.	1700	1696
Daily	1700	1696

Truck Percentage	3.71	NaN	3.71

Classification Summary Database

Dir	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TotTrk	TotVol
N	46	14385	3436	27	399	46	0	161	45	2	1	0	7	0	0	688	18555

Generated by SPS 5.0.44P

County: 93
Station: 1125
Description: I-95 NB TO NORTHLAKE
Start Date: 05/01/2013
Start Time: 0000

	Direction: N				
Time	1st	2nd	3rd	4th	Total
0000	48	46	35	25	154
0100	22	24	14	19	79
0200	17	19	14	12	62
0300	7	13	16	14	50
0400	2	10	23	39	74
0500	32	40	56	74	202
0600	61	71	132	215	479
0700	237	307	327	381	1252
0800	323	283	337	367	1310
0900	273	250	262	263	1048
1000	216	245	262	284	1007
1100	285	267	286	308	1146
1200	273	280	288	315	1156
1300	267	294	314	280	1155
1400	262	313	347	325	1247
1500	321	355	365	393	1434
1600	390	374	392	398	1554
1700	342	421	392	355	1510
1800	327	292	267	253	1139
1900	205	203	161	172	741
2000	135	159	121	145	560
2100	134	120	128	121	503
2200	106	139	124	91	460
2300	93	78	59	51	281
24-Hour Totals:					18603

Peak Volume Information

	Hour	Volume
A.M.	715	1338
P.M.	1600	1554
Daily	1600	1554

Truck Percentage 3.55 NaN 3.55

Classification Summary Database

Dir	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TotTrk	TotVol
N	44	14438	3461	48	377	44	2	138	49	1	0	0	1	0	0	660	18603

Generated by SPS 5.0.44P

County: 93
Station: 1125
Description: I-95 NB TO NORTHLAKE
Start Date: 05/02/2013
Start Time: 0000

Time	Direction: N 1st	2nd	3rd	4th	Total
0000	40	46	39	36	161
0100	24	22	15	25	86
0200	18	19	10	9	56
0300	11	14	9	12	46
0400	15	15	22	24	76
0500	33	49	58	70	210
0600	53	66	149	213	481
0700	242	291	319	364	1216
0800	277	320	317	327	1241
0900	302	247	239	289	1077
1000	235	252	259	293	1039
1100	254	211	272	299	1036
1200	258	239	262	248	1007
1300	256	260	254	248	1018
1400	234	241	285	318	1078
1500	295	275	296	369	1235
1600	278	333	354	375	1340
1700	377	399	352	314	1442
1800	277	295	254	195	1021
1900	198	185	166	139	688
2000	126	147	144	145	562
2100	117	133	126	124	500
2200	92	112	115	79	398
2300	87	86	65	59	297
24-Hour Totals:					17311

Peak Volume Information

	Hour	Volume
A.M.	730	1280
P.M.	1630	1505
Daily	1630	1505

Truck Percentage	3.30	NaN	3.30

Classification Summary Database

Dir	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TotTrk	TotVol
N	33	13307	3399	47	335	39	3	102	43	2	0	0	1	0	0	572	17311

Generated by SPS 5.0.44P

County: 93
Station: 1126
Description: I-95 NB TO NORTHLAKE
Start Date: 04/30/2013
Start Time: 0000

Direction: N

Time	1st	2nd	3rd	4th	Total
0000	19	11	15	10	55
0100	8	11	7	8	34
0200	7	11	6	0	24
0300	7	2	3	4	16
0400	3	2	12	12	29
0500	11	22	28	34	95
0600	20	33	56	85	194
0700	97	92	83	127	399
0800	127	119	137	108	491
0900	93	80	93	90	356
1000	86	81	105	80	352
1100	78	94	67	101	340
1200	90	120	104	79	393
1300	104	91	71	105	371
1400	93	84	117	123	417
1500	143	158	107	128	536
1600	152	149	142	164	607
1700	173	170	163	180	686
1800	148	109	118	122	497
1900	93	77	86	69	325
2000	49	63	63	70	245
2100	64	60	65	57	246
2200	68	49	57	21	195
2300	34	29	32	26	121
24-Hour Totals:					7024

Peak Volume Information

	Hour	Volume
A.M.	745	510
P.M.	1700	686
Daily	1700	686

Generated by SPS 5.0.44P

County: 93
Station: 1126
Description: I-95 NB TO NORTHLAKE
Start Date: 05/01/2013
Start Time: 0000

Direction: N

Time	1st	2nd	3rd	4th	Total
0000	27	26	6	13	72
0100	15	11	6	9	41
0200	6	10	9	3	28
0300	1	4	12	4	21
0400	2	3	18	18	41
0500	8	15	31	33	87
0600	25	29	43	78	175
0700	93	86	95	132	406
0800	92	93	110	128	423
0900	90	92	91	76	349
1000	71	67	93	92	323
1100	92	84	89	101	366
1200	88	81	83	92	344
1300	100	93	92	94	379
1400	68	87	116	91	362
1500	120	131	102	136	489
1600	149	139	117	149	554
1700	156	154	154	166	630
1800	137	121	103	100	461
1900	86	78	75	56	295
2000	46	50	50	65	211
2100	64	49	58	53	224
2200	41	59	47	48	195
2300	40	40	26	30	136
24-Hour Totals:					6612

Peak Volume Information

	Hour	Volume
A.M.	745	427
P.M.	1700	630
Daily	1700	630

Generated by SPS 5.0.44P

County: 93
Station: 1126
Description: I-95 NB TO NORTHLAKE
Start Date: 05/02/2013
Start Time: 0000

Time	Direction: N 1st	2nd	3rd	4th	Total
0000	10	20	14	19	63
0100	13	8	3	12	36
0200	12	9	2	1	24
0300	8	4	1	5	18
0400	3	6	5	11	25
0500	14	19	22	26	81
0600	27	23	43	83	176
0700	100	80	77	132	389
0800	86	112	112	124	434
0900	99	76	92	83	350
1000	67	81	86	82	316
1100	85	78	71	117	351
1200	66	90	103	76	335
1300	95	86	73	90	344
1400	77	80	126	110	393
1500	104	109	107	121	441
1600	106	135	133	127	501
1700	176	158	136	151	621
1800	110	104	106	91	411
1900	69	67	62	48	246
2000	52	56	52	63	223
2100	52	50	48	45	195
2200	45	45	42	45	177
2300	28	29	29	23	109
24-Hour Totals:					6259

Peak Volume Information

	Hour	Volume
A.M.	815	447
P.M.	1700	621
Daily	1700	621

Generated by SPS 5.0.44P

County: 93
Station: 1133
Description: NORTHLAKE TO NB I-95
Start Date: 04/30/2013
Start Time: 0000

	Direction: N				
Time	1st	2nd	3rd	4th	Total
0000	4	1	3	3	11
0100	1	2	3	0	6
0200	1	1	6	2	10
0300	1	1	8	2	12
0400	4	5	8	10	27
0500	6	10	17	31	64
0600	27	51	55	68	201
0700	86	114	162	136	498
0800	128	137	126	127	518
0900	117	101	89	81	388
1000	63	73	80	90	306
1100	60	78	69	76	283
1200	88	96	81	75	340
1300	66	76	94	69	305
1400	76	78	53	61	268
1500	75	77	79	97	328
1600	62	77	95	102	336
1700	121	98	110	98	427
1800	82	90	75	65	312
1900	79	48	49	38	214
2000	38	41	41	45	165
2100	42	29	29	16	116
2200	17	14	18	15	64
2300	12	9	10	5	36
24-Hour Totals:					5235

Peak Volume Information

	Hour	Volume
A.M.	730	563
P.M.	1645	431
Daily	730	563

Generated by SPS 5.0.44P

County: 93
Station: 1133
Description: NORTHLAKE TO NB I-95
Start Date: 05/01/2013
Start Time: 0000

Direction: N

Time	1st	2nd	3rd	4th	Total
0000	5	5	8	0	18
0100	9	3	3	5	20
0200	5	4	2	2	13
0300	0	3	3	3	9
0400	2	6	7	9	24
0500	5	16	19	30	70
0600	30	33	64	69	196
0700	99	135	166	126	526
0800	135	121	103	123	482
0900	123	98	87	70	378
1000	71	72	69	68	280
1100	52	79	89	84	304
1200	87	73	69	77	306
1300	78	73	77	73	301
1400	77	83	62	90	312
1500	65	76	75	133	349
1600	97	70	90	121	378
1700	105	77	66	80	328
1800	82	87	67	43	279
1900	55	48	47	41	191
2000	43	45	57	37	182
2100	53	23	24	16	116
2200	15	14	19	6	54
2300	13	9	11	10	43
24-Hour Totals:					5159

Peak Volume Information

	Hour	Volume
A.M.	715	562
P.M.	1630	393
Daily	715	562

Generated by SPS 5.0.44P

County: 93
Station: 1133
Description: NORTHLAKE TO NB I-95
Start Date: 05/02/2013
Start Time: 0000

	Direction: N				
Time	1st	2nd	3rd	4th	Total
0000	5	6	8	5	24
0100	1	4	3	2	10
0200	2	1	4	0	7
0300	1	1	3	6	11
0400	0	4	6	13	23
0500	12	13	14	24	63
0600	21	47	55	89	212
0700	81	118	134	144	477
0800	116	150	150	145	561
0900	133	91	86	81	391
1000	60	77	71	85	293
1100	65	57	66	68	256
1200	86	59	61	82	288
1300	62	69	74	63	268
1400	55	51	55	79	240
1500	71	65	64	93	293
1600	76	67	77	66	286
1700	75	109	94	91	369
1800	84	70	45	59	258
1900	58	42	41	42	183
2000	41	39	24	34	138
2100	33	28	29	14	104
2200	16	18	20	15	69
2300	16	14	5	7	42
24-Hour Totals:					4866

Peak Volume Information

	Hour	Volume
A.M.	815	578
P.M.	1715	378
Daily	815	578

Generated by SPS 5.0.44P

County: 93
Station: 1134
Description: NORTHLAKE TO NB I-95
Start Date: 04/30/2013
Start Time: 0000

Time	Direction: N 1st	2nd	3rd	4th	Total
0000	13	6	13	7	39
0100	7	12	4	2	25
0200	5	2	7	4	18
0300	3	4	9	6	22
0400	2	7	10	18	37
0500	12	19	29	43	103
0600	42	66	100	118	326
0700	159	163	208	242	772
0800	186	192	220	214	812
0900	168	181	153	147	649
1000	155	139	197	182	673
1100	172	179	162	227	740
1200	183	189	208	216	796
1300	216	194	220	207	837
1400	186	210	168	168	732
1500	196	203	213	212	824
1600	231	210	230	264	935
1700	268	266	244	236	1014
1800	220	207	196	172	795
1900	179	152	116	104	551
2000	112	112	116	107	447
2100	102	76	75	65	318
2200	51	43	38	36	168
2300	32	23	26	15	96
24-Hour Totals:					11729

Peak Volume Information

	Hour	Volume
A.M.	745	840
P.M.	1645	1042
Daily	1645	1042

Truck Percentage	3.98	NaN	3.98

Classification Summary Database

Dir	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TotTrk	TotVol
N	17	8984	2261	18	253	20	12	101	62	0	0	0	1	0	0	467	11729

Generated by SPS 5.0.44P

County: 93
Station: 1134
Description: NORTHLAKE TO NB I-95
Start Date: 05/01/2013
Start Time: 0000

Time	Direction: N 1st	2nd	3rd	4th	Total
0000	19	16	17	6	58
0100	14	6	5	10	35
0200	8	10	5	5	28
0300	3	6	6	8	23
0400	4	13	12	20	49
0500	11	24	31	45	111
0600	46	55	93	128	322
0700	154	174	215	224	767
0800	199	190	191	217	797
0900	180	189	170	130	669
1000	158	155	155	162	630
1100	151	190	180	224	745
1200	219	213	204	219	855
1300	201	204	206	212	823
1400	214	222	194	250	880
1500	202	228	228	275	933
1600	249	217	236	289	991
1700	299	204	214	217	934
1800	208	181	181	136	706
1900	123	131	133	122	509
2000	123	115	110	118	466
2100	115	75	56	46	292
2200	51	44	44	33	172
2300	33	22	22	25	102
24-Hour Totals:					11897

Peak Volume Information

	Hour	Volume
A.M.	730	828
P.M.	1615	1041
Daily	1615	1041

Truck Percentage	3.56	NaN	3.56

Classification Summary Database

Dir	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TotTrk	TotVol
N	21	9072	2381	13	232	16	0	106	56	0	0	0	0	0	0	423	11897

Generated by SPS 5.0.44P

County: 93
Station: 1134
Description: NORTHLAKE TO NB I-95
Start Date: 05/02/2013
Start Time: 0000

Time	Direction: N 1st	2nd	3rd	4th	Total
0000	19	12	13	18	62
0100	7	8	7	9	31
0200	7	6	10	3	26
0300	7	5	6	12	30
0400	4	5	10	19	38
0500	19	18	28	49	114
0600	43	62	89	138	332
0700	146	174	218	246	784
0800	198	189	235	233	855
0900	201	192	180	155	728
1000	147	171	185	184	687
1100	168	169	148	168	653
1200	188	183	204	185	760
1300	192	178	190	194	754
1400	191	174	182	188	735
1500	175	175	180	196	726
1600	225	215	196	191	827
1700	236	252	214	230	932
1800	188	154	130	142	614
1900	146	121	121	103	491
2000	101	100	91	97	389
2100	81	79	81	61	302
2200	56	50	42	40	188
2300	30	36	25	21	112
24-Hour Totals:					11170

Peak Volume Information

	Hour	Volume
A.M.	745	868
P.M.	1700	932
Daily	1700	932

Truck Percentage 3.70 NaN 3.70

Classification Summary Database

Dir	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TotTrk	TotVol
N	10	8559	2188	15	234	21	0	90	52	1	0	0	0	0	0	413	11170

Generated by SPS 5.0.44P

County: 93
Station: 1135
Description: I-95 SB TO NORTHLAKE
Start Date: 04/30/2013
Start Time: 0000

Time	Direction: S 1st	2nd	3rd	4th	Total
0000	31	14	12	17	74
0100	13	7	5	2	27
0200	5	4	5	8	22
0300	4	10	15	12	41
0400	1	7	7	22	37
0500	14	22	35	44	115
0600	44	74	110	126	354
0700	128	163	221	262	774
0800	236	226	237	234	933
0900	189	191	173	226	779
1000	191	171	187	202	751
1100	173	180	196	189	738
1200	230	213	202	174	819
1300	160	208	183	230	781
1400	187	180	204	171	742
1500	151	179	167	196	693
1600	168	255	183	215	821
1700	218	250	238	242	948
1800	180	175	164	170	689
1900	158	152	125	109	544
2000	124	135	122	99	480
2100	87	90	88	72	337
2200	67	72	51	38	228
2300	32	42	23	36	133
24-Hour Totals:					11860

Peak Volume Information

	Hour	Volume
A.M.	745	961
P.M.	1700	948
Daily	745	961

Truck Percentage	4.81	NaN	4.81

Classification Summary Database

Dir	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TotTrk	TotVol
S	44	9102	2144	76	349	38	2	51	52	1	0	0	1	0	0	570	11860

Generated by SPS 5.0.44P

County: 93
Station: 1135
Description: I-95 SB TO NORTHLAKE
Start Date: 05/01/2013
Start Time: 0000

Time	Direction: S 1st	2nd	3rd	4th	Total
0000	20	24	16	10	70
0100	15	9	10	9	43
0200	10	6	7	9	32
0300	7	6	11	9	33
0400	1	7	8	13	29
0500	14	15	27	51	107
0600	54	66	118	140	378
0700	150	186	211	269	816
0800	224	244	204	243	915
0900	178	218	164	210	770
1000	186	166	173	213	738
1100	199	211	181	185	776
1200	202	204	223	217	846
1300	202	222	190	214	828
1400	200	228	226	209	863
1500	214	222	254	232	922
1600	221	245	255	223	944
1700	214	193	172	166	745
1800	149	162	151	171	633
1900	134	130	109	101	474
2000	114	100	106	96	416
2100	105	81	72	73	331
2200	60	46	54	43	203
2300	44	45	23	21	133
24-Hour Totals:					12045

Peak Volume Information

	Hour	Volume
A.M.	730	948
P.M.	1545	953
Daily	1545	953

Truck Percentage	4.96	NaN	4.96

Classification Summary Database

Dir	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TotTrk	TotVol
S	32	9236	2179	71	373	23	2	71	57	1	0	0	0	0	0	598	12045

Generated by SPS 5.0.44P

County: 93
Station: 1135
Description: I-95 SB TO NORTHLAKE
Start Date: 05/02/2013
Start Time: 0000

Time	Direction: S 1st	2nd	3rd	4th	Total
0000	21	19	16	14	70
0100	11	13	12	7	43
0200	6	3	4	8	21
0300	9	7	11	13	40
0400	5	9	10	18	42
0500	20	16	30	41	107
0600	50	95	99	159	403
0700	131	176	197	313	817
0800	278	220	204	248	950
0900	193	190	201	212	796
1000	188	183	198	189	758
1100	192	208	195	195	790
1200	147	191	221	187	746
1300	190	213	166	189	758
1400	149	176	180	196	701
1500	175	168	170	201	714
1600	194	184	133	140	651
1700	118	140	136	136	530
1800	127	120	118	116	481
1900	105	113	82	91	391
2000	75	73	83	81	312
2100	62	90	66	64	282
2200	66	44	38	50	198
2300	45	42	43	23	153
24-Hour Totals:					10754

Peak Volume Information

	Hour	Volume
A.M.	745	1015
P.M.	1230	811
Daily	745	1015

Truck Percentage	6.70	NaN	6.70

Classification Summary Database

Dir	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TotTrk	TotVol
S	59	7769	2206	87	353	57	2	52	63	101	0	0	5	0	0	720	10754

Generated by SPS 5.0.44P

County: 93
Station: 1136
Description: I-95 SB TO NORTHLAKE
Start Date: 04/30/2013
Start Time: 0000

	Direction: S				
Time	1st	2nd	3rd	4th	Total
0000	24	6	2	15	47
0100	9	4	3	2	18
0200	7	3	5	6	21
0300	2	6	14	12	34
0400	2	9	2	15	28
0500	4	18	30	44	96
0600	23	53	102	85	263
0700	101	102	154	206	563
0800	148	134	170	133	585
0900	112	132	129	120	493
1000	153	105	122	133	513
1100	104	129	113	129	475
1200	132	131	127	109	499
1300	82	133	108	144	467
1400	132	123	132	124	511
1500	110	128	94	103	435
1600	114	128	105	123	470
1700	128	128	124	137	517
1800	84	99	96	77	356
1900	83	85	57	55	280
2000	65	66	59	45	235
2100	43	55	33	39	170
2200	35	36	22	15	108
2300	21	27	16	21	85
24-Hour Totals:					7269

Peak Volume Information

	Hour	Volume
A.M.	745	658
P.M.	1345	531
Daily	745	658

Generated by SPS 5.0.44P

County: 93
Station: 1136
Description: I-95 SB TO NORTHLAKE
Start Date: 05/01/2013
Start Time: 0000

	Direction: S				
Time	1st	2nd	3rd	4th	Total
0000	9	11	11	9	40
0100	11	11	8	8	38
0200	7	3	5	5	20
0300	2	5	8	8	23
0400	0	7	4	9	20
0500	6	11	17	43	77
0600	38	46	85	99	268
0700	93	124	126	189	532
0800	130	132	129	147	538
0900	120	157	118	130	525
1000	132	96	116	132	476
1100	124	142	110	126	502
1200	145	104	147	126	522
1300	121	144	95	140	500
1400	121	111	146	123	501
1500	111	130	133	117	491
1600	134	117	116	129	496
1700	107	99	90	94	390
1800	82	78	77	74	311
1900	64	81	65	48	258
2000	60	42	56	50	208
2100	53	46	38	31	168
2200	35	22	24	20	101
2300	28	19	11	16	74
24-Hour Totals:					7079

Peak Volume Information

	Hour	Volume
A.M.	745	580
P.M.	1230	538
Daily	745	580

Generated by SPS 5.0.44P

County: 93
Station: 1136
Description: I-95 SB TO NORTHLAKE
Start Date: 05/02/2013
Start Time: 0000

	Direction: S				
Time	1st	2nd	3rd	4th	Total
0000	12	13	8	7	40
0100	6	12	9	7	34
0200	3	1	1	8	13
0300	8	10	10	10	38
0400	4	11	5	9	29
0500	9	9	23	33	74
0600	30	70	63	110	273
0700	78	100	138	192	508
0800	170	123	128	141	562
0900	120	126	120	115	481
1000	128	111	128	111	478
1100	120	122	113	131	486
1200	111	107	164	118	500
1300	128	130	88	136	482
1400	99	93	117	101	410
1500	95	110	95	107	407
1600	127	107	88	120	442
1700	75	101	88	116	380
1800	88	79	77	83	327
1900	62	68	61	51	242
2000	52	45	50	41	188
2100	34	48	28	34	144
2200	33	25	21	22	101
2300	27	34	22	6	89
24-Hour Totals:					6728

Peak Volume Information

	Hour	Volume
A.M.	730	623
P.M.	1230	540
Daily	730	623

Generated by SPS 5.0.44P

County: 93
Station: 1142
Description: NORTHLAKE TO SB I-95
Start Date: 04/30/2013
Start Time: 0000

	Direction: S				
Time	1st	2nd	3rd	4th	Total
0000	19	24	17	11	71
0100	18	8	3	7	36
0200	6	4	7	7	24
0300	3	2	12	2	19
0400	15	10	14	17	56
0500	14	28	29	48	119
0600	65	73	114	129	381
0700	164	177	218	259	818
0800	276	197	185	179	837
0900	169	147	147	158	621
1000	123	170	172	135	600
1100	180	155	160	172	667
1200	165	197	183	153	698
1300	171	164	169	169	673
1400	153	172	159	114	598
1500	164	216	184	155	719
1600	184	225	191	174	774
1700	241	251	218	236	946
1800	189	151	142	143	625
1900	121	115	132	85	453
2000	94	125	78	111	408
2100	62	74	67	78	281
2200	72	48	52	37	209
2300	37	35	27	21	120
24-Hour Totals:					10753

Peak Volume Information

	Hour	Volume
A.M.	730	950
P.M.	1700	946
Daily	730	950

Generated by SPS 5.0.44P

County: 93
Station: 1142
Description: NORTHLAKE TO SB I-95
Start Date: 05/01/2013
Start Time: 0000

	Direction: S				
Time	1st	2nd	3rd	4th	Total
0000	24	23	9	20	76
0100	17	8	12	4	41
0200	8	4	8	4	24
0300	5	9	7	5	26
0400	11	9	13	23	56
0500	18	22	34	54	128
0600	66	77	109	124	376
0700	176	174	204	270	824
0800	264	186	176	172	798
0900	165	145	172	143	625
1000	135	171	176	135	617
1100	162	152	160	187	661
1200	141	163	172	137	613
1300	192	194	182	194	762
1400	167	208	180	152	707
1500	187	239	244	178	848
1600	187	234	214	194	829
1700	245	239	227	217	928
1800	202	180	131	148	661
1900	139	112	106	97	454
2000	87	107	89	78	361
2100	75	81	64	53	273
2200	67	70	49	44	230
2300	27	26	24	21	98
24-Hour Totals:					11016

Peak Volume Information

	Hour	Volume
A.M.	730	924
P.M.	1700	928
Daily	1700	928

Generated by SPS 5.0.44P

County: 93
Station: 1142
Description: NORTHLAKE TO SB I-95
Start Date: 05/02/2013
Start Time: 0000

	Direction: S				
Time	1st	2nd	3rd	4th	Total
0000	20	17	13	14	64
0100	7	18	17	16	58
0200	6	5	7	5	23
0300	2	10	4	18	34
0400	11	19	21	18	69
0500	28	35	38	51	152
0600	62	83	111	118	374
0700	187	173	214	245	819
0800	229	195	183	200	807
0900	147	156	156	143	602
1000	119	176	142	137	574
1100	171	154	141	150	616
1200	140	145	149	132	566
1300	162	146	162	154	624
1400	138	171	187	146	642
1500	139	167	183	148	637
1600	161	204	154	163	682
1700	227	196	213	192	828
1800	206	164	121	139	630
1900	135	96	118	88	437
2000	77	100	75	94	346
2100	90	70	63	63	286
2200	58	46	55	45	204
2300	31	26	31	24	112
24-Hour Totals:					10186

Peak Volume Information

	Hour	Volume
A.M.	730	883
P.M.	1700	828
Daily	730	883

Generated by SPS 5.0.44P

County: 93
Station: 1143
Description: NORTHLAKE TO SB I-95
Start Date: 04/30/2013
Start Time: 0000

	Direction: S				
Time	1st	2nd	3rd	4th	Total
0000	36	30	27	20	113
0100	22	14	7	10	53
0200	11	12	9	9	41
0300	4	8	18	7	37
0400	19	15	30	25	89
0500	40	50	64	85	239
0600	132	132	206	233	703
0700	322	364	440	425	1551
0800	429	414	345	257	1445
0900	306	287	246	278	1117
1000	228	272	254	261	1015
1100	274	249	269	254	1046
1200	288	307	281	305	1181
1300	262	286	294	255	1097
1400	272	286	256	158	972
1500	177	160	190	184	711
1600	181	202	196	196	775
1700	227	242	223	212	904
1800	199	164	176	153	692
1900	138	151	139	118	546
2000	124	118	111	123	476
2100	121	86	113	81	401
2200	97	77	68	40	282
2300	55	42	36	35	168
24-Hour Totals:					15654

Peak Volume Information

	Hour	Volume
A.M.	730	1708
P.M.	1200	1181
Daily	730	1708

Truck Percentage	3.63	NaN	3.63

Classification Summary Database

Dir	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TotTrk	TotVol
S	44	11829	3213	59	340	21	0	82	62	2	0	0	2	0	0	568	15654

Generated by SPS 5.0.44P

County: 93
Station: 1143
Description: NORTHLAKE TO SB I-95
Start Date: 05/01/2013
Start Time: 0000

Direction: S					
Time	1st	2nd	3rd	4th	Total
0000	33	27	26	36	122
0100	18	20	16	10	64
0200	19	14	11	12	56
0300	16	10	13	10	49
0400	18	23	30	35	106
0500	50	53	76	90	269
0600	98	144	163	175	580
0700	211	224	294	268	997
0800	275	249	248	202	974
0900	196	196	192	200	784
1000	187	180	260	254	881
1100	232	263	281	220	996
1200	294	255	269	282	1100
1300	290	313	320	283	1206
1400	294	296	287	297	1174
1500	302	324	333	310	1269
1600	309	309	368	342	1328
1700	388	341	368	340	1437
1800	307	297	237	207	1048
1900	235	208	157	166	766
2000	154	167	155	149	625
2100	142	115	117	75	449
2200	123	86	83	64	356
2300	48	39	37	29	153
24-Hour Totals:					16789

Peak Volume Information

	Hour	Volume
A.M.	730	1086
P.M.	1630	1439
Daily	1630	1439

Truck Percentage 3.60 NaN 3.60

Classification Summary Database

Dir	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TotTrk	TotVol
S	27	12836	3321	55	373	21	0	90	58	4	1	0	3	0	0	605	16789

Generated by SPS 5.0.44P

County: 93
Station: 1143
Description: NORTHLAKE TO SB I-95
Start Date: 05/02/2013
Start Time: 0000

	Direction: S				
Time	1st	2nd	3rd	4th	Total
0000	37	31	18	20	106
0100	19	18	24	17	78
0200	16	14	17	8	55
0300	2	10	9	23	44
0400	13	28	34	30	105
0500	48	52	65	78	243
0600	118	154	221	262	755
0700	312	360	442	392	1506
0800	412	352	365	319	1448
0900	276	267	231	256	1030
1000	231	257	239	271	998
1100	260	276	246	218	1000
1200	249	231	259	268	1007
1300	248	255	277	207	987
1400	262	238	274	248	1022
1500	252	243	265	268	1028
1600	281	274	269	280	1104
1700	343	318	371	257	1289
1800	277	254	197	202	930
1900	199	170	177	156	702
2000	153	136	143	135	567
2100	155	109	110	95	469
2200	99	78	83	50	310
2300	52	37	50	30	169
24-Hour Totals:					16952

Peak Volume Information

	Hour	Volume
A.M.	715	1606
P.M.	1645	1312
Daily	715	1606

Truck Percentage 3.94 NaN 3.94

Classification Summary Database

Dir	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TotTrk	TotVol
S	42	13117	3125	49	416	36	1	93	69	2	0	0	2	0	0	668	16952

Generated by SPS 5.0.44P

County: 93
Station: 1048
Description: I-95 SB TO PGA
Start Date: 04/23/2013
Start Time: 0000

Direction: S

Time	1st	2nd	3rd	4th	Total
0000	5	11	1	5	22
0100	3	1	0	2	6
0200	0	2	3	0	5
0300	4	2	6	1	13
0400	4	3	3	8	18
0500	10	12	18	28	68
0600	14	35	47	79	175
0700	98	148	208	271	725
0800	201	188	184	200	773
0900	153	138	84	100	475
1000	103	86	98	122	409
1100	97	110	91	125	423
1200	99	79	80	102	360
1300	81	96	85	109	371
1400	78	99	87	96	360
1500	93	73	69	88	323
1600	80	76	84	104	344
1700	90	88	106	87	371
1800	99	85	70	80	334
1900	50	35	46	31	162
2000	43	28	30	26	127
2100	20	15	26	15	76
2200	13	21	15	15	64
2300	6	3	10	13	32
24-Hour Totals:					6036

Peak Volume Information

	Hour	Volume
A.M.	730	868
P.M.	1645	388
Daily	730	868

Truck Percentage	2.42	NaN	2.42

Classification Summary Database

Dir	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TotTrk	TotVol
S	23	4789	1078	6	84	3	0	30	23	0	0	0	0	0	0	146	6036

Generated by SPS 5.0.44P

County: 93
Station: 1048
Description: I-95 SB TO PGA
Start Date: 04/24/2013
Start Time: 0000

Time	Direction: S 1st	2nd	3rd	4th	Total
0000	5	7	1	5	18
0100	4	4	1	0	9
0200	2	0	0	0	2
0300	2	0	3	4	9
0400	2	4	8	9	23
0500	11	15	23	31	80
0600	18	32	52	104	206
0700	107	168	214	258	747
0800	202	203	178	197	780
0900	155	147	129	118	549
1000	105	100	129	122	456
1100	102	101	93	118	414
1200	129	119	72	105	425
1300	84	91	106	83	364
1400	73	69	68	88	298
1500	106	77	92	90	365
1600	61	90	96	115	362
1700	86	97	97	99	379
1800	116	107	75	75	373
1900	62	63	44	32	201
2000	33	36	49	24	142
2100	30	22	27	16	95
2200	23	16	17	13	69
2300	6	9	4	5	24
24-Hour Totals:					6390

Peak Volume Information

	Hour	Volume
A.M.	730	877
P.M.	1200	425
Daily	730	877

Truck Percentage	2.32	NaN	2.32

Classification Summary Database

Dir	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TotTrk	TotVol
S	27	5151	1064	5	92	12	1	25	13	0	0	0	0	0	0	148	6390

Generated by SPS 5.0.44P

County: 93
Station: 1048
Description: I-95 SB TO PGA
Start Date: 04/25/2013
Start Time: 0000

Time	Direction: S 1st	2nd	3rd	4th	Total
0000	7	5	2	5	19
0100	7	5	0	2	14
0200	1	1	2	2	6
0300	1	2	4	4	11
0400	8	4	12	7	31
0500	11	16	19	22	68
0600	18	32	54	82	186
0700	99	181	185	282	747
0800	207	214	177	214	812
0900	167	169	116	125	577
1000	110	92	132	116	450
1100	103	96	98	111	408
1200	79	91	100	92	362
1300	76	115	94	89	374
1400	84	90	77	95	346
1500	84	107	102	76	369
1600	96	98	105	104	403
1700	71	98	78	132	379
1800	88	110	91	75	364
1900	59	59	47	43	208
2000	33	39	45	41	158
2100	20	31	27	32	110
2200	33	23	21	11	88
2300	6	7	11	7	31
24-Hour Totals:					6521

Peak Volume Information

	Hour	Volume
A.M.	730	888
P.M.	1745	421
Daily	730	888

Truck Percentage	2.47	NaN	2.47

Classification Summary Database

Dir	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TotTrk	TotVol
S	21	5336	1003	3	93	6	0	29	30	0	0	0	0	0	0	161	6521

Generated by SPS 5.0.44P

County: 93
Station: 1049
Description: I-95 SB TO PGA
Start Date: 04/23/2013
Start Time: 0000

Direction: S

Time	1st	2nd	3rd	4th	Total
0000	4	17	1	3	25
0100	4	1	0	3	8
0200	0	5	3	0	8
0300	6	3	7	1	17
0400	2	4	3	8	17
0500	12	14	19	23	68
0600	17	44	47	90	198
0700	106	153	211	268	738
0800	193	176	197	207	773
0900	148	151	89	105	493
1000	99	75	95	113	382
1100	90	113	79	98	380
1200	82	89	73	99	343
1300	75	79	75	102	331
1400	67	86	74	83	310
1500	85	62	71	87	305
1600	63	73	70	93	299
1700	80	84	91	85	340
1800	77	81	68	67	293
1900	48	34	45	24	151
2000	49	24	31	16	120
2100	15	18	19	18	70
2200	18	20	15	12	65
2300	6	2	11	13	32
24-Hour Totals:					5766

Peak Volume Information

	Hour	Volume
A.M.	730	848
P.M.	1645	348
Daily	730	848

Generated by SPS 5.0.44P

County: 93
Station: 1049
Description: I-95 SB TO PGA
Start Date: 04/24/2013
Start Time: 0000

	Direction: S				
Time	1st	2nd	3rd	4th	Total
0000	9	7	1	2	19
0100	1	5	0	0	6
0200	2	0	0	0	2
0300	2	0	2	7	11
0400	2	2	9	8	21
0500	10	15	17	28	70
0600	18	27	53	95	193
0700	101	164	203	243	711
0800	217	184	172	189	762
0900	146	138	120	113	517
1000	99	94	109	105	407
1100	92	86	84	112	374
1200	120	102	70	94	386
1300	77	77	95	76	325
1400	66	60	63	81	270
1500	81	76	78	77	312
1600	52	82	82	101	317
1700	84	86	77	90	337
1800	102	95	70	70	337
1900	60	72	41	33	206
2000	32	40	44	25	141
2100	27	25	24	14	90
2200	24	17	19	14	74
2300	8	7	10	6	31
24-Hour Totals:					5919

Peak Volume Information

	Hour	Volume
A.M.	730	847
P.M.	1200	386
Daily	730	847

Generated by SPS 5.0.44P

County: 93
Station: 1049
Description: I-95 SB TO PGA
Start Date: 04/25/2013
Start Time: 0000

Direction: S

Time	1st	2nd	3rd	4th	Total
0000	6	6	2	3	17
0100	7	7	0	3	17
0200	2	0	0	2	4
0300	1	2	2	6	11
0400	6	3	13	6	28
0500	13	13	20	22	68
0600	19	31	51	83	184
0700	102	160	181	269	712
0800	200	183	171	200	754
0900	160	163	114	117	554
1000	98	84	118	111	411
1100	85	91	98	107	381
1200	74	85	90	83	332
1300	77	115	94	92	378
1400	75	86	74	88	323
1500	79	91	102	72	344
1600	84	82	93	107	366
1700	68	84	72	111	335
1800	90	97	80	71	338
1900	69	52	40	51	212
2000	31	40	46	44	161
2100	21	25	28	31	105
2200	30	22	20	14	86
2300	7	9	11	9	36
24-Hour Totals:					6157

Peak Volume Information

	Hour	Volume
A.M.	730	833
P.M.	1300	378
Daily	730	833

Generated by SPS 5.0.44P

County: 93
Station: 1050
Description: PGA E OF MILITARY
Start Date: 04/23/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	43	40	30	29	142	32	26	32	29	119	261
0100	16	17	13	11	57	19	16	12	13	60	117
0200	11	12	7	9	39	6	12	24	11	53	92
0300	3	11	15	11	40	9	9	3	5	26	66
0400	26	29	16	27	98	12	7	11	16	46	144
0500	30	48	50	69	197	22	20	50	66	158	355
0600	88	124	165	233	610	60	74	117	209	460	1070
0700	368	451	557	702	2078	198	241	249	337	1025	3103
0800	635	585	632	566	2418	294	298	249	278	1119	3537
0900	492	540	461	405	1898	250	225	236	240	951	2849
1000	381	369	364	388	1502	220	258	245	274	997	2499
1100	331	448	392	443	1614	235	270	335	341	1181	2795
1200	430	434	430	492	1786	322	303	333	323	1281	3067
1300	405	412	409	441	1667	291	361	362	432	1446	3113
1400	427	381	404	447	1659	369	335	403	369	1476	3135
1500	455	436	438	424	1753	381	367	432	422	1602	3355
1600	469	401	443	429	1742	431	445	412	480	1768	3510
1700	489	471	483	442	1885	474	582	586	485	2127	4012
1800	439	410	338	367	1554	438	433	362	329	1562	3116
1900	290	287	201	225	1003	296	299	275	233	1103	2106
2000	230	194	205	188	817	244	276	245	236	1001	1818
2100	182	153	129	132	596	235	216	157	157	765	1361
2200	122	113	72	92	399	150	124	83	103	460	859
2300	90	52	68	42	252	91	71	56	59	277	529
24-Hour Totals:					25806					21063	46869

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	745	2554	730	1178	745	3732
P.M.	1700	1885	1700	2127	1700	4012
Daily	745	2554	1700	2127	1700	4012

Generated by SPS 5.0.44P

County: 93
Station: 1050
Description: PGA E OF MILITARY
Start Date: 04/24/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	35	42	29	13	119	35	36	37	35	143	262
0100	30	17	10	16	73	20	14	17	11	62	135
0200	11	18	5	10	44	11	10	11	3	35	79
0300	12	14	15	16	57	15	5	4	10	34	91
0400	17	16	15	28	76	9	9	22	17	57	133
0500	36	32	53	89	210	19	40	53	70	182	392
0600	82	144	183	244	653	65	74	146	190	475	1128
0700	336	436	572	736	2080	179	249	251	351	1030	3110
0800	668	581	630	594	2473	297	278	284	246	1105	3578
0900	455	518	410	399	1782	270	256	240	244	1010	2792
1000	370	392	381	387	1530	220	284	264	304	1072	2602
1100	338	421	397	428	1584	291	351	293	344	1279	2863
1200	418	425	437	416	1696	319	330	360	339	1348	3044
1300	373	463	393	485	1714	281	331	383	369	1364	3078
1400	389	414	437	480	1720	329	365	413	371	1478	3198
1500	424	436	455	437	1752	382	417	406	428	1633	3385
1600	473	446	457	499	1875	428	403	448	482	1761	3636
1700	502	542	517	432	1993	475	565	588	503	2131	4124
1800	423	441	384	348	1596	406	417	371	346	1540	3136
1900	327	268	211	244	1050	302	303	268	273	1146	2196
2000	220	206	195	164	785	248	240	267	260	1015	1800
2100	158	151	130	129	568	228	267	214	148	857	1425
2200	119	145	76	90	430	108	117	99	101	425	855
2300	80	63	59	43	245	65	59	57	40	221	466
24-Hour Totals:					26105					21403	47508

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	745	2615	745	1210	745	3825
P.M.	1645	2060	1700	2131	1645	4170
Daily	745	2615	1700	2131	1645	4170

Generated by SPS 5.0.44P

County: 93
Station: 1050
Description: PGA E OF MILITARY
Start Date: 04/25/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	60	27	28	33	148	51	48	44	40	183	331
0100	22	21	6	6	55	34	21	12	10	77	132
0200	17	11	15	10	53	13	19	7	10	49	102
0300	16	14	15	8	53	12	9	8	11	40	93
0400	18	14	20	27	79	17	6	12	24	59	138
0500	43	46	65	76	230	16	32	53	58	159	389
0600	85	123	180	247	635	68	82	147	190	487	1122
0700	343	444	546	679	2012	169	276	281	313	1039	3051
0800	599	579	582	591	2351	298	317	323	283	1221	3572
0900	511	501	418	395	1825	263	237	271	227	998	2823
1000	381	371	394	429	1575	219	246	284	295	1044	2619
1100	386	428	440	414	1668	246	257	305	327	1135	2803
1200	456	419	475	463	1813	303	364	378	356	1401	3214
1300	421	429	462	451	1763	347	350	373	377	1447	3210
1400	414	433	452	500	1799	376	385	352	384	1497	3296
1500	446	430	463	467	1806	351	458	439	460	1708	3514
1600	463	475	485	432	1855	464	441	439	491	1835	3690
1700	517	522	515	483	2037	523	578	514	503	2118	4155
1800	433	417	404	355	1609	454	404	403	375	1636	3245
1900	346	304	279	253	1182	321	313	280	253	1167	2349
2000	252	231	214	211	908	260	290	267	252	1069	1977
2100	164	174	171	174	683	250	264	217	216	947	1630
2200	167	140	107	100	514	163	132	110	108	513	1027
2300	109	83	66	52	310	96	98	65	64	323	633
24-Hour Totals:					26963					22152	49115

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	745	2439	745	1251	745	3690
P.M.	1700	2037	1700	2118	1700	4155
Daily	745	2439	1700	2118	1700	4155

Generated by SPS 5.0.44P

County: 93
Station: 1051
Description: EB PGA TO SB I-95
Start Date: 04/23/2013
Start Time: 0000

Time	Direction: S 1st	2nd	3rd	4th	Total
0000	21	12	17	9	59
0100	4	4	8	9	25
0200	3	3	4	1	11
0300	3	4	6	6	19
0400	6	14	12	18	50
0500	15	31	37	38	121
0600	55	61	97	120	333
0700	177	192	278	305	952
0800	278	239	212	201	930
0900	149	190	140	143	622
1000	117	147	140	139	543
1100	113	138	125	159	535
1200	146	163	134	141	584
1300	128	131	153	130	542
1400	156	140	145	156	597
1500	212	185	192	152	741
1600	193	185	166	174	718
1700	220	232	218	195	865
1800	162	158	126	126	572
1900	134	120	72	76	402
2000	92	65	87	86	330
2100	87	77	63	63	290
2200	58	50	46	40	194
2300	47	29	29	28	133
24-Hour Totals:					10168

Peak Volume Information

	Hour	Volume
A.M.	730	1100
P.M.	1700	865
Daily	730	1100

Truck Percentage 3.13 NaN 3.13

Classification Summary Database

Dir	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TotTrk	TotVol
S	26	8639	1185	71	163	18	1	24	36	3	1	0	1	0	0	318	10168

Generated by SPS 5.0.44P

County: 93
Station: 1051
Description: EB PGA TO SB I-95
Start Date: 04/24/2013
Start Time: 0000

	Direction: S				
Time	1st	2nd	3rd	4th	Total
0000	18	16	20	8	62
0100	11	10	4	7	32
0200	5	8	3	4	20
0300	6	10	5	5	26
0400	8	8	11	14	41
0500	18	20	26	48	112
0600	45	61	110	128	344
0700	156	177	280	289	902
0800	286	216	269	187	958
0900	171	175	160	134	640
1000	146	128	123	103	500
1100	109	129	154	139	531
1200	164	139	131	142	576
1300	122	162	139	145	568
1400	157	179	172	171	679
1500	194	163	197	148	702
1600	179	206	178	178	741
1700	217	239	240	206	902
1800	169	146	137	110	562
1900	133	99	80	81	393
2000	97	87	78	86	348
2100	63	69	66	47	245
2200	71	77	38	49	235
2300	43	34	31	27	135
24-Hour Totals:					10254

Peak Volume Information

	Hour	Volume
A.M.	730	1071
P.M.	1700	902
Daily	730	1071

Truck Percentage	3.34	NaN	3.34

Classification Summary Database

Dir	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TotTrk	TotVol
S	28	8681	1203	59	164	34	0	29	53	2	0	0	1	0	0	342	10254

Generated by SPS 5.0.44P

County: 93
Station: 1051
Description: EB PGA TO SB I-95
Start Date: 04/25/2013
Start Time: 0000

	Direction: S				
Time	1st	2nd	3rd	4th	Total
0000	33	19	16	17	85
0100	12	19	1	2	34
0200	9	8	4	3	24
0300	6	6	7	2	21
0400	10	11	11	8	40
0500	23	27	33	39	122
0600	38	64	110	117	329
0700	186	188	263	272	909
0800	286	219	229	214	948
0900	192	215	169	129	705
1000	143	140	123	134	540
1100	159	157	134	135	585
1200	152	163	136	156	607
1300	133	141	147	150	571
1400	148	190	162	169	669
1500	180	175	203	172	730
1600	196	185	191	157	729
1700	230	254	257	207	948
1800	160	138	117	118	533
1900	122	112	95	90	419
2000	94	94	86	85	359
2100	73	68	89	107	337
2200	89	73	60	40	262
2300	62	37	34	27	160
24-Hour Totals:					10666

Peak Volume Information

	Hour	Volume
A.M.	730	1040
P.M.	1700	948
Daily	730	1040

Truck Percentage 3.26 NaN 3.26

Classification Summary Database

Dir	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TotTrk	TotVol
S	35	9106	1177	80	171	16	0	17	57	6	0	0	1	0	0	348	10666

Generated by SPS 5.0.44P

County: 93
Station: 1058
Description: PGA TO NB I-95
Start Date: 04/23/2013
Start Time: 0000

	Direction: N				
Time	1st	2nd	3rd	4th	Total
0000	4	8	1	2	15
0100	4	3	0	0	7
0200	0	0	0	3	3
0300	0	0	1	0	1
0400	1	3	1	2	7
0500	4	2	2	1	9
0600	7	5	12	5	29
0700	18	14	18	15	65
0800	13	14	18	10	55
0900	17	11	19	11	58
1000	15	8	13	15	51
1100	13	12	12	10	47
1200	17	11	16	22	66
1300	11	13	16	11	51
1400	19	31	7	24	81
1500	19	8	23	19	69
1600	16	19	20	28	83
1700	20	21	21	14	76
1800	14	18	14	14	60
1900	16	9	12	8	45
2000	12	10	13	9	44
2100	9	5	6	8	28
2200	6	10	3	4	23
2300	8	8	7	3	26
24-Hour Totals:					999

Peak Volume Information

	Hour	Volume
A.M.	700	65
P.M.	1645	90
Daily	1645	90

Generated by SPS 5.0.44P

County: 93
Station: 1058
Description: PGA TO NB I-95
Start Date: 04/24/2013
Start Time: 0000

Direction: N					
Time	1st	2nd	3rd	4th	Total
0000	2	2	2	2	8
0100	0	3	3	3	9
0200	1	5	1	5	12
0300	1	0	2	0	3
0400	0	0	0	0	0
0500	3	2	2	4	11
0600	2	7	7	15	31
0700	16	20	13	12	61
0800	17	7	13	21	58
0900	14	13	21	18	66
1000	19	18	12	18	67
1100	12	19	27	24	82
1200	20	7	19	8	54
1300	16	16	13	19	64
1400	20	14	12	23	69
1500	16	15	16	23	70
1600	27	26	22	19	94
1700	29	23	18	14	84
1800	16	13	24	19	72
1900	15	14	10	21	60
2000	12	9	9	10	40
2100	11	8	9	17	45
2200	10	6	7	6	29
2300	4	11	3	6	24
24-Hour Totals:					1113

Peak Volume Information

	Hour	Volume
A.M.	845	69
P.M.	1545	98
Daily	1545	98

Generated by SPS 5.0.44P

County: 93
Station: 1058
Description: PGA TO NB I-95
Start Date: 04/25/2013
Start Time: 0000

	Direction: N				
Time	1st	2nd	3rd	4th	Total
0000	3	2	0	0	5
0100	3	3	0	0	6
0200	0	1	0	0	1
0300	2	2	2	0	6
0400	0	0	0	7	7
0500	2	1	6	4	13
0600	9	3	7	8	27
0700	16	16	12	20	64
0800	21	16	21	5	63
0900	16	19	13	8	56
1000	20	7	10	19	56
1100	18	12	12	11	53
1200	26	14	20	17	77
1300	13	9	26	11	59
1400	19	22	14	19	74
1500	30	15	27	17	89
1600	19	23	24	25	91
1700	14	17	18	19	68
1800	15	11	25	17	68
1900	12	24	8	14	58
2000	16	10	7	16	49
2100	9	7	9	5	30
2200	9	6	11	6	32
2300	7	7	5	4	23
24-Hour Totals:					1075

Peak Volume Information

	Hour	Volume
A.M.	745	78
P.M.	1445	91
Daily	1445	91

Generated by SPS 5.0.44P

County: 93
Station: 1059
Description: PGA TO NB I-95
Start Date: 04/23/2013
Start Time: 0000

Time	Direction: N 1st	2nd	3rd	4th	Total
0000	9	15	7	8	39
0100	6	5	2	2	15
0200	2	4	1	5	12
0300	3	2	2	2	9
0400	1	4	4	2	11
0500	7	5	3	5	20
0600	11	10	29	24	74
0700	37	49	52	60	198
0800	56	55	34	51	196
0900	38	49	40	54	181
1000	41	48	52	50	191
1100	69	71	53	62	255
1200	77	80	67	74	298
1300	74	65	74	81	294
1400	108	107	93	107	415
1500	103	107	129	120	459
1600	116	121	111	134	482
1700	156	149	151	129	585
1800	114	126	115	77	432
1900	98	82	104	71	355
2000	65	85	88	59	297
2100	63	63	58	35	219
2200	35	33	24	14	106
2300	27	23	17	10	77
24-Hour Totals:					5220

Peak Volume Information

	Hour	Volume
A.M.	730	223
P.M.	1645	590
Daily	1645	590

Truck Percentage 2.72 NaN 2.72

Classification Summary Database

Dir	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TotTrk	TotVol
N	16	4427	635	17	89	10	1	11	12	1	0	1	0	0	0	142	5220

Generated by SPS 5.0.44P

County: 93
Station: 1059
Description: PGA TO NB I-95
Start Date: 04/24/2013
Start Time: 0000

Time	Direction: N 1st	2nd	3rd	4th	Total
0000	5	10	9	7	31
0100	2	4	5	3	14
0200	6	5	2	3	16
0300	2	0	3	2	7
0400	0	1	3	1	5
0500	4	4	6	10	24
0600	7	18	27	36	88
0700	37	53	54	58	202
0800	57	45	48	58	208
0900	50	56	64	54	224
1000	54	76	36	76	242
1100	58	60	75	78	271
1200	77	88	96	64	325
1300	92	77	77	97	343
1400	106	93	87	102	388
1500	109	113	120	128	470
1600	154	138	120	132	544
1700	153	139	167	142	601
1800	132	117	117	119	485
1900	96	82	78	101	357
2000	98	84	63	84	329
2100	78	76	66	50	270
2200	49	36	34	24	143
2300	27	21	14	14	76
24-Hour Totals:					5663

Peak Volume Information

	Hour	Volume
A.M.	845	228
P.M.	1700	601
Daily	1700	601

Truck Percentage 3.14 NaN 3.14

Classification Summary Database

Dir	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TotTrk	TotVol
N	22	4710	753	22	108	7	0	23	12	3	1	0	2	0	0	178	5663

Generated by SPS 5.0.44P

County: 93
Station: 1059
Description: PGA TO NB I-95
Start Date: 04/25/2013
Start Time: 0000

Time	Direction: N 1st	2nd	3rd	4th	Total
0000	17	9	10	6	42
0100	6	4	4	1	15
0200	5	5	3	0	13
0300	10	3	2	0	15
0400	2	3	3	10	18
0500	5	4	13	14	36
0600	15	12	23	32	82
0700	46	55	68	53	222
0800	69	51	64	33	217
0900	47	60	47	47	201
1000	53	42	59	85	239
1100	79	67	57	63	266
1200	83	87	87	67	324
1300	105	81	91	83	360
1400	89	115	99	100	403
1500	125	127	124	123	499
1600	130	129	125	138	522
1700	160	159	165	129	613
1800	129	107	127	104	467
1900	108	116	95	81	400
2000	83	72	75	69	299
2100	80	65	63	49	257
2200	48	35	45	26	154
2300	33	35	23	23	114
24-Hour Totals:					5778

Peak Volume Information

	Hour	Volume
A.M.	715	245
P.M.	1645	622
Daily	1645	622

Truck Percentage	2.80	NaN	2.80

Classification Summary Database

Dir	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TotTrk	TotVol
N	22	4847	746	23	95	5	0	21	17	1	0	0	0	0	1	162	5778

Generated by SPS 5.0.44P

County: 93
Station: 1060
Description: SB SR-811 TO SB I-95
Start Date: 04/23/2013
Start Time: 0000

	Direction: S				
Time	1st	2nd	3rd	4th	Total
0000	19	8	5	7	39
0100	3	5	6	5	19
0200	1	3	2	5	11
0300	6	1	6	7	20
0400	5	10	21	33	69
0500	24	22	44	48	138
0600	65	80	148	173	466
0700	190	231	305	279	1005
0800	264	281	228	200	973
0900	137	180	140	114	571
1000	116	148	130	141	535
1100	99	107	123	132	461
1200	113	108	117	121	459
1300	129	122	102	124	477
1400	122	154	116	148	540
1500	156	174	142	147	619
1600	171	182	157	171	681
1700	169	222	201	151	743
1800	146	128	148	104	526
1900	97	98	88	73	356
2000	75	69	50	59	253
2100	57	62	46	45	210
2200	43	40	33	30	146
2300	29	30	19	18	96
24-Hour Totals:					9413

Peak Volume Information

	Hour	Volume
A.M.	730	1129
P.M.	1645	763
Daily	730	1129

Generated by SPS 5.0.44P

County: 93
Station: 1060
Description: SB SR-811 TO SB I-95
Start Date: 04/24/2013
Start Time: 0000

Time	Direction: S 1st	2nd	3rd	4th	Total
0000	17	9	7	5	38
0100	5	7	4	4	20
0200	0	3	1	3	7
0300	2	2	7	8	19
0400	5	20	22	27	74
0500	22	22	43	53	140
0600	68	87	158	160	473
0700	193	246	266	265	970
0800	251	275	239	205	970
0900	142	182	117	106	547
1000	150	115	112	136	513
1100	100	127	145	113	485
1200	106	129	109	121	465
1300	128	136	122	109	495
1400	127	143	157	132	559
1500	145	153	149	132	579
1600	146	198	174	171	689
1700	197	361	198	199	955
1800	173	146	149	105	573
1900	123	104	97	60	384
2000	65	73	62	48	248
2100	58	59	59	54	230
2200	62	31	33	18	144
2300	26	28	20	22	96
24-Hour Totals:					9673

Peak Volume Information

	Hour	Volume
A.M.	730	1057
P.M.	1700	955
Daily	730	1057

Generated by SPS 5.0.44P

County: 93
Station: 1060
Description: SB SR-811 TO SB I-95
Start Date: 04/25/2013
Start Time: 0000

Time	Direction: S 1st	2nd	3rd	4th	Total
0000	25	15	6	9	55
0100	6	2	7	4	19
0200	1	5	5	7	18
0300	10	4	10	6	30
0400	6	15	20	18	59
0500	21	17	45	50	133
0600	56	91	140	175	462
0700	187	226	285	288	986
0800	232	230	230	227	919
0900	162	150	133	148	593
1000	134	147	106	118	505
1100	106	121	137	125	489
1200	95	128	108	111	442
1300	119	115	125	128	487
1400	143	136	139	156	574
1500	164	162	186	150	662
1600	160	173	171	173	677
1700	192	264	206	185	847
1800	154	154	138	114	560
1900	113	98	107	77	395
2000	73	75	60	68	276
2100	56	61	61	64	242
2200	71	54	49	33	207
2300	28	32	25	18	103
24-Hour Totals:					9740

Peak Volume Information

	Hour	Volume
A.M.	730	1035
P.M.	1700	847
Daily	730	1035

Generated by SPS 5.0.44P

County: 93
Station: 1061
Description: WB PGA-SB SR-811 TO SB I-95
Start Date: 04/23/2013
Start Time: 0000

Time	Direction: S 1st	2nd	3rd	4th	Total
0000	42	25	18	19	104
0100	17	10	12	10	49
0200	5	4	7	11	27
0300	12	13	11	12	48
0400	11	21	23	46	101
0500	31	46	64	90	231
0600	103	130	211	239	683
0700	315	315	411	419	1460
0800	411	422	363	333	1529
0900	272	337	267	278	1154
1000	240	313	289	288	1130
1100	287	271	289	329	1176
1200	307	325	308	315	1255
1300	313	330	297	385	1325
1400	374	394	313	381	1462
1500	348	420	410	351	1529
1600	379	422	401	457	1659
1700	438	481	470	403	1792
1800	385	382	358	293	1418
1900	274	292	254	226	1046
2000	259	284	230	226	999
2100	231	236	200	141	808
2200	156	147	123	90	516
2300	99	87	64	62	312
24-Hour Totals:					21813

Peak Volume Information

	Hour	Volume
A.M.	730	1663
P.M.	1645	1846
Daily	1645	1846

Truck Percentage	3.83	NaN	3.83

Classification Summary Database

Dir	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TotTrk	TotVol
S	61	18102	2815	105	422	52	0	74	153	26	0	0	3	0	0	835	21813

Generated by SPS 5.0.44P

County: 93
Station: 1061
Description: WB PGA-SB SR-811 TO SB I-95
Start Date: 04/24/2013
Start Time: 0000

	Direction: S				
Time	1st	2nd	3rd	4th	Total
0000	40	30	23	17	110
0100	19	19	11	8	57
0200	8	11	9	6	34
0300	14	5	6	14	39
0400	12	27	30	38	107
0500	38	38	67	80	223
0600	91	140	237	235	703
0700	292	326	372	402	1392
0800	391	423	365	350	1529
0900	283	306	249	252	1090
1000	283	272	271	335	1161
1100	310	300	340	328	1278
1200	311	340	303	314	1268
1300	333	360	345	374	1412
1400	321	395	380	365	1461
1500	383	403	402	391	1579
1600	370	435	437	432	1674
1700	449	431	430	441	1751
1800	450	401	361	331	1543
1900	333	287	279	244	1143
2000	260	273	255	203	991
2100	243	250	205	166	864
2200	180	118	112	102	512
2300	101	93	81	50	325
24-Hour Totals:					22246

Peak Volume Information

	Hour	Volume
A.M.	730	1588
P.M.	1615	1753
Daily	1615	1753

Truck Percentage 4.01 NaN 4.01

Classification Summary Database

Dir	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TotTrk	TotVol
S	67	18510	2776	112	378	91	0	60	194	53	2	0	3	0	0	893	22246

Generated by SPS 5.0.44P

County: 93
Station: 1061
Description: WB PGA-SB SR-811 TO SB I-95
Start Date: 04/25/2013
Start Time: 0000

Time	Direction: S 1st	2nd	3rd	4th	Total
0000	56	56	22	42	176
0100	30	22	19	11	82
0200	9	18	8	15	50
0300	13	8	20	9	50
0400	10	22	34	28	94
0500	37	37	65	81	220
0600	85	145	212	241	683
0700	297	287	396	413	1393
0800	386	379	353	346	1464
0900	272	283	280	298	1133
1000	272	288	280	291	1131
1100	305	298	314	347	1264
1200	300	344	332	304	1280
1300	306	311	322	385	1324
1400	372	385	335	379	1471
1500	387	405	433	377	1602
1600	392	396	409	429	1626
1700	427	442	413	431	1713
1800	415	407	364	296	1482
1900	298	290	289	248	1125
2000	294	294	254	245	1087
2100	259	281	245	215	1000
2200	196	177	159	95	627
2300	106	103	77	70	356
24-Hour Totals:					22433

Peak Volume Information

	Hour	Volume
A.M.	730	1574
P.M.	1700	1713
Daily	1700	1713

Truck Percentage	3.84	NaN	3.84

Classification Summary Database

Dir	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TotTrk	TotVol
S	53	18731	2788	106	393	38	1	70	186	60	2	0	5	0	0	861	22433

Generated by SPS 5.0.44P

County: 93
Station: 1062
Description: I-95 NB TO EB PGA
Start Date: 04/23/2013
Start Time: 0000

Time	Direction: N 1st	2nd	3rd	4th	Total
0000	33	22	33	17	105
0100	15	13	11	11	50
0200	6	3	6	11	26
0300	5	14	13	12	44
0400	11	13	15	32	71
0500	29	35	70	90	224
0600	81	131	142	287	641
0700	274	358	524	600	1756
0800	524	583	493	544	2144
0900	400	432	321	329	1482
1000	275	306	279	349	1209
1100	273	266	335	370	1244
1200	339	351	352	369	1411
1300	311	323	332	346	1312
1400	296	288	323	341	1248
1500	344	352	404	373	1473
1600	334	372	341	382	1429
1700	374	482	462	451	1769
1800	379	380	355	273	1387
1900	234	201	171	158	764
2000	181	159	143	135	618
2100	113	135	104	104	456
2200	72	95	84	115	366
2300	76	71	59	49	255
24-Hour Totals:					21484

Peak Volume Information

	Hour	Volume
A.M.	730	2231
P.M.	1715	1774
Daily	730	2231

Truck Percentage	2.94	NaN	2.94

Classification Summary Database

Dir	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TotTrk	TotVol
N	54	16945	3854	58	409	50	23	68	21	0	0	0	2	0	0	631	21484

Generated by SPS 5.0.44P

County: 93
Station: 1062
Description: I-95 NB TO EB PGA
Start Date: 04/24/2013
Start Time: 0000

Time	Direction: N 1st	2nd	3rd	4th	Total
0000	49	17	29	22	117
0100	10	17	13	9	49
0200	13	8	5	9	35
0300	10	12	13	11	46
0400	10	10	18	33	71
0500	30	49	72	97	248
0600	94	113	145	277	629
0700	267	364	545	514	1690
0800	505	570	550	537	2162
0900	431	411	350	324	1516
1000	311	328	354	343	1336
1100	289	333	320	363	1305
1200	379	388	367	364	1498
1300	355	312	360	342	1369
1400	310	322	362	389	1383
1500	339	328	378	393	1438
1600	365	376	398	433	1572
1700	397	521	511	421	1850
1800	403	425	338	267	1433
1900	257	202	171	162	792
2000	192	185	154	150	681
2100	136	123	126	120	505
2200	115	86	88	119	408
2300	88	75	52	57	272
24-Hour Totals:					22405

Peak Volume Information

	Hour	Volume
A.M.	800	2162
P.M.	1645	1862
Daily	800	2162

Truck Percentage 3.31 NaN 3.31

Classification Summary Database

Dir	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TotTrk	TotVol
N	71	17354	4239	62	432	51	71	97	27	1	0	0	0	0	0	741	22405

Generated by SPS 5.0.44P

County: 93
Station: 1062
Description: I-95 NB TO EB PGA
Start Date: 04/25/2013
Start Time: 0000

Time	Direction: N 1st	2nd	3rd	4th	Total
0000	43	49	31	21	144
0100	20	19	14	12	65
0200	12	12	10	2	36
0300	7	13	10	13	43
0400	6	16	22	29	73
0500	28	39	62	114	243
0600	84	133	156	268	641
0700	231	378	508	571	1688
0800	524	579	555	506	2164
0900	415	417	329	353	1514
1000	301	301	305	364	1271
1100	304	305	341	341	1291
1200	348	355	364	378	1445
1300	318	351	345	341	1355
1400	348	333	357	405	1443
1500	370	392	403	348	1513
1600	364	354	377	451	1546
1700	416	464	472	479	1831
1800	402	414	334	304	1454
1900	261	230	220	190	901
2000	167	167	168	125	627
2100	147	129	126	132	534
2200	112	93	111	135	451
2300	94	67	77	56	294
24-Hour Totals:					22567

Peak Volume Information

	Hour	Volume
A.M.	745	2229
P.M.	1700	1831
Daily	745	2229

Truck Percentage	2.96	NaN	2.96

Classification Summary Database

Dir	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TotTrk	TotVol
N	67	17302	4530	51	441	55	12	88	20	1	0	0	0	0	0	668	22567

Generated by SPS 5.0.44P

County: 93
Station: 1063
Description: PGA E OF NB I-95
Start Date: 04/23/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	47	47	41	55	190	27	26	27	25	105	295
0100	39	32	27	19	117	20	15	12	12	59	176
0200	16	16	11	17	60	5	13	23	11	52	112
0300	20	24	17	18	79	6	9	1	6	22	101
0400	23	35	64	39	161	11	7	10	15	43	204
0500	83	91	156	128	458	20	20	46	58	144	602
0600	167	236	421	429	1253	56	70	95	178	399	1652
0700	484	589	889	1146	3108	168	203	229	288	888	3996
0800	1068	1033	967	1062	4130	263	275	212	248	998	5128
0900	831	815	702	725	3073	225	212	194	230	861	3934
1000	631	659	688	714	2692	199	234	216	257	906	3598
1100	644	600	538	566	2348	207	242	289	301	1039	3387
1200	329	326	312	341	1308	306	273	293	287	1159	2467
1300	280	266	253	403	1202	278	317	319	414	1328	2530
1400	619	589	616	671	2495	332	302	345	325	1304	3799
1500	639	614	702	696	2651	350	330	378	381	1439	4090
1600	616	643	616	694	2569	372	413	364	448	1597	4166
1700	671	781	749	757	2958	410	555	513	438	1916	4874
1800	684	685	594	547	2510	393	404	325	306	1428	3938
1900	451	386	331	315	1483	264	267	250	205	986	2469
2000	354	295	283	235	1167	234	263	233	218	948	2115
2100	205	223	178	191	797	214	210	152	142	718	1515
2200	146	154	136	167	603	142	105	79	97	423	1026
2300	112	102	98	77	389	84	57	54	50	245	634
24-Hour Totals:					37801					19007	56808

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	745	4214	730	1055	745	5252
P.M.	1715	2971	1645	1926	1700	4874
Daily	745	4214	1645	1926	745	5252

Generated by SPS 5.0.44P

County: 93
Station: 1063
Description: PGA E OF NB I-95
Start Date: 04/24/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	66	35	44	27	172	31	32	39	32	134	306
0100	22	27	16	23	88	16	14	17	10	57	145
0200	20	11	10	13	54	9	9	12	2	32	86
0300	17	13	17	23	70	16	5	3	11	35	105
0400	17	15	31	54	117	8	6	20	17	51	168
0500	58	81	98	167	404	19	36	48	64	167	571
0600	150	194	265	457	1066	60	68	121	142	391	1457
0700	514	697	902	1184	3297	163	198	208	312	881	4178
0800	1084	1045	987	1091	4207	253	256	243	218	970	5177
0900	849	829	682	699	3059	226	233	190	228	877	3936
1000	608	671	678	694	2651	184	244	244	295	967	3618
1100	629	667	625	730	2651	254	311	250	335	1150	3801
1200	713	755	713	713	2894	263	315	301	279	1158	4052
1300	661	675	644	762	2742	264	296	342	352	1254	3996
1400	602	604	653	725	2584	317	340	377	317	1351	3935
1500	628	665	672	723	2688	362	386	348	399	1495	4183
1600	663	686	690	786	2825	382	285	66	95	828	3653
1700	704	858	820	722	3104	84	169	6	0	259	3363
1800	711	768	616	530	2625	4	39	100	314	457	3082
1900	493	415	346	326	1580	279	270	239	242	1030	2610
2000	346	321	291	262	1220	252	233	237	246	968	2188
2100	235	211	205	194	845	213	258	202	135	808	1653
2200	188	158	146	160	652	107	107	90	100	404	1056
2300	121	107	74	78	380	64	51	56	36	207	587
24-Hour Totals:					41975					15931	57906

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	745	4300	745	1064	745	5364
P.M.	1645	3168	1515	1515	1515	4238
Daily	745	4300	1515	1515	745	5364

Generated by SPS 5.0.44P

County: 93
Station: 1063
Description: PGA E OF NB I-95
Start Date: 04/25/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	64	66	43	33	206	48	42	42	33	165	371
0100	35	31	19	20	105	33	23	13	10	79	184
0200	19	14	14	6	53	9	17	4	9	39	92
0300	15	19	19	24	77	10	9	6	10	35	112
0400	16	19	43	53	131	14	3	12	22	51	182
0500	55	62	105	162	384	15	25	53	54	147	531
0600	150	195	264	438	1047	64	72	123	153	412	1459
0700	439	703	858	1066	3066	149	235	255	273	912	3978
0800	977	1006	987	1019	3989	275	283	268	265	1091	5080
0900	840	824	657	698	3019	231	224	226	200	881	3900
1000	594	582	647	703	2526	198	228	260	263	949	3475
1100	606	613	700	687	2606	241	242	269	312	1064	3670
1200	676	714	694	731	2815	283	329	335	318	1265	4080
1300	653	686	715	682	2736	316	317	338	375	1346	4082
1400	635	635	673	725	2668	335	360	308	338	1341	4009
1500	695	685	707	695	2782	335	428	397	437	1597	4379
1600	658	677	687	794	2816	409	416	402	451	1678	4494
1700	692	773	757	835	3057	499	531	481	498	2009	5066
1800	725	768	655	576	2724	414	383	366	351	1514	4238
1900	508	465	407	383	1763	280	299	249	219	1047	2810
2000	327	335	332	276	1270	257	263	260	241	1021	2291
2100	253	230	208	230	921	224	255	213	192	884	1805
2200	213	158	171	198	740	150	127	103	101	481	1221
2300	150	131	105	88	474	87	89	61	58	295	769
24-Hour Totals:					41975					20303	62278

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	745	4036	745	1099	745	5135
P.M.	1715	3090	1700	2009	1700	5066
Daily	745	4036	1700	2009	745	5135

Generated by SPS 5.0.44P

County: 93
Station: 1075
Description: I-95 NB TO WB PGA
Start Date: 04/23/2013
Start Time: 0000

Direction: N					
Time	1st	2nd	3rd	4th	Total
0000	17	14	19	11	61
0100	11	10	9	4	34
0200	4	7	7	7	25
0300	4	5	2	3	14
0400	5	5	7	12	29
0500	13	9	25	34	81
0600	36	33	71	120	260
0700	118	158	153	196	625
0800	165	169	142	156	632
0900	121	113	113	115	462
1000	90	105	85	86	366
1100	95	84	126	140	445
1200	126	118	113	120	477
1300	112	137	124	150	523
1400	133	116	149	137	535
1500	167	156	166	183	672
1600	176	161	179	192	708
1700	205	267	237	246	955
1800	183	165	143	145	636
1900	118	94	98	71	381
2000	93	91	72	74	330
2100	74	77	66	68	285
2200	71	51	47	65	234
2300	44	35	33	41	153
24-Hour Totals:					8923

Peak Volume Information

	Hour	Volume
A.M.	730	683
P.M.	1700	955
Daily	1700	955

Truck Percentage 10.46 NaN 10.46

Classification Summary Database

Dir	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TotTrk	TotVol
N	26	6598	1366	34	100	664	5	40	24	7	0	0	59	0	0	933	8923

Generated by SPS 5.0.44P

County: 93
Station: 1075
Description: I-95 NB TO WB PGA
Start Date: 04/24/2013
Start Time: 0000

Time	Direction: N 1st	2nd	3rd	4th	Total
0000	22	21	18	14	75
0100	12	8	10	7	37
0200	6	8	5	1	20
0300	7	2	3	5	17
0400	6	5	11	13	35
0500	10	23	29	38	100
0600	26	43	82	101	252
0700	104	162	163	191	620
0800	153	168	167	143	631
0900	135	121	109	122	487
1000	92	109	110	105	416
1100	116	127	112	154	509
1200	107	132	146	136	521
1300	116	103	141	137	497
1400	107	112	128	147	494
1500	152	147	171	194	664
1600	182	178	172	204	736
1700	191	230	248	222	891
1800	189	193	160	138	680
1900	106	111	93	88	398
2000	83	79	93	79	334
2100	80	87	83	54	304
2200	51	58	44	62	215
2300	31	27	27	17	102
24-Hour Totals:					9035

Peak Volume Information

	Hour	Volume
A.M.	745	679
P.M.	1700	891
Daily	1700	891

Truck Percentage 9.72 NaN 9.72

Classification Summary Database

Dir	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TotTrk	TotVol
N	31	6871	1255	33	93	593	2	51	34	13	0	0	59	0	0	878	9035

Generated by SPS 5.0.44P

County: 93
Station: 1075
Description: I-95 NB TO WB PGA
Start Date: 04/25/2013
Start Time: 0000

Direction: N					
Time	1st	2nd	3rd	4th	Total
0000	28	30	20	20	98
0100	18	8	6	4	36
0200	5	10	3	8	26
0300	6	6	4	6	22
0400	8	2	8	16	34
0500	8	18	30	37	93
0600	40	44	85	109	278
0700	102	161	188	188	639
0800	160	175	162	166	663
0900	124	108	131	98	461
1000	107	102	114	117	440
1100	93	104	110	115	422
1200	114	124	132	113	483
1300	131	111	149	138	529
1400	119	158	119	158	554
1500	140	164	170	203	677
1600	180	162	187	213	742
1700	213	251	228	212	904
1800	189	157	171	148	665
1900	126	94	86	79	385
2000	100	93	91	82	366
2100	69	94	65	82	310
2200	66	51	45	59	221
2300	47	29	28	38	142
24-Hour Totals:					9190

Peak Volume Information

	Hour	Volume
A.M.	730	711
P.M.	1645	905
Daily	1645	905

Truck Percentage 9.52 NaN 9.52

Classification Summary Database

Dir	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TotTrk	TotVol
N	36	7015	1264	32	67	625	2	39	38	19	0	0	53	0	0	875	9190

Generated by SPS 5.0.44P

72 HOUR ARTERIAL VOLUME COUNT REPORTS

County: 93
Station: 1036
Description: DONALD ROSS W OF SB I-95
Start Date: 04/23/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	4	1	1	3	9	7	14	19	12	52	61
0100	5	2	2	2	11	4	8	5	5	22	33
0200	1	1	0	0	2	6	4	3	4	17	19
0300	3	1	5	1	10	3	4	0	2	9	19
0400	0	4	10	11	25	3	6	1	0	10	35
0500	8	12	23	27	70	8	11	14	15	48	118
0600	35	54	82	139	310	19	31	32	60	142	452
0700	189	211	198	213	811	50	110	93	113	366	1177
0800	139	156	177	175	647	122	118	119	124	483	1130
0900	155	121	111	113	500	132	103	100	104	439	939
1000	128	109	102	105	444	95	81	69	100	345	789
1100	120	116	91	122	449	80	102	106	118	406	855
1200	101	78	101	83	363	107	115	107	111	440	803
1300	110	83	105	104	402	106	102	112	108	428	830
1400	124	108	95	118	445	104	100	118	126	448	893
1500	115	114	103	148	480	147	152	157	148	604	1084
1600	129	111	116	138	494	165	174	184	173	696	1190
1700	112	137	114	134	497	166	222	194	182	764	1261
1800	100	115	92	92	399	200	172	147	160	679	1078
1900	79	71	55	45	250	131	147	131	146	555	805
2000	41	40	40	28	149	150	102	110	104	466	615
2100	37	18	24	18	97	112	98	79	74	363	460
2200	19	19	6	13	57	56	30	29	35	150	207
2300	7	10	5	4	26	42	17	12	16	87	113
24-Hour Totals:					6947					8019	14966

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	700	811	815	493	715	1199
P.M.	1545	504	1715	798	1715	1283
Daily	700	811	1715	798	1715	1283

Generated by SPS 5.0.44P

County: 93
Station: 1036
Description: DONALD ROSS W OF SB I-95
Start Date: 04/24/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	6	8	0	4	18	21	19	13	2	55	73
0100	0	0	3	1	4	6	2	1	5	14	18
0200	1	2	0	0	3	2	2	1	4	9	12
0300	1	2	2	3	8	3	2	2	0	7	15
0400	1	7	9	6	23	6	3	2	6	17	40
0500	9	20	20	28	77	5	9	15	13	42	119
0600	31	52	84	141	308	22	24	41	46	133	441
0700	194	208	202	199	803	47	95	77	97	316	1119
0800	178	173	188	186	725	106	128	104	114	452	1177
0900	151	90	104	142	487	103	90	101	101	395	882
1000	111	94	111	88	404	89	94	90	88	361	765
1100	92	119	120	110	441	105	98	67	128	398	839
1200	96	102	90	95	383	102	122	112	84	420	803
1300	104	108	106	108	426	94	95	118	94	401	827
1400	87	102	116	117	422	116	103	108	161	488	910
1500	132	124	131	131	518	136	133	131	130	530	1048
1600	111	133	117	113	474	161	163	160	167	651	1125
1700	122	148	142	119	531	176	204	197	167	744	1275
1800	97	97	126	98	418	168	178	159	147	652	1070
1900	82	79	74	74	309	132	145	127	138	542	851
2000	62	58	41	27	188	114	145	133	105	497	685
2100	42	34	24	25	125	128	125	95	74	422	547
2200	18	25	9	12	64	54	59	49	38	200	264
2300	12	20	11	7	50	36	25	24	16	101	151
24-Hour Totals:					7209					7847	15056

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	700	803	800	452	800	1177
P.M.	1700	531	1645	744	1700	1275
Daily	700	803	1645	744	1700	1275

Generated by SPS 5.0.44P

County: 93
Station: 1036
Description: DONALD ROSS W OF SB I-95
Start Date: 04/25/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	3	1	3	3	10	27	10	3	6	46	56
0100	2	4	1	1	8	5	5	0	2	12	20
0200	5	1	1	2	9	7	3	1	0	11	20
0300	1	0	0	3	4	1	1	1	3	6	10
0400	2	6	4	10	22	3	2	2	8	15	37
0500	15	18	17	28	78	4	8	15	12	39	117
0600	36	58	86	122	302	23	19	34	52	128	430
0700	173	215	204	196	788	46	110	73	104	333	1121
0800	179	165	173	186	703	107	92	90	121	410	1113
0900	135	125	110	149	519	94	117	106	110	427	946
1000	93	126	112	88	419	75	96	112	82	365	784
1100	92	116	100	109	417	90	102	95	105	392	809
1200	96	90	87	104	377	98	92	103	88	381	758
1300	107	104	100	123	434	127	93	100	101	421	855
1400	97	120	103	113	433	118	118	93	120	449	882
1500	111	109	129	130	479	129	138	116	134	517	996
1600	151	130	111	115	507	157	181	147	170	655	1162
1700	121	113	105	138	477	168	186	200	189	743	1220
1800	112	114	102	104	432	198	143	145	149	635	1067
1900	73	66	67	66	272	142	143	124	143	552	824
2000	48	50	37	50	185	112	93	113	130	448	633
2100	37	33	34	18	122	96	91	75	75	337	459
2200	31	20	17	22	90	82	51	48	29	210	300
2300	8	11	10	12	41	47	23	31	21	122	163
24-Hour Totals:					7128					7654	14782

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	715	794	845	438	715	1188
P.M.	1530	540	1715	773	1715	1241
Daily	715	794	1715	773	1715	1241

Generated by SPS 5.0.44P

County: 93
Station: 1064
Description: DONALD ROSS W OF 64 DR
Start Date: 04/23/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	10	3	4	2	19	21	14	18	6	59	78
0100	0	2	1	2	5	3	3	4	3	13	18
0200	2	0	2	0	4	6	6	4	3	19	23
0300	2	1	1	1	5	3	5	1	2	11	16
0400	4	3	5	7	19	3	2	2	1	8	27
0500	11	18	18	23	70	3	4	4	9	20	90
0600	20	38	86	124	268	21	15	22	40	98	366
0700	165	169	196	171	701	38	83	77	80	278	979
0800	152	135	155	156	598	77	78	106	94	355	953
0900	120	112	97	94	423	89	77	81	84	331	754
1000	118	90	87	98	393	67	68	56	84	275	668
1100	116	87	98	93	394	68	86	106	80	340	734
1200	79	67	83	79	308	90	109	80	96	375	683
1300	92	72	97	89	350	98	79	93	80	350	700
1400	112	85	91	94	382	85	85	107	94	371	753
1500	93	93	98	128	412	123	128	124	131	506	918
1600	108	99	115	113	435	133	133	144	136	546	981
1700	106	115	111	105	437	133	168	153	151	605	1042
1800	98	91	79	79	347	140	131	97	117	485	832
1900	67	65	48	35	215	105	101	92	93	391	606
2000	35	31	39	19	124	98	69	67	76	310	434
2100	36	13	17	18	84	73	72	47	50	242	326
2200	19	15	4	11	49	34	23	17	27	101	150
2300	10	7	4	4	25	23	12	10	8	53	78
24-Hour Totals:					6067					6142	12209

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	700	701	815	367	715	1005
P.M.	1545	450	1715	612	1700	1042
Daily	700	701	1715	612	1700	1042

Generated by SPS 5.0.44P

County: 93
Station: 1064
Description: DONALD ROSS W OF 64 DR
Start Date: 04/24/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	5	6	1	3	15	15	16	6	4	41	56
0100	0	0	3	1	4	3	0	2	1	6	10
0200	1	0	0	0	1	2	1	1	2	6	7
0300	1	2	1	2	6	3	1	1	0	5	11
0400	1	6	9	6	22	3	3	0	4	10	32
0500	8	20	17	23	68	4	6	11	9	30	98
0600	25	50	91	127	293	15	17	28	42	102	395
0700	195	172	201	171	739	42	70	71	69	252	991
0800	162	151	174	142	629	85	88	82	76	331	960
0900	127	75	96	123	421	84	81	73	74	312	733
1000	94	82	103	81	360	68	76	72	70	286	646
1100	72	116	105	83	376	80	72	65	102	319	695
1200	85	90	91	81	347	90	110	91	73	364	711
1300	95	93	84	91	363	88	81	88	82	339	702
1400	71	96	94	106	367	97	95	103	134	429	796
1500	100	109	124	107	440	120	122	105	117	464	904
1600	103	110	110	96	419	135	152	137	147	571	990
1700	115	120	129	101	465	159	161	184	128	632	1097
1800	83	78	96	78	335	129	153	133	93	508	843
1900	73	63	75	48	259	96	116	88	92	392	651
2000	49	40	35	24	148	79	96	96	77	348	496
2100	40	23	21	15	99	83	88	64	52	287	386
2200	19	18	8	8	53	41	34	32	23	130	183
2300	15	17	8	3	43	26	14	15	14	69	112
24-Hour Totals:					6272					6233	12505

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	700	739	800	331	715	1001
P.M.	1700	465	1645	651	1645	1111
Daily	700	739	1645	651	1645	1111

Generated by SPS 5.0.44P

County: 93
Station: 1064
Description: DONALD ROSS W OF 64 DR
Start Date: 04/25/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	2	0	2	3	7	17	9	5	3	34	41
0100	2	3	1	1	7	4	3	0	1	8	15
0200	4	0	1	2	7	5	2	1	0	8	15
0300	1	0	1	1	3	2	0	2	1	5	8
0400	2	5	5	5	17	1	1	2	4	8	25
0500	13	15	18	23	69	1	5	14	7	27	96
0600	30	59	88	115	292	19	13	27	37	96	388
0700	169	188	191	179	727	41	91	57	84	273	1000
0800	147	150	161	157	615	81	77	74	90	322	937
0900	120	100	98	127	445	77	89	97	88	351	796
1000	78	104	95	84	361	58	75	92	68	293	654
1100	78	92	108	81	359	87	82	84	82	335	694
1200	75	84	75	99	333	81	79	86	87	333	666
1300	94	92	80	97	363	102	79	80	93	354	717
1400	89	100	91	93	373	111	101	77	118	407	780
1500	103	91	115	114	423	109	118	102	123	452	875
1600	144	100	102	100	446	134	156	120	146	556	1002
1700	110	88	113	103	414	141	154	162	158	615	1029
1800	94	93	94	85	366	152	121	109	111	493	859
1900	59	57	57	55	228	119	98	92	97	406	634
2000	41	38	31	36	146	77	57	81	93	308	454
2100	30	40	26	14	110	65	71	49	56	241	351
2200	23	16	16	17	72	55	28	35	28	146	218
2300	8	11	7	11	37	24	17	19	14	74	111
24-Hour Totals:					6220					6145	12365

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	700	727	845	353	715	1018
P.M.	1530	473	1715	626	1700	1029
Daily	700	727	1715	626	1700	1029

Generated by SPS 5.0.44P

County: 93
Station: 1150
Description: DONALD ROSS W OF CENTRAL
Start Date: 04/30/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	16	22	9	12	59	18	16	9	10	53	112
0100	8	7	9	4	28	10	3	7	3	23	51
0200	5	2	4	4	15	3	8	1	2	14	29
0300	4	2	5	1	12	3	8	3	14	28	40
0400	7	5	14	17	43	8	10	16	21	55	98
0500	17	31	40	57	145	23	26	41	27	117	262
0600	47	88	140	220	495	64	67	123	131	385	880
0700	290	454	459	516	1719	170	217	280	252	919	2638
0800	391	397	370	387	1545	255	245	220	231	951	2496
0900	335	238	231	231	1035	238	215	209	174	836	1871
1000	212	198	208	220	838	198	210	211	167	786	1624
1100	204	204	219	243	870	176	203	205	236	820	1690
1200	228	201	188	232	849	223	272	219	205	919	1768
1300	219	239	212	222	892	283	297	257	243	1080	1972
1400	199	202	237	230	868	275	243	283	365	1166	2034
1500	233	243	263	277	1016	391	355	417	355	1518	2534
1600	289	256	245	258	1048	394	396	294	430	1514	2562
1700	232	302	328	287	1149	459	470	399	368	1696	2845
1800	251	226	221	177	875	320	277	224	223	1044	1919
1900	191	129	133	109	562	216	212	188	176	792	1354
2000	113	106	94	112	425	179	154	156	164	653	1078
2100	105	70	58	71	304	134	120	97	103	454	758
2200	56	51	51	32	190	79	67	69	42	257	447
2300	32	28	29	26	115	49	36	17	39	141	256
24-Hour Totals:					15097					16221	31318

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	715	1820	730	1032	715	2824
P.M.	1715	1168	1645	1758	1645	2878
Daily	715	1820	1645	1758	1645	2878

Generated by SPS 5.0.44P

County: 93
Station: 1150
Description: DONALD ROSS W OF CENTRAL
Start Date: 05/01/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	23	12	17	11	63	6	12	18	20	56	119
0100	10	7	11	5	33	10	6	10	13	39	72
0200	10	5	6	5	26	5	13	7	7	32	58
0300	6	4	5	2	17	3	2	5	9	19	36
0400	5	8	8	17	38	13	8	12	11	44	82
0500	19	29	39	65	152	16	32	30	33	111	263
0600	58	79	176	238	551	53	74	118	138	383	934
0700	323	452	443	516	1734	189	253	321	260	1023	2757
0800	409	368	391	393	1561	295	213	247	266	1021	2582
0900	322	236	239	247	1044	255	215	215	198	883	1927
1000	201	211	208	229	849	232	194	201	212	839	1688
1100	206	221	206	241	874	222	256	215	249	942	1816
1200	235	196	234	222	887	212	234	237	204	887	1774
1300	206	228	203	257	894	252	211	208	237	908	1802
1400	237	243	267	249	996	248	254	225	330	1057	2053
1500	226	274	271	260	1031	321	298	339	313	1271	2302
1600	289	251	245	303	1088	428	402	409	399	1638	2726
1700	301	251	257	289	1098	546	530	413	323	1812	2910
1800	260	234	221	205	920	363	324	222	243	1152	2072
1900	154	131	129	102	516	191	199	167	161	718	1234
2000	126	106	100	101	433	128	179	158	146	611	1044
2100	76	67	79	78	300	142	106	116	94	458	758
2200	67	50	86	40	243	80	92	58	55	285	528
2300	45	34	35	21	135	52	34	34	21	141	276
24-Hour Totals:					15483					16330	31813

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	715	1820	715	1129	715	2949
P.M.	1645	1112	1645	1888	1645	3000
Daily	715	1820	1645	1888	1645	3000

Generated by SPS 5.0.44P

County: 93
Station: 1150
Description: DONALD ROSS W OF CENTRAL
Start Date: 05/02/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	18	20	19	14	71	18	12	15	16	61	132
0100	15	9	5	7	36	17	10	10	4	41	77
0200	7	8	9	7	31	12	7	0	4	23	54
0300	11	12	8	8	39	7	6	8	7	28	67
0400	8	12	21	30	71	17	13	17	14	61	132
0500	24	30	44	44	142	11	16	27	34	88	230
0600	52	71	156	239	518	63	51	122	138	374	892
0700	310	444	424	528	1706	167	244	287	243	941	2647
0800	432	398	370	354	1554	252	207	231	221	911	2465
0900	360	268	243	252	1123	217	253	246	211	927	2050
1000	198	197	220	202	817	205	216	210	203	834	1651
1100	216	213	198	227	854	193	259	209	248	909	1763
1200	167	218	194	202	781	257	253	248	226	984	1765
1300	191	192	207	216	806	343	247	275	223	1088	1894
1400	209	210	235	234	888	260	259	240	351	1110	1998
1500	230	234	220	220	904	322	324	307	263	1216	2120
1600	240	238	223	252	953	322	391	363	390	1466	2419
1700	220	317	286	267	1090	410	468	421	329	1628	2718
1800	232	226	186	158	802	345	313	250	240	1148	1950
1900	146	136	133	127	542	211	221	183	180	795	1337
2000	113	91	94	71	369	135	147	133	120	535	904
2100	69	68	80	83	300	126	127	95	77	425	725
2200	61	65	69	49	244	77	74	49	55	255	499
2300	53	48	30	30	161	45	42	26	26	139	300
24-Hour Totals:					14802					15987	30789

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	715	1828	715	1026	715	2854
P.M.	1715	1102	1645	1689	1645	2764
Daily	715	1828	1645	1689	715	2854

Generated by SPS 5.0.44P

County: 93
Station: 1147
Description: DONALD ROSS W OF MILITARY TRAIL
Start Date: 04/30/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	16	17	11	15	59	16	15	8	13	52	111
0100	11	7	5	4	27	8	4	12	6	30	57
0200	4	5	4	4	17	4	8	3	2	17	34
0300	3	2	3	1	9	7	6	4	13	30	39
0400	4	5	12	8	29	9	6	9	14	38	67
0500	13	22	28	44	107	18	14	25	24	81	188
0600	47	80	113	174	414	51	37	66	89	243	657
0700	208	434	394	452	1488	122	196	298	285	901	2389
0800	394	416	327	335	1472	264	244	198	233	939	2411
0900	297	264	210	193	964	205	244	186	210	845	1809
1000	229	184	227	215	855	193	205	237	166	801	1656
1100	214	220	212	229	875	211	231	240	277	959	1834
1200	225	205	187	272	889	247	287	255	262	1051	1940
1300	211	237	262	209	919	290	342	280	245	1157	2076
1400	209	195	254	226	884	264	220	297	415	1196	2080
1500	259	219	236	274	988	416	373	427	360	1576	2564
1600	264	239	220	228	951	326	340	235	386	1287	2238
1700	220	210	272	249	951	417	450	366	314	1547	2498
1800	201	187	185	172	745	298	283	245	197	1023	1768
1900	174	115	131	112	532	196	154	148	146	644	1176
2000	103	91	69	98	361	157	137	146	136	576	937
2100	79	57	51	60	247	132	99	66	84	381	628
2200	42	59	49	30	180	67	46	52	34	199	379
2300	33	19	23	16	91	30	25	17	27	99	190
24-Hour Totals:					14054					15672	29726

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	715	1674	730	1091	730	2747
P.M.	1530	1013	1445	1631	1445	2571
Daily	715	1674	1445	1631	730	2747

Generated by SPS 5.0.44P

County: 93
Station: 1147
Description: DONALD ROSS W OF MILITARY TRAIL
Start Date: 05/01/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	21	19	14	17	71	9	18	18	12	57	128
0100	8	10	19	11	48	9	7	2	11	29	77
0200	10	0	6	5	21	4	11	5	4	24	45
0300	3	3	5	0	11	4	1	4	7	16	27
0400	6	7	6	13	32	10	5	11	6	32	64
0500	16	26	33	45	120	14	25	19	36	94	214
0600	54	68	130	197	449	38	51	72	110	271	720
0700	264	407	416	411	1498	121	237	289	235	882	2380
0800	399	393	334	367	1493	241	228	196	254	919	2412
0900	271	260	242	243	1016	192	193	208	209	802	1818
1000	225	194	212	201	832	193	207	225	199	824	1656
1100	195	229	217	254	895	217	244	222	263	946	1841
1200	199	233	218	252	902	247	258	256	240	1001	1903
1300	198	233	249	248	928	247	235	205	276	963	1891
1400	254	216	298	255	1023	271	286	247	319	1123	2146
1500	231	256	243	244	974	317	298	327	317	1259	2233
1600	272	222	216	258	968	364	364	377	342	1447	2415
1700	275	208	266	255	1004	444	464	376	298	1582	2586
1800	196	227	168	198	789	303	293	196	193	985	1774
1900	146	155	117	104	522	185	190	144	149	668	1190
2000	96	109	97	76	378	103	144	122	128	497	875
2100	75	58	71	61	265	124	88	96	72	380	645
2200	64	48	62	44	218	58	56	35	33	182	400
2300	40	28	25	23	116	32	26	27	22	107	223
24-Hour Totals:					14573					15090	29663

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	715	1633	715	1002	715	2635
P.M.	1430	1040	1630	1627	1645	2633
Daily	715	1633	1630	1627	715	2635

Generated by SPS 5.0.44P

County: 93
Station: 1147
Description: DONALD ROSS W OF MILITARY TRAIL
Start Date: 05/02/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	17	16	19	11	63	16	12	17	13	58	121
0100	12	6	3	6	27	11	10	10	3	34	61
0200	6	8	2	9	25	9	10	2	4	25	50
0300	9	10	8	5	32	9	2	4	7	22	54
0400	5	9	13	22	49	16	9	8	16	49	98
0500	14	27	35	39	115	10	12	13	27	62	177
0600	47	63	124	185	419	55	38	64	100	257	676
0700	265	373	417	435	1490	110	203	296	276	885	2375
0800	471	391	319	344	1525	225	222	226	220	893	2418
0900	304	274	241	233	1052	214	243	199	214	870	1922
1000	215	189	215	205	824	219	229	207	187	842	1666
1100	199	207	199	214	819	187	211	199	273	870	1689
1200	185	217	202	248	852	241	266	277	237	1021	1873
1300	201	179	231	187	798	288	234	260	229	1011	1809
1400	212	205	269	253	939	241	257	255	349	1102	2041
1500	223	212	201	216	852	282	269	272	264	1087	1939
1600	201	238	196	208	843	319	305	317	378	1319	2162
1700	217	272	251	217	957	393	410	316	289	1408	2365
1800	194	201	158	153	706	277	276	203	207	963	1669
1900	132	109	119	127	487	194	198	140	155	687	1174
2000	94	89	74	58	315	108	120	117	91	436	751
2100	58	75	61	91	285	100	120	65	53	338	623
2200	53	58	61	43	215	73	52	45	44	214	429
2300	55	47	27	27	156	25	37	20	22	104	260
24-Hour Totals:					13845					14557	28402

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	730	1714	730	1019	730	2733
P.M.	1430	957	1630	1498	1645	2445
Daily	730	1714	1630	1498	730	2733

Generated by SPS 5.0.44P

County: 93
Station: 1152
Description: DONALD ROSS W OF PARKSIDE
Start Date: 05/01/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	20	26	11	15	72	26	13	15	10	64	136
0100	9	9	9	6	33	8	5	6	5	24	57
0200	6	3	4	4	17	1	9	3	3	16	33
0300	4	2	6	1	13	2	7	7	11	27	40
0400	7	5	14	17	43	9	9	14	17	49	92
0500	19	33	43	63	158	21	25	36	37	119	277
0600	46	94	151	241	532	58	70	125	122	375	907
0700	316	469	529	562	1876	199	216	291	267	973	2849
0800	432	445	439	451	1767	237	250	221	233	941	2708
0900	361	269	232	252	1114	241	216	190	190	837	1951
1000	246	240	242	236	964	158	212	182	156	708	1672
1100	223	211	224	260	918	185	203	210	188	786	1704
1200	241	214	255	241	951	227	239	178	156	800	1751
1300	245	260	235	253	993	234	270	197	196	897	1890
1400	214	233	273	276	996	236	207	246	270	959	1955
1500	352	361	406	345	1464	299	311	327	300	1237	2701
1600	313	293	274	297	1177	333	353	309	353	1348	2525
1700	262	349	396	368	1375	437	452	343	342	1574	2949
1800	302	272	258	211	1043	274	234	232	193	933	1976
1900	211	144	146	111	612	199	175	179	163	716	1328
2000	137	118	102	118	475	159	143	137	143	582	1057
2100	120	77	67	79	343	115	110	89	86	400	743
2200	61	55	63	35	214	74	65	71	45	255	469
2300	43	28	31	35	137	47	33	13	28	121	258
24-Hour Totals:					17287					14741	32028

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	715	1992	730	1045	730	3013
P.M.	1500	1464	1645	1585	1700	2949
Daily	715	1992	1645	1585	730	3013

Generated by SPS 5.0.44P

County: 93
Station: 1152
Description: DONALD ROSS W OF PARKSIDE
Start Date: 05/02/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	29	16	19	13	77	21	13	17	16	67	144
0100	14	9	14	7	44	15	5	7	10	37	81
0200	19	9	7	5	40	6	9	6	6	27	67
0300	5	7	5	4	21	4	1	12	7	24	45
0400	6	11	9	25	51	11	10	9	13	43	94
0500	20	31	42	73	166	11	33	27	36	107	273
0600	70	110	233	337	750	48	77	117	147	389	1139
0700	441	585	625	683	2334	199	238	288	266	991	3325
0800	537	523	482	530	2072	290	243	233	256	1022	3094
0900	424	295	286	295	1300	249	202	196	203	850	2150
1000	213	249	239	244	945	189	188	176	186	739	1684
1100	246	244	224	278	992	214	201	215	225	855	1847
1200	240	213	253	238	944	206	204	188	225	823	1767
1300	221	253	250	222	946	231	202	194	250	877	1823
1400	251	263	287	273	1074	221	256	232	287	996	2070
1500	282	301	321	312	1216	300	300	298	323	1221	2437
1600	344	281	315	368	1308	380	381	438	351	1550	2858
1700	454	414	404	441	1713	469	443	361	322	1595	3308
1800	410	351	320	247	1328	289	317	255	209	1070	2398
1900	218	179	166	127	690	181	156	171	140	648	1338
2000	160	128	116	140	544	108	158	148	130	544	1088
2100	118	89	117	106	430	132	98	97	83	410	840
2200	107	99	140	66	412	65	66	39	53	223	635
2300	54	49	42	31	176	48	33	27	21	129	305
24-Hour Totals:					19573					15237	34810

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	715	2430	730	1087	715	3512
P.M.	1700	1713	1630	1701	1700	3308
Daily	715	2430	1630	1701	715	3512

Generated by SPS 5.0.44P

County: 93
Station: 1152
Description: DONALD ROSS W OF PARKSIDE
Start Date: 05/03/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	22	20	34	27	103	26	9	14	16	65	168
0100	30	10	9	16	65	17	9	6	6	38	103
0200	7	12	8	12	39	7	7	3	6	23	62
0300	11	14	9	8	42	8	5	9	6	28	70
0400	10	13	20	32	75	14	15	16	12	57	132
0500	25	33	59	51	168	8	26	33	33	100	268
0600	60	84	173	308	625	63	68	123	150	404	1029
0700	376	508	553	654	2091	183	242	329	238	992	3083
0800	527	490	456	482	1955	249	229	216	248	942	2897
0900	433	341	327	324	1425	237	226	194	217	874	2299
1000	263	220	244	215	942	167	195	190	183	735	1677
1100	239	274	267	322	1102	191	204	199	195	789	1891
1200	241	282	240	282	1045	221	224	241	204	890	1935
1300	272	281	312	308	1173	257	217	219	190	883	2056
1400	307	303	311	342	1263	196	201	215	284	896	2159
1500	348	348	362	336	1394	259	279	206	260	1004	2398
1600	361	353	296	380	1390	271	308	351	319	1249	2639
1700	315	498	425	390	1628	375	416	324	340	1455	3083
1800	369	392	281	257	1299	266	226	234	184	910	2209
1900	226	205	203	188	822	183	170	146	139	638	1460
2000	159	126	148	106	539	120	109	104	101	434	973
2100	110	95	96	116	417	117	99	98	77	391	808
2200	73	91	97	72	333	64	65	49	41	219	552
2300	63	67	49	38	217	47	41	22	29	139	356
24-Hour Totals:					20152					14155	34307

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	715	2242	715	1058	715	3300
P.M.	1715	1682	1630	1461	1700	3083
Daily	715	2242	1630	1461	715	3300

Generated by SPS 5.0.44P

County: 93
Station: 1128
Description: NORTHLAKE E OF ROAN
Start Date: 04/30/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	38	34	27	21	120	41	41	44	22	148	268
0100	24	15	8	18	65	32	27	16	12	87	152
0200	17	15	6	16	54	16	14	14	14	58	112
0300	13	14	14	26	67	7	10	18	6	41	108
0400	10	14	25	47	96	14	16	24	28	82	178
0500	33	61	76	112	282	29	37	58	79	203	485
0600	74	134	241	286	735	100	121	186	243	650	1385
0700	341	456	544	607	1948	315	304	400	485	1504	3452
0800	575	554	581	593	2303	481	383	402	440	1706	4009
0900	492	441	454	530	1917	400	348	374	396	1518	3435
1000	481	472	491	528	1972	393	414	464	430	1701	3673
1100	482	495	515	573	2065	520	474	488	585	2067	4132
1200	582	585	551	561	2279	507	578	606	594	2285	4564
1300	485	536	498	560	2079	606	569	535	542	2252	4331
1400	482	444	441	510	1877	496	547	507	458	2008	3885
1500	431	517	523	521	1992	528	536	548	538	2150	4142
1600	537	556	522	527	2142	572	575	598	562	2307	4449
1700	497	593	611	530	2231	664	710	662	638	2674	4905
1800	479	484	408	382	1753	561	526	458	506	2051	3804
1900	352	322	254	252	1180	436	402	377	319	1534	2714
2000	272	234	223	212	941	343	379	302	304	1328	2269
2100	170	175	143	132	620	247	192	211	193	843	1463
2200	133	113	82	84	412	177	139	123	80	519	931
2300	91	78	58	58	285	113	76	73	50	312	597
24-Hour Totals:					29415					30028	59443

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	745	2317	745	1751	745	4068
P.M.	1200	2279	1700	2674	1700	4905
Daily	745	2317	1700	2674	1700	4905

Generated by SPS 5.0.44P

County: 93
Station: 1128
Description: NORTHLAKE E OF ROAN
Start Date: 05/01/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	42	46	42	30	160	70	45	40	29	184	344
0100	19	28	13	15	75	27	17	23	11	78	153
0200	18	17	20	15	70	19	11	17	9	56	126
0300	12	18	25	23	78	13	12	20	11	56	134
0400	5	20	20	51	96	17	19	19	35	90	186
0500	32	47	68	120	267	30	34	66	85	215	482
0600	103	145	216	321	785	121	118	213	245	697	1482
0700	334	489	555	623	2001	299	322	390	511	1522	3523
0800	570	521	516	575	2182	482	394	407	403	1686	3868
0900	524	458	453	533	1968	390	366	373	406	1535	3503
1000	474	460	487	530	1951	389	432	464	388	1673	3624
1100	540	546	521	587	2194	453	489	493	532	1967	4161
1200	571	556	603	550	2280	509	586	546	554	2195	4475
1300	551	578	536	543	2208	590	605	568	555	2318	4526
1400	505	584	585	568	2242	563	625	568	558	2314	4556
1500	486	534	592	558	2170	598	646	703	577	2524	4694
1600	548	567	578	585	2278	626	662	665	670	2623	4901
1700	469	493	518	472	1952	711	639	650	567	2567	4519
1800	436	408	380	333	1557	579	498	433	430	1940	3497
1900	325	320	275	281	1201	399	373	366	339	1477	2678
2000	241	224	205	216	886	342	306	293	248	1189	2075
2100	190	172	148	136	646	255	240	211	154	860	1506
2200	126	125	132	88	471	181	155	123	115	574	1045
2300	92	91	61	68	312	86	69	59	62	276	588
24-Hour Totals:					30030					30616	60646

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	730	2269	745	1794	730	4046
P.M.	1230	2282	1615	2708	1615	4907
Daily	1145	2317	1615	2708	1615	4907

Generated by SPS 5.0.44P

County: 93
Station: 1128
Description: NORTHLAKE E OF ROAN
Start Date: 05/02/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	60	40	37	40	177	56	36	35	36	163	340
0100	27	34	17	27	105	29	28	37	26	120	225
0200	16	10	13	17	56	24	18	19	12	73	129
0300	14	19	20	26	79	10	14	17	17	58	137
0400	10	23	33	35	101	15	26	27	27	95	196
0500	49	48	75	104	276	55	48	78	88	269	545
0600	96	126	226	305	753	110	132	199	231	672	1425
0700	329	481	520	655	1985	291	321	423	453	1488	3473
0800	604	534	527	574	2239	463	413	409	443	1728	3967
0900	542	467	459	531	1999	407	424	418	447	1696	3695
1000	517	471	516	507	2011	395	405	422	424	1646	3657
1100	478	491	456	564	1989	475	467	418	477	1837	3826
1200	509	481	495	460	1945	517	527	548	495	2087	4032
1300	484	491	464	414	1853	522	496	512	483	2013	3866
1400	438	400	427	503	1768	493	505	503	475	1976	3744
1500	445	426	440	510	1821	485	473	539	490	1987	3808
1600	474	433	462	523	1892	553	594	510	517	2174	4066
1700	443	492	508	457	1900	630	620	600	555	2405	4305
1800	418	373	388	349	1528	524	511	401	382	1818	3346
1900	289	317	251	252	1109	396	328	333	329	1386	2495
2000	226	200	210	183	819	313	277	280	249	1119	1938
2100	173	174	150	144	641	253	215	213	164	845	1486
2200	121	125	121	86	453	168	127	139	92	526	979
2300	101	90	73	67	331	96	69	78	70	313	644
24-Hour Totals:					27830					28494	56324

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	745	2320	730	1752	730	4065
P.M.	1645	1966	1700	2405	1645	4333
Daily	745	2320	1700	2405	1645	4333

Generated by SPS 5.0.44P

County: 93
Station: 1137
Description: NORTHLAKE W OF I-95
Start Date: 04/30/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	38	15	26	16	95	46	29	34	26	135	230
0100	11	15	12	12	50	27	21	23	9	80	130
0200	13	15	15	5	48	9	18	18	7	52	100
0300	10	3	18	5	36	13	10	16	5	44	80
0400	12	15	39	35	101	1	8	18	26	53	154
0500	43	47	75	102	267	26	33	49	75	183	450
0600	107	159	231	292	789	62	88	128	211	489	1278
0700	374	475	576	558	1983	222	240	235	372	1069	3052
0800	501	576	509	464	2050	352	385	342	395	1474	3524
0900	467	419	393	437	1716	368	303	275	341	1287	3003
1000	393	415	404	445	1657	312	325	365	368	1370	3027
1100	403	396	440	465	1704	364	362	402	398	1526	3230
1200	474	492	446	474	1886	449	466	477	446	1838	3724
1300	428	472	483	406	1789	426	502	395	437	1760	3549
1400	408	380	363	383	1534	408	388	451	461	1708	3242
1500	363	381	480	412	1636	478	446	422	476	1822	3458
1600	367	418	452	452	1689	492	511	526	515	2044	3733
1700	463	463	490	439	1855	550	600	621	578	2349	4204
1800	425	372	362	303	1462	485	460	419	427	1791	3253
1900	341	270	230	239	1080	415	338	317	298	1368	2448
2000	242	180	204	208	834	271	331	272	234	1108	1942
2100	218	150	164	111	643	218	183	192	164	757	1400
2200	133	91	88	63	375	175	155	123	75	528	903
2300	69	56	45	52	222	79	67	74	59	279	501
24-Hour Totals:					25501					25114	50615

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	730	2211	815	1490	745	3595
P.M.	1200	1886	1700	2349	1700	4204
Daily	730	2211	1700	2349	1700	4204

Generated by SPS 5.0.44P

County: 93
Station: 1137
Description: NORTHLAKE W OF I-95
Start Date: 05/01/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	36	22	27	13	98	56	47	30	18	151	249
0100	25	14	7	10	56	28	25	19	18	90	146
0200	20	14	5	11	50	13	15	9	12	49	99
0300	13	6	12	12	43	7	9	10	9	35	78
0400	9	21	22	42	94	7	11	19	24	61	155
0500	36	51	66	111	264	24	28	58	71	181	445
0600	113	190	210	306	819	77	76	139	203	495	1314
0700	379	514	626	527	2046	231	257	286	357	1131	3177
0800	558	501	477	459	1995	370	325	353	367	1415	3410
0900	455	396	381	405	1637	345	320	287	321	1273	2910
1000	398	383	415	377	1573	322	303	339	348	1312	2885
1100	408	427	452	427	1714	336	383	380	352	1451	3165
1200	502	468	449	449	1868	394	437	398	431	1660	3528
1300	455	437	447	430	1769	449	463	427	414	1753	3522
1400	424	456	435	474	1789	423	429	488	437	1777	3566
1500	409	406	456	481	1752	480	477	506	510	1973	3725
1600	467	437	467	505	1876	535	545	556	549	2185	4061
1700	462	444	389	422	1717	511	516	543	471	2041	3758
1800	399	412	336	275	1422	452	421	356	385	1614	3036
1900	317	262	260	255	1094	346	303	290	273	1212	2306
2000	215	227	218	226	886	274	248	259	211	992	1878
2100	203	148	132	97	580	251	192	191	167	801	1381
2200	103	78	83	59	323	137	141	112	111	501	824
2300	58	60	42	46	206	84	87	54	58	283	489
24-Hour Totals:					25671					24436	50107

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	715	2225	800	1415	730	3550
P.M.	1630	1878	1600	2185	1600	4061
Daily	715	2225	1600	2185	1600	4061

Generated by SPS 5.0.44P

County: 93
Station: 1137
Description: NORTHLAKE W OF I-95
Start Date: 05/02/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	43	26	26	22	117	32	44	39	29	144	261
0100	19	21	12	12	64	24	22	22	25	93	157
0200	15	14	17	14	60	21	19	14	11	65	125
0300	7	5	15	21	48	7	4	11	9	31	79
0400	7	19	25	41	92	6	13	9	29	57	149
0500	45	40	66	103	254	33	38	55	60	186	440
0600	97	154	226	300	777	84	85	145	199	513	1290
0700	374	472	583	560	1989	224	255	245	401	1125	3114
0800	509	518	538	507	2072	389	401	359	418	1567	3639
0900	469	439	385	433	1726	325	304	296	314	1239	2965
1000	402	375	374	415	1566	305	296	321	356	1278	2844
1100	375	411	380	403	1569	341	341	345	416	1443	3012
1200	446	406	379	407	1638	375	375	419	383	1552	3190
1300	392	504	367	354	1617	363	387	379	320	1449	3066
1400	339	376	364	397	1476	368	348	368	440	1524	3000
1500	318	345	357	447	1467	401	371	393	441	1606	3073
1600	441	440	494	440	1815	409	488	447	471	1815	3630
1700	469	500	470	420	1859	498	526	508	466	1998	3857
1800	433	366	340	288	1427	406	441	415	343	1605	3032
1900	308	235	191	225	959	311	275	228	257	1071	2030
2000	242	196	194	171	803	270	211	246	225	952	1755
2100	188	149	127	114	578	178	191	192	147	708	1286
2200	89	91	84	59	323	138	120	120	101	479	802
2300	84	42	29	35	190	91	56	78	66	291	481
24-Hour Totals:					24486					22791	47277

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	730	2170	800	1567	745	3675
P.M.	1630	1903	1645	2003	1645	3882
Daily	730	2170	1645	2003	1645	3882

Generated by SPS 5.0.44P

County: 93
Station: 1140
Description: NORTHLAKE W OF KEATING
Start Date: 04/30/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	27	14	22	16	79	29	30	27	21	107	186
0100	10	8	8	9	35	15	18	15	10	58	93
0200	12	11	12	6	41	10	13	9	9	41	82
0300	11	5	16	6	38	13	10	14	4	41	79
0400	16	16	36	29	97	2	9	13	17	41	138
0500	37	39	69	99	244	24	33	45	67	169	413
0600	100	136	212	311	759	57	75	124	183	439	1198
0700	382	515	549	597	2043	208	222	223	354	1007	3050
0800	573	543	502	501	2119	322	326	317	360	1325	3444
0900	458	421	465	450	1794	302	258	284	305	1149	2943
1000	448	397	454	481	1780	278	265	338	301	1182	2962
1100	436	467	489	547	1939	341	342	336	393	1412	3351
1200	539	536	483	485	2043	347	438	444	382	1611	3654
1300	469	490	506	427	1892	450	425	357	419	1651	3543
1400	407	412	414	411	1644	353	349	390	388	1480	3124
1500	446	476	515	480	1917	420	402	382	389	1593	3510
1600	411	499	518	506	1934	454	445	453	449	1801	3735
1700	522	531	561	463	2077	499	546	523	562	2130	4207
1800	438	373	395	313	1519	426	402	371	440	1639	3158
1900	311	246	240	260	1057	346	313	336	263	1258	2315
2000	204	177	184	201	766	240	328	236	243	1047	1813
2100	194	140	144	107	585	190	188	157	160	695	1280
2200	129	78	67	48	322	154	144	120	69	487	809
2300	52	44	40	42	178	87	64	70	47	268	446
24-Hour Totals:					26902					22631	49533

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	730	2262	800	1325	745	3534
P.M.	1645	2120	1700	2130	1700	4207
Daily	730	2262	1700	2130	1700	4207

Generated by SPS 5.0.44P

County: 93
Station: 1140
Description: NORTHLAKE W OF KEATING
Start Date: 05/01/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	36	21	17	14	88	53	43	30	13	139	227
0100	9	11	8	14	42	26	10	18	15	69	111
0200	18	9	6	9	42	11	8	10	8	37	79
0300	9	7	10	11	37	9	10	8	6	33	70
0400	9	18	19	37	83	5	9	15	16	45	128
0500	30	47	60	103	240	17	29	52	63	161	401
0600	109	173	234	315	831	77	74	144	197	492	1323
0700	401	534	638	535	2108	221	230	243	352	1046	3154
0800	586	518	490	498	2092	337	312	311	345	1305	3397
0900	488	393	413	464	1758	298	287	283	302	1170	2928
1000	407	414	457	415	1693	268	291	321	310	1190	2883
1100	477	436	509	494	1916	322	344	348	383	1397	3313
1200	525	543	496	443	2007	335	427	415	391	1568	3575
1300	500	456	441	454	1851	443	423	424	406	1696	3547
1400	423	464	444	479	1810	375	396	440	403	1614	3424
1500	453	467	510	543	1973	428	444	462	437	1771	3744
1600	461	500	492	517	1970	517	544	545	497	2103	4073
1700	526	478	446	480	1930	550	528	507	478	2063	3993
1800	466	417	361	287	1531	414	365	350	389	1518	3049
1900	316	252	234	216	1018	290	303	287	237	1117	2135
2000	193	216	200	199	808	267	233	227	227	954	1762
2100	171	131	107	95	504	206	184	164	163	717	1221
2200	86	75	60	43	264	127	136	106	112	481	745
2300	51	59	35	31	176	83	73	50	44	250	426
24-Hour Totals:					26772					22936	49708

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	715	2293	745	1312	730	3521
P.M.	1615	2035	1615	2136	1615	4171
Daily	715	2293	1615	2136	1615	4171

Generated by SPS 5.0.44P

County: 93
Station: 1140
Description: NORTHLAKE W OF KEATING
Start Date: 05/02/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	29	21	18	16	84	28	37	36	28	129	213
0100	19	16	7	10	52	23	19	13	17	72	124
0200	12	10	18	12	52	18	17	15	8	58	110
0300	6	7	18	18	49	7	4	13	6	30	79
0400	7	18	24	42	91	8	9	10	15	42	133
0500	37	37	61	108	243	28	31	54	59	172	415
0600	82	143	210	327	762	79	84	137	178	478	1240
0700	378	518	583	572	2051	224	224	241	390	1079	3130
0800	530	543	557	569	2199	356	362	336	398	1452	3651
0900	489	450	431	468	1838	291	277	291	300	1159	2997
1000	400	439	405	438	1682	300	296	313	318	1227	2909
1100	411	453	451	442	1757	341	311	305	406	1363	3120
1200	497	464	457	394	1812	323	389	450	336	1498	3310
1300	418	412	404	339	1573	372	362	378	373	1485	3058
1400	363	358	386	406	1513	309	330	373	380	1392	2905
1500	436	425	400	460	1721	376	382	379	416	1553	3274
1600	449	391	422	390	1652	407	468	431	427	1733	3385
1700	434	474	497	416	1821	497	533	455	481	1966	3787
1800	396	337	307	293	1333	405	394	385	326	1510	2843
1900	253	241	192	228	914	296	241	246	258	1041	1955
2000	212	198	135	156	701	245	250	224	212	931	1632
2100	129	123	96	87	435	172	188	168	137	665	1100
2200	100	83	69	53	305	128	117	109	94	448	753
2300	46	35	33	34	148	78	62	70	55	265	413
24-Hour Totals:					24788					21748	46536

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	730	2228	800	1452	800	3651
P.M.	1700	1821	1700	1966	1700	3787
Daily	730	2228	1700	1966	1700	3787

Generated by SPS 5.0.44P

County: 93
Station: 1127
Description: NORTHLAKE W OF ROAN
Start Date: 04/30/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	66	51	41	30	188	44	46	45	27	162	350
0100	38	24	17	31	110	39	32	22	13	106	216
0200	28	19	11	22	80	15	14	18	16	63	143
0300	19	28	29	40	116	8	10	20	12	50	166
0400	18	22	35	65	140	17	23	28	32	100	240
0500	64	93	111	149	417	33	55	65	101	254	671
0600	120	176	311	404	1011	125	140	222	272	759	1770
0700	482	576	831	893	2782	318	374	405	499	1596	4378
0800	807	732	809	814	3162	491	445	396	454	1786	4948
0900	653	607	614	660	2534	420	392	366	400	1578	4112
1000	644	592	658	672	2566	372	417	423	486	1698	4264
1100	644	662	650	770	2726	507	432	501	551	1991	4717
1200	761	773	733	735	3002	510	569	539	599	2217	5219
1300	628	724	658	780	2790	585	543	565	504	2197	4987
1400	709	606	703	786	2804	503	527	490	468	1988	4792
1500	701	827	738	762	3028	521	530	540	538	2129	5157
1600	777	843	779	755	3154	586	563	629	554	2332	5486
1700	704	835	923	750	3212	640	727	679	601	2647	5859
1800	688	719	544	554	2505	574	529	468	470	2041	4546
1900	502	464	369	312	1647	467	412	370	336	1585	3232
2000	370	328	343	312	1353	347	377	322	300	1346	2699
2100	245	256	213	193	907	247	204	213	207	871	1778
2200	205	176	133	126	640	187	144	129	84	544	1184
2300	144	113	101	89	447	104	77	83	53	317	764
24-Hour Totals:					41321					30357	71678

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	730	3263	730	1840	730	5103
P.M.	1645	3217	1700	2647	1700	5859
Daily	730	3263	1700	2647	1700	5859

Generated by SPS 5.0.44P

County: 93
Station: 1127
Description: NORTHLAKE W OF ROAN
Start Date: 05/01/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	74	71	82	43	270	72	62	33	38	205	475
0100	30	41	26	31	128	38	22	26	20	106	234
0200	28	26	31	25	110	19	12	15	16	62	172
0300	11	39	26	33	109	19	14	15	14	62	171
0400	7	28	35	69	139	20	20	24	41	105	244
0500	60	73	99	154	386	44	44	67	108	263	649
0600	139	176	286	441	1042	139	125	221	259	744	1786
0700	460	671	808	920	2859	319	378	417	513	1627	4486
0800	760	686	770	821	3037	516	425	426	380	1747	4784
0900	713	622	617	711	2663	423	376	389	420	1608	4271
1000	608	608	654	665	2535	388	442	423	422	1675	4210
1100	695	728	664	767	2854	432	476	491	478	1877	4731
1200	784	729	846	703	3062	531	575	477	585	2168	5230
1300	698	754	693	733	2878	563	581	586	541	2271	5149
1400	662	789	823	731	3005	546	612	524	576	2258	5263
1500	694	753	805	752	3004	580	605	668	590	2443	5447
1600	745	801	839	839	3224	593	626	692	641	2552	5776
1700	730	734	795	720	2979	656	637	678	535	2506	5485
1800	620	568	568	482	2238	554	489	401	424	1868	4106
1900	449	446	392	377	1664	414	364	365	345	1488	3152
2000	334	334	274	314	1256	334	299	316	256	1205	2461
2100	257	259	234	226	976	268	227	212	155	862	1838
2200	183	202	203	143	731	180	157	116	121	574	1305
2300	147	138	89	87	461	82	74	60	63	279	740
24-Hour Totals:					41610					30555	72165

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	730	3174	745	1880	730	5045
P.M.	1600	3224	1630	2626	1615	5824
Daily	1600	3224	1630	2626	1615	5824

Generated by SPS 5.0.44P

County: 93
Station: 1127
Description: NORTHLAKE W OF ROAN
Start Date: 05/02/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	99	62	66	56	283	55	41	38	36	170	453
0100	39	44	31	44	158	24	28	32	37	121	279
0200	26	20	21	21	88	20	18	19	11	68	156
0300	21	29	29	42	121	9	16	16	23	64	185
0400	17	38	45	44	144	21	26	37	32	116	260
0500	80	73	110	144	407	57	57	87	94	295	702
0600	134	173	287	420	1014	135	140	201	239	715	1729
0700	442	618	763	950	2773	312	368	410	499	1589	4362
0800	810	734	719	753	3016	462	427	441	447	1777	4793
0900	682	633	600	692	2607	404	378	399	384	1565	4172
1000	670	604	690	642	2606	362	430	385	439	1616	4222
1100	646	658	649	880	2833	458	434	414	409	1715	4548
1200	710	716	730	681	2837	516	499	480	506	2001	4838
1300	683	687	657	606	2633	477	478	489	417	1861	4494
1400	616	589	625	706	2536	492	480	444	501	1917	4453
1500	641	653	631	765	2690	453	448	511	515	1927	4617
1600	686	649	712	771	2818	518	562	518	522	2120	4938
1700	685	693	746	646	2770	564	631	578	520	2293	5063
1800	606	559	536	470	2171	483	524	404	384	1795	3966
1900	395	446	359	331	1531	427	333	320	300	1380	2911
2000	312	288	299	248	1147	303	246	296	266	1111	2258
2100	247	250	251	215	963	246	201	211	174	832	1795
2200	175	188	188	131	682	167	131	138	97	533	1215
2300	142	144	111	106	503	93	68	83	66	310	813
24-Hour Totals:					39331					27891	67222

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	730	3257	745	1829	730	5055
P.M.	1645	2895	1645	2295	1645	5190
Daily	730	3257	1645	2295	1645	5190

Generated by SPS 5.0.44P

County: 93
Station: 1114
Description: PGA W OF CENTRAL
Start Date: 04/23/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	21	23	12	10	66	16	23	11	18	68	134
0100	12	9	10	9	40	14	7	11	6	38	78
0200	8	5	7	10	30	1	4	12	12	29	59
0300	8	5	2	7	22	5	4	4	3	16	38
0400	6	12	16	15	49	11	15	10	15	51	100
0500	19	27	34	45	125	27	36	70	75	208	333
0600	84	88	128	220	520	92	112	145	201	550	1070
0700	299	364	553	570	1786	220	271	381	448	1320	3106
0800	455	540	521	470	1986	417	403	353	332	1505	3491
0900	467	397	362	379	1605	318	301	248	286	1153	2758
1000	329	325	335	331	1320	237	261	271	311	1080	2400
1100	321	309	357	376	1363	244	285	291	298	1118	2481
1200	389	386	380	341	1496	310	278	306	348	1242	2738
1300	302	328	339	368	1337	325	336	344	387	1392	2729
1400	339	358	358	326	1381	335	353	343	383	1414	2795
1500	325	347	367	342	1381	366	369	365	380	1480	2861
1600	369	338	406	394	1507	442	506	411	482	1841	3348
1700	501	472	478	477	1928	511	556	627	520	2214	4142
1800	397	414	343	378	1532	399	411	362	293	1465	2997
1900	282	246	193	173	894	317	258	259	225	1059	1953
2000	168	150	126	111	555	250	218	217	224	909	1464
2100	104	115	102	106	427	231	181	171	110	693	1120
2200	98	97	52	78	325	105	92	69	68	334	659
2300	52	45	61	54	212	61	41	42	26	170	382
24-Hour Totals:					21887					21349	43236

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	730	2118	730	1649	730	3767
P.M.	1700	1928	1700	2214	1700	4142
Daily	730	2118	1700	2214	1700	4142

Generated by SPS 5.0.44P

County: 93
Station: 1114
Description: PGA W OF CENTRAL
Start Date: 04/24/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	43	34	23	8	108	22	17	19	20	78	186
0100	16	16	10	7	49	14	3	11	15	43	92
0200	7	15	6	10	38	5	3	5	7	20	58
0300	6	11	6	8	31	8	6	8	9	31	62
0400	7	11	8	18	44	15	14	22	22	73	117
0500	15	20	28	49	112	25	40	73	73	211	323
0600	59	101	140	233	533	89	110	138	198	535	1068
0700	320	402	511	594	1827	225	310	392	457	1384	3211
0800	477	517	546	479	2019	403	368	421	341	1533	3552
0900	426	391	365	381	1563	305	342	238	288	1173	2736
1000	306	336	333	343	1318	249	292	282	319	1142	2460
1100	287	321	342	394	1344	275	327	270	341	1213	2557
1200	389	390	351	362	1492	330	343	356	325	1354	2846
1300	319	381	345	398	1443	303	312	344	379	1338	2781
1400	328	367	365	344	1404	318	372	346	387	1423	2827
1500	336	379	398	380	1493	391	409	392	407	1599	3092
1600	349	360	371	464	1544	470	479	451	470	1870	3414
1700	477	466	451	486	1880	520	559	509	493	2081	3961
1800	407	388	355	324	1474	414	415	329	331	1489	2963
1900	279	223	202	206	910	324	265	234	234	1057	1967
2000	175	171	144	140	630	241	230	253	215	939	1569
2100	129	113	137	97	476	191	190	174	140	695	1171
2200	94	100	62	59	315	119	97	77	74	367	682
2300	63	40	41	38	182	36	47	47	32	162	344
24-Hour Totals:					22229					21810	44039

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	745	2134	745	1649	745	3783
P.M.	1700	1880	1700	2081	1700	3961
Daily	745	2134	1700	2081	1700	3961

Generated by SPS 5.0.44P

County: 93
Station: 1114
Description: PGA W OF CENTRAL
Start Date: 04/25/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	51	25	18	27	121	16	26	32	14	88	209
0100	10	11	6	10	37	15	12	8	2	37	74
0200	13	8	9	7	37	4	9	4	3	20	57
0300	3	9	6	5	23	5	5	6	5	21	44
0400	14	8	8	18	48	11	14	18	28	71	119
0500	26	24	43	44	137	29	25	64	73	191	328
0600	85	100	136	235	556	98	111	144	206	559	1115
0700	262	389	519	585	1755	203	278	379	423	1283	3038
0800	455	525	515	514	2009	415	397	368	376	1556	3565
0900	473	387	328	356	1544	328	320	291	267	1206	2750
1000	345	302	340	362	1349	244	285	316	304	1149	2498
1100	347	314	385	361	1407	243	293	277	328	1141	2548
1200	409	384	405	368	1566	313	377	334	348	1372	2938
1300	324	365	384	331	1404	336	380	345	388	1449	2853
1400	330	362	342	374	1408	357	390	370	364	1481	2889
1500	371	346	375	403	1495	359	413	409	413	1594	3089
1600	347	424	427	391	1589	519	476	483	477	1955	3544
1700	441	472	503	461	1877	569	585	549	483	2186	4063
1800	404	467	387	334	1592	444	403	322	321	1490	3082
1900	306	249	186	190	931	315	256	237	245	1053	1984
2000	170	164	143	134	611	220	241	261	218	940	1551
2100	133	122	124	108	487	208	242	188	210	848	1335
2200	107	94	72	56	329	178	90	84	79	431	760
2300	76	59	41	43	219	80	66	34	44	224	443
24-Hour Totals:					22531					22345	44876

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	730	2084	730	1614	730	3698
P.M.	1700	1877	1700	2186	1700	4063
Daily	730	2084	1700	2186	1700	4063

Generated by SPS 5.0.44P

County: 93
Station: 1057
Description: PGA W OF FAIRCHILD GARDENS
Start Date: 04/23/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	49	55	29	30	163	86	60	55	31	232	395
0100	27	24	33	22	106	30	26	21	19	96	202
0200	16	9	13	12	50	14	12	12	11	49	99
0300	11	7	9	8	35	9	7	28	7	51	86
0400	7	10	9	11	37	9	14	2	9	34	71
0500	10	12	17	36	75	7	9	6	16	38	113
0600	36	39	66	81	222	19	34	41	61	155	377
0700	74	113	155	282	624	54	75	108	162	399	1023
0800	315	445	627	768	2155	176	188	245	264	873	3028
0900	676	685	661	703	2725	273	302	241	243	1059	3784
1000	674	660	500	537	2371	282	274	258	297	1111	3482
1100	435	521	489	571	2016	264	346	344	390	1344	3360
1200	476	486	541	552	2055	383	379	428	385	1575	3630
1300	523	556	548	566	2193	452	471	412	469	1804	3997
1400	512	455	543	554	2064	369	487	519	567	1942	4006
1500	448	500	479	485	1912	577	530	495	545	2147	4059
1600	501	481	512	507	2001	511	542	596	491	2140	4141
1700	440	464	461	508	1873	589	576	574	619	2358	4231
1800	492	530	537	545	2104	592	709	627	535	2463	4567
1900	506	528	420	406	1860	528	532	467	396	1923	3783
2000	307	284	231	226	1048	431	416	396	335	1578	2626
2100	237	208	174	154	773	362	439	371	333	1505	2278
2200	153	135	114	110	512	372	331	260	170	1133	1645
2300	92	89	97	85	363	189	149	114	73	525	888
24-Hour Totals:					29337					26534	55871

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	845	2790	830	1084	845	3870
P.M.	1300	2193	1745	2547	1745	4614
Daily	845	2790	1745	2547	1745	4614

Generated by SPS 5.0.44P

County: 93
Station: 1057
Description: PGA W OF FAIRCHILD GARDENS
Start Date: 04/24/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	62	60	55	53	230	104	92	59	40	295	525
0100	38	20	21	14	93	32	25	27	21	105	198
0200	9	13	12	16	50	12	6	11	8	37	87
0300	8	7	4	8	27	15	10	12	3	40	67
0400	4	6	8	11	29	10	4	3	6	23	52
0500	9	9	24	33	75	11	6	18	13	48	123
0600	30	43	72	84	229	19	28	38	50	135	364
0700	66	85	183	282	616	62	72	142	146	422	1038
0800	304	449	595	789	2137	171	183	229	243	826	2963
0900	706	678	652	774	2810	312	248	249	253	1062	3872
1000	646	621	546	549	2362	308	263	300	277	1148	3510
1100	456	527	565	568	2116	291	387	281	469	1428	3544
1200	553	484	553	559	2149	433	421	443	452	1749	3898
1300	573	660	569	539	2341	478	507	437	471	1893	4234
1400	534	476	565	571	2146	411	472	506	555	1944	4090
1500	436	493	502	542	1973	514	563	525	558	2160	4133
1600	516	450	542	560	2068	554	601	582	490	2227	4295
1700	483	491	507	598	2079	610	586	629	648	2473	4552
1800	493	638	559	532	2222	626	698	641	588	2553	4775
1900	564	589	421	390	1964	575	544	489	464	2072	4036
2000	374	291	243	239	1147	478	406	420	418	1722	2869
2100	240	230	184	147	801	392	426	368	382	1568	2369
2200	161	148	115	128	552	364	436	302	199	1301	1853
2300	106	90	86	83	365	195	142	123	105	565	930
24-Hour Totals:					30581					27796	58377

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	845	2825	845	1052	845	3877
P.M.	1245	2361	1745	2613	1745	4901
Daily	845	2825	1745	2613	1745	4901

Generated by SPS 5.0.44P

County: 93
Station: 1057
Description: PGA W OF FAIRCHILD GARDENS
Start Date: 04/25/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	66	57	41	47	211	95	70	68	32	265	476
0100	36	36	16	23	111	41	43	18	27	129	240
0200	19	12	11	18	60	23	15	9	4	51	111
0300	15	10	10	6	41	16	16	8	6	46	87
0400	8	11	7	9	35	10	4	5	6	25	60
0500	12	15	27	36	90	10	11	18	19	58	148
0600	27	43	63	91	224	17	37	40	48	142	366
0700	71	107	162	262	602	52	78	121	149	400	1002
0800	290	463	584	751	2088	160	186	241	248	835	2923
0900	658	687	634	738	2717	271	310	258	248	1087	3804
1000	631	595	543	536	2305	276	265	296	274	1111	3416
1100	460	501	535	581	2077	292	336	324	461	1413	3490
1200	499	494	561	584	2138	412	373	425	441	1651	3789
1300	517	599	574	564	2254	441	518	462	507	1928	4182
1400	512	541	588	553	2194	460	447	493	538	1938	4132
1500	476	544	520	561	2101	555	564	474	561	2154	4255
1600	536	522	528	556	2142	481	649	616	534	2280	4422
1700	517	507	546	577	2147	641	622	574	616	2453	4600
1800	515	561	544	643	2263	682	659	605	596	2542	4805
1900	556	583	475	415	2029	594	571	498	446	2109	4138
2000	356	346	315	249	1266	472	459	423	371	1725	2991
2100	243	237	222	196	898	388	450	385	389	1612	2510
2200	151	152	119	136	558	419	440	329	280	1468	2026
2300	134	85	84	107	410	226	185	146	115	672	1082
24-Hour Totals:					30961					28094	59055

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	845	2730	845	1087	845	3817
P.M.	1245	2274	1745	2562	1800	4805
Daily	845	2730	1745	2562	1800	4805

Generated by SPS 5.0.44P

County: 93
Station: 1050
Description: PGA W OF SB I-95
Start Date: 04/23/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	43	40	30	29	142	32	26	32	29	119	261
0100	16	17	13	11	57	19	16	12	13	60	117
0200	11	12	7	9	39	6	12	24	11	53	92
0300	3	11	15	11	40	9	9	3	5	26	66
0400	26	29	16	27	98	12	7	11	16	46	144
0500	30	48	50	69	197	22	20	50	66	158	355
0600	88	124	165	233	610	60	74	117	209	460	1070
0700	368	451	557	702	2078	198	241	249	337	1025	3103
0800	635	585	632	566	2418	294	298	249	278	1119	3537
0900	492	540	461	405	1898	250	225	236	240	951	2849
1000	381	369	364	388	1502	220	258	245	274	997	2499
1100	331	448	392	443	1614	235	270	335	341	1181	2795
1200	430	434	430	492	1786	322	303	333	323	1281	3067
1300	405	412	409	441	1667	291	361	362	432	1446	3113
1400	427	381	404	447	1659	369	335	403	369	1476	3135
1500	455	436	438	424	1753	381	367	432	422	1602	3355
1600	469	401	443	429	1742	431	445	412	480	1768	3510
1700	489	471	483	442	1885	474	582	586	485	2127	4012
1800	439	410	338	367	1554	438	433	362	329	1562	3116
1900	290	287	201	225	1003	296	299	275	233	1103	2106
2000	230	194	205	188	817	244	276	245	236	1001	1818
2100	182	153	129	132	596	235	216	157	157	765	1361
2200	122	113	72	92	399	150	124	83	103	460	859
2300	90	52	68	42	252	91	71	56	59	277	529
24-Hour Totals:					25806					21063	46869

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	745	2554	730	1178	745	3732
P.M.	1700	1885	1700	2127	1700	4012
Daily	745	2554	1700	2127	1700	4012

Generated by SPS 5.0.44P

County: 93
Station: 1050
Description: PGA W OF SB I-95
Start Date: 04/24/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	35	42	29	13	119	35	36	37	35	143	262
0100	30	17	10	16	73	20	14	17	11	62	135
0200	11	18	5	10	44	11	10	11	3	35	79
0300	12	14	15	16	57	15	5	4	10	34	91
0400	17	16	15	28	76	9	9	22	17	57	133
0500	36	32	53	89	210	19	40	53	70	182	392
0600	82	144	183	244	653	65	74	146	190	475	1128
0700	336	436	572	736	2080	179	249	251	351	1030	3110
0800	668	581	630	594	2473	297	278	284	246	1105	3578
0900	455	518	410	399	1782	270	256	240	244	1010	2792
1000	370	392	381	387	1530	220	284	264	304	1072	2602
1100	338	421	397	428	1584	291	351	293	344	1279	2863
1200	418	425	437	416	1696	319	330	360	339	1348	3044
1300	373	463	393	485	1714	281	331	383	369	1364	3078
1400	389	414	437	480	1720	329	365	413	371	1478	3198
1500	424	436	455	437	1752	382	417	406	428	1633	3385
1600	473	446	457	499	1875	428	403	448	482	1761	3636
1700	502	542	517	432	1993	475	565	588	503	2131	4124
1800	423	441	384	348	1596	406	417	371	346	1540	3136
1900	327	268	211	244	1050	302	303	268	273	1146	2196
2000	220	206	195	164	785	248	240	267	260	1015	1800
2100	158	151	130	129	568	228	267	214	148	857	1425
2200	119	145	76	90	430	108	117	99	101	425	855
2300	80	63	59	43	245	65	59	57	40	221	466
24-Hour Totals:					26105					21403	47508

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	745	2615	745	1210	745	3825
P.M.	1645	2060	1700	2131	1645	4170
Daily	745	2615	1700	2131	1645	4170

Generated by SPS 5.0.44P

County: 93
Station: 1050
Description: PGA W OF SB I-95
Start Date: 04/25/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	60	27	28	33	148	51	48	44	40	183	331
0100	22	21	6	6	55	34	21	12	10	77	132
0200	17	11	15	10	53	13	19	7	10	49	102
0300	16	14	15	8	53	12	9	8	11	40	93
0400	18	14	20	27	79	17	6	12	24	59	138
0500	43	46	65	76	230	16	32	53	58	159	389
0600	85	123	180	247	635	68	82	147	190	487	1122
0700	343	444	546	679	2012	169	276	281	313	1039	3051
0800	599	579	582	591	2351	298	317	323	283	1221	3572
0900	511	501	418	395	1825	263	237	271	227	998	2823
1000	381	371	394	429	1575	219	246	284	295	1044	2619
1100	386	428	440	414	1668	246	257	305	327	1135	2803
1200	456	419	475	463	1813	303	364	378	356	1401	3214
1300	421	429	462	451	1763	347	350	373	377	1447	3210
1400	414	433	452	500	1799	376	385	352	384	1497	3296
1500	446	430	463	467	1806	351	458	439	460	1708	3514
1600	463	475	485	432	1855	464	441	439	491	1835	3690
1700	517	522	515	483	2037	523	578	514	503	2118	4155
1800	433	417	404	355	1609	454	404	403	375	1636	3245
1900	346	304	279	253	1182	321	313	280	253	1167	2349
2000	252	231	214	211	908	260	290	267	252	1069	1977
2100	164	174	171	174	683	250	264	217	216	947	1630
2200	167	140	107	100	514	163	132	110	108	513	1027
2300	109	83	66	52	310	96	98	65	64	323	633
24-Hour Totals:					26963					22152	49115

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	745	2439	745	1251	745	3690
P.M.	1700	2037	1700	2118	1700	4155
Daily	745	2439	1700	2118	1700	4155

Generated by SPS 5.0.44P

County: 93
Station: 1056
Description: PGA W OF LAKE VICTORIA
Start Date: 04/23/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	40	37	41	35	153	38	43	30	36	147	300
0100	26	21	10	16	73	20	14	15	12	61	134
0200	17	10	9	14	50	10	12	21	18	61	111
0300	13	10	14	17	54	12	16	7	10	45	99
0400	11	17	23	37	88	9	16	6	21	52	140
0500	48	44	83	122	297	19	40	45	72	176	473
0600	97	140	170	355	762	64	90	124	166	444	1206
0700	361	545	741	1010	2657	224	221	287	342	1074	3731
0800	919	853	835	910	3517	348	352	261	327	1288	4805
0900	723	848	591	610	2772	305	324	257	348	1234	4006
1000	553	559	557	658	2327	278	381	369	397	1425	3752
1100	552	595	615	651	2413	421	418	421	475	1735	4148
1200	666	656	625	693	2640	469	517	464	465	1915	4555
1300	603	624	585	646	2458	486	490	533	662	2171	4629
1400	586	535	575	620	2316	600	598	539	581	2318	4634
1500	588	579	617	646	2430	562	579	663	593	2397	4827
1600	563	612	575	628	2378	572	682	618	726	2598	4976
1700	647	742	723	701	2813	729	795	787	654	2965	5778
1800	652	665	557	529	2403	622	648	579	455	2304	4707
1900	432	359	329	314	1434	424	493	452	377	1746	3180
2000	329	289	252	240	1110	415	486	423	380	1704	2814
2100	176	206	171	179	732	396	389	300	217	1302	2034
2200	138	125	129	147	539	224	200	153	112	689	1228
2300	108	92	81	82	363	132	109	86	71	398	761
24-Hour Totals:					36779					30249	67028

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	745	3617	730	1329	745	4920
P.M.	1715	2818	1645	3037	1700	5778
Daily	745	3617	1645	3037	1700	5778

Generated by SPS 5.0.44P

County: 93
Station: 1056
Description: PGA W OF LAKE VICTORIA
Start Date: 04/24/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	54	39	36	24	153	40	47	40	31	158	311
0100	17	21	14	18	70	21	18	15	9	63	133
0200	19	9	10	6	44	19	13	15	10	57	101
0300	10	13	8	15	46	18	6	1	11	36	82
0400	13	12	27	46	98	10	11	17	20	58	156
0500	41	57	77	143	318	21	32	42	62	157	475
0600	112	139	176	336	763	71	91	154	167	483	1246
0700	393	541	694	960	2588	220	219	267	333	1039	3627
0800	886	897	826	969	3578	376	308	295	314	1293	4871
0900	751	760	626	658	2795	297	325	279	333	1234	4029
1000	528	597	617	681	2423	286	400	355	445	1486	3909
1100	601	618	606	661	2486	464	436	465	506	1871	4357
1200	678	737	690	673	2778	477	544	503	465	1989	4767
1300	610	609	590	688	2497	494	530	531	632	2187	4684
1400	584	539	572	662	2357	530	634	609	546	2319	4676
1500	580	611	619	692	2502	639	643	641	622	2545	5047
1600	601	635	648	753	2637	620	667	702	717	2706	5343
1700	683	795	807	705	2990	756	782	776	724	3038	6028
1800	720	732	597	487	2536	664	616	536	572	2388	4924
1900	506	374	369	292	1541	499	464	455	460	1878	3419
2000	328	299	279	245	1151	469	471	429	411	1780	2931
2100	224	213	197	174	808	409	444	340	249	1442	2250
2200	167	150	132	135	584	235	167	158	145	705	1289
2300	122	80	76	57	335	136	104	103	58	401	736
24-Hour Totals:					38078					31313	69391

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	800	3578	745	1312	745	4881
P.M.	1645	3038	1700	3038	1645	6069
Daily	800	3578	1700	3038	1645	6069

Generated by SPS 5.0.44P

County: 93
Station: 1056
Description: PGA W OF LAKE VICTORIA
Start Date: 04/25/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	69	54	42	31	196	67	60	46	54	227	423
0100	31	27	18	17	93	45	39	19	14	117	210
0200	19	15	11	8	53	23	22	7	9	61	114
0300	13	13	12	18	56	18	9	10	8	45	101
0400	13	19	36	41	109	11	17	17	24	69	178
0500	41	43	80	131	295	27	35	49	57	168	463
0600	113	148	195	328	784	64	101	141	171	477	1261
0700	348	526	692	923	2489	211	219	289	328	1047	3536
0800	813	832	833	918	3396	371	342	327	301	1341	4737
0900	754	769	607	628	2758	298	297	324	326	1245	4003
1000	598	530	619	655	2402	285	377	389	425	1476	3878
1100	586	578	679	683	2526	450	404	439	527	1820	4346
1200	661	673	656	699	2689	451	552	547	510	2060	4749
1300	629	645	657	679	2610	523	506	506	619	2154	4764
1400	605	594	646	643	2488	594	641	519	585	2339	4827
1500	680	630	630	660	2600	596	669	691	613	2569	5169
1600	621	641	641	749	2652	641	687	634	694	2656	5308
1700	677	720	726	806	2929	823	784	760	713	3080	6009
1800	716	746	638	552	2652	673	656	561	528	2418	5070
1900	482	441	419	360	1702	498	502	473	413	1886	3588
2000	309	325	309	274	1217	483	460	452	415	1810	3027
2100	252	211	201	212	876	460	455	401	322	1638	2514
2200	207	151	150	175	683	284	232	212	139	867	1550
2300	141	126	107	90	464	145	172	109	98	524	988
24-Hour Totals:					38719					32094	70813

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	745	3401	745	1368	745	4769
P.M.	1730	2994	1700	3080	1700	6009
Daily	745	3401	1700	3080	1700	6009

Generated by SPS 5.0.44P

County: 93
Station: 1052
Description: PGA W OF MILITARY TRAIL
Start Date: 04/23/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	29	28	17	12	86	18	24	15	17	74	160
0100	8	12	10	9	39	13	13	5	6	37	76
0200	9	5	6	6	26	2	7	17	6	32	58
0300	8	3	7	9	27	3	7	1	7	18	45
0400	8	13	22	16	59	15	12	10	15	52	111
0500	20	34	33	45	132	23	28	55	64	170	302
0600	77	76	135	187	475	82	90	133	181	486	961
0700	275	349	520	638	1782	224	284	418	385	1311	3093
0800	505	490	486	449	1930	357	335	353	377	1422	3352
0900	508	439	359	376	1682	323	280	243	285	1131	2813
1000	340	308	370	348	1366	252	274	282	280	1088	2454
1100	319	338	374	392	1423	280	300	301	351	1232	2655
1200	364	366	395	416	1541	321	347	343	372	1383	2924
1300	339	358	364	411	1472	328	368	335	458	1489	2961
1400	402	403	393	359	1557	373	322	361	362	1418	2975
1500	378	381	371	384	1514	398	362	416	460	1636	3150
1600	442	417	396	400	1655	447	484	446	488	1865	3520
1700	465	453	504	477	1899	523	596	599	536	2254	4153
1800	378	408	340	346	1472	441	458	366	363	1628	3100
1900	314	282	196	194	986	344	315	269	270	1198	2184
2000	214	176	176	162	728	249	255	225	224	953	1681
2100	156	164	134	153	607	214	208	156	120	698	1305
2200	123	114	69	97	403	105	81	73	73	332	735
2300	74	42	67	60	243	65	47	36	30	178	421
24-Hour Totals:					23104					22085	45189

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	730	2153	730	1495	730	3648
P.M.	1700	1899	1700	2254	1700	4153
Daily	730	2153	1700	2254	1700	4153

Generated by SPS 5.0.44P

County: 93
Station: 1052
Description: PGA W OF MILITARY TRAIL
Start Date: 04/24/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	44	37	28	8	117	24	28	23	23	98	215
0100	18	17	10	7	52	15	8	12	9	44	96
0200	9	13	6	9	37	8	4	7	6	25	62
0300	8	10	10	10	38	10	4	8	8	30	68
0400	8	11	9	20	48	12	18	16	19	65	113
0500	18	24	27	57	126	21	32	56	75	184	310
0600	48	108	128	189	473	84	103	137	174	498	971
0700	295	357	520	640	1812	228	308	387	417	1340	3152
0800	539	482	549	519	2089	367	336	366	344	1413	3502
0900	425	415	354	350	1544	358	312	237	310	1217	2761
1000	306	349	325	336	1316	251	274	311	312	1148	2464
1100	293	344	356	413	1406	293	332	280	381	1286	2692
1200	372	416	385	364	1537	369	404	413	348	1534	3071
1300	352	426	384	421	1583	324	354	382	429	1489	3072
1400	380	437	413	406	1636	361	360	366	367	1454	3090
1500	375	415	387	398	1575	399	417	432	473	1721	3296
1600	423	438	398	452	1711	449	456	449	522	1876	3587
1700	463	495	467	439	1864	518	564	549	522	2153	4017
1800	403	374	344	333	1454	441	429	355	360	1585	3039
1900	316	275	213	244	1048	331	283	268	275	1157	2205
2000	202	186	186	159	733	261	253	261	234	1009	1742
2100	157	141	144	143	585	180	206	191	143	720	1305
2200	137	129	87	87	440	113	109	80	73	375	815
2300	76	57	51	45	229	56	41	45	34	176	405
24-Hour Totals:					23453					22597	46050

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	745	2210	730	1507	745	3696
P.M.	1645	1877	1645	2153	1645	4030
Daily	745	2210	1645	2153	1645	4030

Generated by SPS 5.0.44P

County: 93
Station: 1052
Description: PGA W OF MILITARY TRAIL
Start Date: 04/25/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	55	34	17	32	138	22	34	28	21	105	243
0100	18	15	4	9	46	16	12	9	1	38	84
0200	18	10	9	9	46	7	10	5	7	29	75
0300	5	10	9	5	29	8	7	4	7	26	55
0400	13	8	10	19	50	15	10	27	22	74	124
0500	23	30	45	49	147	21	28	53	62	164	311
0600	83	95	133	212	523	82	90	133	187	492	1015
0700	259	369	495	626	1749	197	326	394	368	1285	3034
0800	515	496	478	513	2002	365	352	356	416	1489	3491
0900	472	449	338	341	1600	339	296	300	259	1194	2794
1000	314	349	356	368	1387	270	290	285	310	1155	2542
1100	329	337	401	365	1432	292	274	289	401	1256	2688
1200	400	400	407	414	1621	358	388	375	365	1486	3107
1300	366	410	412	404	1592	370	390	371	432	1563	3155
1400	392	463	385	420	1660	398	371	360	358	1487	3147
1500	409	356	405	399	1569	412	463	461	515	1851	3420
1600	430	485	435	397	1747	472	438	473	531	1914	3661
1700	487	475	459	469	1890	510	590	576	540	2216	4106
1800	416	386	386	310	1498	439	436	380	386	1641	3139
1900	321	277	245	231	1074	353	313	296	280	1242	2316
2000	233	208	184	202	827	257	268	251	245	1021	1848
2100	185	177	146	161	669	227	204	227	190	848	1517
2200	131	131	114	85	461	137	114	86	85	422	883
2300	93	78	47	47	265	64	73	47	43	227	492
24-Hour Totals:					24022					23225	47247

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	730	2132	800	1489	730	3611
P.M.	1700	1890	1700	2216	1700	4106
Daily	730	2132	1700	2216	1700	4106

Generated by SPS 5.0.44P

County: 93
Station: 1038
Description: DONALD ROSS E OF NB I-95
Start Date: 04/23/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	23	27	16	19	85	20	15	10	6	51	136
0100	17	11	8	5	41	9	4	4	3	20	61
0200	5	6	3	2	16	3	1	4	3	11	27
0300	3	7	8	4	22	8	10	9	12	39	61
0400	7	6	10	18	41	15	13	13	26	67	108
0500	22	29	50	56	157	34	35	56	56	181	338
0600	62	98	162	240	562	83	112	184	208	587	1149
0700	285	417	433	489	1624	279	310	389	362	1340	2964
0800	411	406	415	407	1639	351	325	309	295	1280	2919
0900	335	281	244	250	1110	265	219	222	216	922	2032
1000	197	218	223	232	870	221	206	175	215	817	1687
1100	256	224	199	239	918	191	202	221	203	817	1735
1200	223	219	230	237	909	187	180	212	224	803	1712
1300	230	241	232	260	963	229	211	211	201	852	1815
1400	266	264	246	289	1065	228	265	264	287	1044	2109
1500	272	291	317	374	1254	303	296	308	245	1152	2406
1600	321	327	349	348	1345	380	376	331	373	1460	2805
1700	339	413	413	435	1600	447	464	409	321	1641	3241
1800	322	314	301	234	1171	334	259	215	217	1025	2196
1900	227	197	176	149	749	198	193	153	158	702	1451
2000	159	112	161	103	535	158	170	136	133	597	1132
2100	113	127	104	95	439	164	168	118	77	527	966
2200	71	67	44	64	246	67	54	42	48	211	457
2300	62	60	43	36	201	53	37	30	19	139	340
24-Hour Totals:					17562					16285	33847

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	715	1750	730	1427	730	3166
P.M.	1700	1600	1645	1693	1700	3241
Daily	715	1750	1645	1693	1700	3241

Generated by SPS 5.0.44P

County: 93
Station: 1038
Description: DONALD ROSS E OF NB I-95
Start Date: 04/24/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	32	23	15	15	85	24	22	10	8	64	149
0100	11	9	9	7	36	9	11	10	4	34	70
0200	8	13	6	3	30	9	6	7	4	26	56
0300	11	7	6	5	29	7	5	14	6	32	61
0400	7	10	14	17	48	12	14	14	21	61	109
0500	9	27	37	59	132	37	34	55	56	182	314
0600	55	81	140	251	527	92	127	182	202	603	1130
0700	288	405	415	526	1634	284	315	375	400	1374	3008
0800	413	450	414	412	1689	334	317	328	285	1264	2953
0900	334	254	245	253	1086	271	215	203	192	881	1967
1000	220	224	237	226	907	213	203	225	203	844	1751
1100	199	247	227	228	901	196	219	197	231	843	1744
1200	219	205	230	224	878	225	226	222	189	862	1740
1300	229	260	240	270	999	211	187	215	215	828	1827
1400	235	272	253	269	1029	224	230	210	295	959	1988
1500	288	335	314	347	1284	301	310	309	266	1186	2470
1600	307	358	331	339	1335	333	372	345	375	1425	2760
1700	351	453	434	406	1644	442	494	419	284	1639	3283
1800	345	281	278	234	1138	359	272	279	200	1110	2248
1900	229	200	169	177	775	198	187	168	184	737	1512
2000	142	156	141	145	584	153	150	142	145	590	1174
2100	145	137	102	77	461	133	117	97	102	449	910
2200	86	80	65	60	291	121	62	56	41	280	571
2300	40	56	42	29	167	63	37	29	26	155	322
24-Hour Totals:					17689					16428	34117

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	730	1804	730	1426	730	3230
P.M.	1700	1644	1645	1730	1645	3307
Daily	730	1804	1645	1730	1645	3307

Generated by SPS 5.0.44P

County: 93
Station: 1038
Description: DONALD ROSS E OF NB I-95
Start Date: 04/25/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	30	30	12	24	96	34	17	16	8	75	171
0100	13	10	9	7	39	11	7	4	12	34	73
0200	8	13	8	5	34	6	3	13	4	26	60
0300	8	12	9	5	34	6	12	12	15	45	79
0400	9	13	18	19	59	10	17	19	23	69	128
0500	22	26	37	59	144	29	46	50	45	170	314
0600	65	91	158	249	563	97	104	189	207	597	1160
0700	313	423	440	490	1666	261	305	356	382	1304	2970
0800	442	408	440	400	1690	339	313	295	289	1236	2926
0900	315	247	241	292	1095	279	231	244	247	1001	2096
1000	203	242	236	262	943	221	238	209	206	874	1817
1100	215	290	257	260	1022	171	216	223	221	831	1853
1200	257	260	245	261	1023	236	255	211	230	932	1955
1300	249	274	261	274	1058	245	218	220	225	908	1966
1400	273	297	249	286	1105	200	267	284	305	1056	2161
1500	247	309	333	392	1281	302	289	366	295	1252	2533
1600	374	320	373	343	1410	342	395	347	399	1483	2893
1700	364	412	413	363	1552	432	536	427	350	1745	3297
1800	367	307	311	283	1268	346	290	222	248	1106	2374
1900	215	199	175	181	770	163	202	210	168	743	1513
2000	158	160	160	142	620	132	147	161	156	596	1216
2100	111	141	114	119	485	194	140	164	157	655	1140
2200	84	101	88	67	340	118	75	60	42	295	635
2300	58	53	45	48	204	78	42	32	30	182	386
24-Hour Totals:					18501					17215	35716

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	715	1795	730	1390	715	3177
P.M.	1715	1555	1645	1794	1645	3326
Daily	715	1795	1645	1794	1645	3326

Generated by SPS 5.0.44P

County: 93
Station: 1153
Description: DONALD ROSS BETWEEN RAMPS
Start Date: 04/30/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	8	9	2	5	24	14	10	12	11	47	71
0100	3	7	4	3	17	5	4	9	3	21	38
0200	3	0	0	4	7	6	9	4	1	20	27
0300	1	1	1	2	5	2	4	10	10	26	31
0400	3	1	6	7	17	14	10	13	21	58	75
0500	9	13	11	40	73	24	31	49	47	151	224
0600	29	50	99	132	310	64	103	145	185	497	807
0700	203	258	312	331	1104	227	247	323	288	1085	2189
0800	224	205	226	212	867	330	290	243	306	1169	2036
0900	226	122	149	152	649	225	249	208	191	873	1522
1000	125	134	112	116	487	154	199	202	173	728	1215
1100	111	108	113	128	460	168	174	185	202	729	1189
1200	140	106	104	120	470	217	231	170	150	768	1238
1300	110	119	108	137	474	198	219	194	186	797	1271
1400	111	133	118	131	493	211	168	219	226	824	1317
1500	143	119	119	126	507	236	235	260	240	971	1478
1600	134	132	141	124	531	220	295	257	250	1022	1553
1700	124	130	139	155	548	300	302	302	255	1159	1707
1800	123	107	112	84	426	217	223	181	219	840	1266
1900	100	79	56	54	289	173	147	149	163	632	921
2000	59	66	46	33	204	148	129	127	119	523	727
2100	48	33	32	29	142	89	96	80	65	330	472
2200	25	21	26	13	85	74	51	61	34	220	305
2300	20	9	12	22	63	53	31	13	32	129	192
24-Hour Totals:					8252					13619	21871

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	715	1125	730	1231	715	2313
P.M.	1700	548	1700	1159	1700	1707
Daily	715	1125	730	1231	715	2313

Generated by SPS 5.0.44P

County: 93
Station: 1153
Description: DONALD ROSS BETWEEN RAMPS
Start Date: 05/01/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	9	7	4	9	29	21	15	14	5	55	84
0100	8	3	2	4	17	17	1	10	7	35	52
0200	5	2	5	3	15	5	16	6	6	33	48
0300	2	4	1	2	9	4	4	10	12	30	39
0400	2	3	10	8	23	9	9	13	11	42	65
0500	7	17	20	35	79	20	42	45	51	158	237
0600	36	44	119	138	337	60	95	142	200	497	834
0700	234	251	278	338	1101	233	257	313	287	1090	2191
0800	232	230	217	238	917	324	298	230	325	1177	2094
0900	217	139	129	148	633	228	227	205	190	850	1483
1000	116	133	117	145	511	206	170	182	182	740	1251
1100	118	103	114	112	447	200	210	204	213	827	1274
1200	131	82	136	102	451	180	212	158	223	773	1224
1300	113	136	108	111	468	215	182	189	230	816	1284
1400	115	144	136	137	532	189	200	212	226	827	1359
1500	134	141	136	174	585	262	247	266	249	1024	1609
1600	158	118	140	142	558	293	339	334	300	1266	1824
1700	159	114	88	119	480	358	311	279	254	1202	1682
1800	108	118	116	99	441	231	256	220	200	907	1348
1900	83	74	66	42	265	146	171	153	128	598	863
2000	48	59	37	43	187	89	140	121	109	459	646
2100	37	31	36	28	132	103	96	87	73	359	491
2200	36	11	21	21	89	61	60	50	56	227	316
2300	10	8	12	14	44	39	24	19	25	107	151
24-Hour Totals:					8350					14099	22449

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	700	1101	730	1222	730	2300
P.M.	1515	609	1615	1331	1615	1890
Daily	700	1101	1615	1331	730	2300

Generated by SPS 5.0.44P

County: 93
Station: 1153
Description: DONALD ROSS BETWEEN RAMPS
Start Date: 05/02/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	9	11	10	8	38	21	13	7	12	53	91
0100	5	5	0	5	15	16	9	7	4	36	51
0200	2	5	6	6	19	9	6	4	4	23	42
0300	6	4	3	0	13	8	7	9	4	28	41
0400	0	7	10	12	29	12	22	21	20	75	104
0500	11	16	31	33	91	15	25	61	41	142	233
0600	31	40	106	157	334	60	96	139	227	522	856
0700	210	267	263	328	1068	210	262	344	262	1078	2146
0800	259	248	220	217	944	325	293	231	319	1168	2112
0900	199	158	157	162	676	258	222	206	197	883	1559
1000	119	126	124	117	486	183	166	211	170	730	1216
1100	136	124	113	113	486	182	185	171	177	715	1201
1200	116	128	103	107	454	180	212	204	184	780	1234
1300	94	124	95	106	419	194	191	195	164	744	1163
1400	109	98	108	119	434	174	162	183	216	735	1169
1500	109	124	94	135	462	230	218	212	209	869	1331
1600	104	108	100	104	416	212	274	273	251	1010	1426
1700	98	146	126	128	498	277	312	289	259	1137	1635
1800	99	93	92	76	360	200	199	187	181	767	1127
1900	65	61	78	55	259	153	141	134	134	562	821
2000	63	42	42	39	186	104	109	94	99	406	592
2100	33	29	32	35	129	105	95	85	63	348	477
2200	25	20	24	16	85	69	57	46	46	218	303
2300	15	23	16	15	69	49	38	26	31	144	213
24-Hour Totals:					7970					13173	21143

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	715	1117	730	1224	730	2322
P.M.	1715	499	1700	1137	1700	1635
Daily	715	1117	730	1224	730	2322

Generated by SPS 5.0.44P

County: 93
Station: 1141
Description: NORTHLAKE BETWEEN I-95 RAMPS
Start Date: 04/30/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	37	13	17	18	85	46	45	42	25	158	243
0100	21	12	10	13	56	36	28	18	16	98	154
0200	9	10	10	12	41	17	19	18	13	67	108
0300	11	6	18	15	50	10	9	19	7	45	95
0400	8	13	30	38	89	16	16	31	28	91	180
0500	21	37	64	102	224	32	49	70	93	244	468
0600	74	135	213	211	633	97	105	199	259	660	1293
0700	286	351	495	539	1671	301	316	340	484	1441	3112
0800	411	473	463	455	1802	470	407	422	413	1712	3514
0900	403	405	384	394	1586	360	327	333	363	1383	2969
1000	415	346	415	447	1623	346	349	430	364	1489	3112
1100	351	409	398	441	1599	434	409	416	485	1744	3343
1200	468	446	456	451	1821	462	503	528	455	1948	3769
1300	359	463	406	417	1645	515	489	408	476	1888	3533
1400	400	353	366	336	1455	421	433	491	438	1783	3238
1500	324	365	374	402	1465	529	544	462	488	2023	3488
1600	371	382	380	441	1574	530	548	530	523	2131	3705
1700	407	396	474	433	1710	622	676	599	605	2502	4212
1800	340	371	331	288	1330	527	436	453	450	1866	3196
1900	286	277	228	204	995	387	342	367	285	1381	2376
2000	218	204	186	175	783	263	377	250	268	1158	1941
2100	167	137	131	87	522	220	185	173	196	774	1296
2200	101	89	69	66	325	187	146	129	84	546	871
2300	63	52	45	48	208	102	78	88	57	325	533
24-Hour Totals:					23292					27457	50749

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	730	1918	745	1783	745	3669
P.M.	1200	1821	1700	2502	1700	4212
Daily	730	1918	1700	2502	1700	4212

Generated by SPS 5.0.44P

County: 93
Station: 1141
Description: NORTHLAKE BETWEEN I-95 RAMPS
Start Date: 05/01/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	30	25	31	19	105	70	57	31	34	192	297
0100	22	21	10	18	71	38	24	26	19	107	178
0200	15	12	12	8	47	17	15	21	9	62	109
0300	10	12	12	17	51	11	11	17	11	50	101
0400	6	20	17	41	84	13	16	31	36	96	180
0500	18	41	56	109	224	30	47	80	90	247	471
0600	92	127	192	261	672	125	117	194	260	696	1368
0700	306	376	532	519	1733	316	317	362	520	1515	3248
0800	446	459	409	451	1765	444	370	409	402	1625	3390
0900	400	409	373	390	1572	363	361	366	371	1461	3033
1000	389	337	404	388	1518	356	342	418	345	1461	2979
1100	394	455	423	456	1728	414	416	421	473	1724	3452
1200	489	412	498	410	1809	430	451	474	448	1803	3612
1300	416	483	373	429	1701	533	517	467	484	2001	3702
1400	400	430	463	437	1730	438	481	527	428	1874	3604
1500	363	401	405	432	1601	509	594	553	483	2139	3740
1600	434	406	406	478	1724	572	575	596	589	2332	4056
1700	394	331	350	366	1441	657	612	617	594	2480	3921
1800	323	328	315	254	1220	517	453	397	413	1780	3000
1900	243	272	236	213	964	372	321	353	293	1339	2303
2000	213	182	195	190	780	266	284	251	264	1065	1845
2100	172	140	120	95	527	213	210	205	172	800	1327
2200	93	75	72	50	290	171	171	119	133	594	884
2300	64	55	44	48	211	93	80	70	64	307	518
24-Hour Totals:					23568					27750	51318

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	730	1956	745	1743	730	3652
P.M.	1200	1809	1700	2480	1615	4101
Daily	730	1956	1700	2480	1615	4101

Generated by SPS 5.0.44P

County: 93
Station: 1141
Description: NORTHLAKE BETWEEN I-95 RAMPS
Start Date: 05/02/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	41	24	22	18	105	46	47	45	36	174	279
0100	16	25	15	17	73	28	28	33	35	124	197
0200	12	4	11	11	38	27	20	17	12	76	114
0300	13	12	21	22	68	10	12	15	20	57	125
0400	4	17	20	34	75	21	23	31	29	104	179
0500	40	33	57	89	219	55	61	85	88	289	508
0600	85	143	192	257	677	112	129	190	258	689	1366
0700	285	360	480	564	1689	321	315	362	470	1468	3157
0800	481	470	451	485	1887	424	403	442	442	1711	3598
0900	426	426	384	387	1623	351	335	356	354	1396	3019
1000	422	345	402	384	1553	317	363	368	366	1414	2967
1100	345	424	334	394	1497	413	388	417	568	1786	3283
1200	427	369	410	350	1556	522	501	583	452	2058	3614
1300	363	417	349	321	1450	540	524	503	483	2050	3500
1400	344	290	370	385	1389	431	460	519	512	1922	3311
1500	341	342	331	356	1370	519	548	568	527	2162	3532
1600	403	331	319	367	1420	573	645	583	608	2409	3829
1700	316	339	386	366	1407	714	699	611	631	2655	4062
1800	309	283	292	271	1155	568	546	465	423	2002	3157
1900	236	247	195	187	865	397	321	339	317	1374	2239
2000	184	198	193	138	713	290	291	246	283	1110	1823
2100	151	126	109	115	501	220	231	194	178	823	1324
2200	91	93	73	61	318	165	150	162	112	589	907
2300	88	47	39	36	210	96	71	95	70	332	542
24-Hour Totals:					21858					28774	50632

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	730	1995	745	1739	745	3705
P.M.	1200	1556	1700	2655	1700	4062
Daily	730	1995	1700	2655	1700	4062

Generated by SPS 5.0.44P

County: 93
Station: 1054
Description: PGA BETWEEN I-95 RAMPS
Start Date: 04/23/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	15	25	13	15	68	28	25	38	24	115	183
0100	10	7	2	8	27	17	18	13	11	59	86
0200	6	4	6	3	19	6	12	28	8	54	73
0300	5	3	8	7	23	7	8	4	5	24	47
0400	6	7	10	17	40	10	8	10	20	48	88
0500	24	34	41	62	161	18	25	48	65	156	317
0600	52	81	120	198	451	53	72	136	201	462	913
0700	243	365	490	610	1708	197	241	275	341	1054	2762
0800	469	536	495	504	2004	287	307	255	280	1129	3133
0900	485	419	334	388	1626	247	236	221	254	958	2584
1000	328	328	354	388	1398	226	262	250	280	1018	2416
1100	337	379	349	376	1441	249	286	317	365	1217	2658
1200	364	349	358	420	1491	323	333	332	331	1319	2810
1300	370	334	346	390	1440	316	365	386	449	1516	2956
1400	327	345	319	388	1379	366	360	412	359	1497	2876
1500	321	308	336	348	1313	420	396	451	447	1714	3027
1600	329	298	334	346	1307	427	466	433	519	1845	3152
1700	324	332	363	332	1351	505	658	585	501	2249	3600
1800	328	330	268	283	1209	452	436	377	334	1599	2808
1900	208	198	177	160	743	297	307	260	257	1121	1864
2000	185	142	141	101	569	238	281	247	225	991	1560
2100	111	100	67	93	371	239	202	167	144	752	1123
2200	68	71	48	52	239	153	112	84	97	446	685
2300	41	25	46	26	138	85	73	51	58	267	405
24-Hour Totals:					20516					21610	42126

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	745	2110	730	1210	730	3315
P.M.	1215	1497	1645	2267	1645	3632
Daily	745	2110	1645	2267	1645	3632

Generated by SPS 5.0.44P

County: 93
Station: 1054
Description: PGA BETWEEN I-95 RAMPS
Start Date: 04/24/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	21	20	11	6	58	37	32	46	26	141	199
0100	12	11	5	8	36	14	16	14	11	55	91
0200	7	6	1	7	21	12	11	9	5	37	58
0300	4	1	10	9	24	13	4	4	12	33	57
0400	6	7	14	21	48	8	8	20	19	55	103
0500	27	26	44	71	168	19	38	51	65	173	341
0600	53	90	136	226	505	65	68	155	182	470	975
0700	275	390	460	611	1736	180	247	282	328	1037	2773
0800	503	507	499	555	2064	325	280	281	251	1137	3201
0900	434	420	364	377	1595	259	257	238	236	990	2585
1000	323	354	389	375	1441	223	288	271	305	1087	2528
1100	326	367	346	397	1436	312	357	300	383	1352	2788
1200	354	402	353	360	1469	301	374	323	352	1350	2819
1300	337	359	356	395	1447	326	321	403	403	1453	2900
1400	289	294	319	366	1268	337	381	399	400	1517	2785
1500	327	342	334	356	1359	421	413	420	463	1717	3076
1600	315	348	342	388	1393	424	425	497	514	1860	3253
1700	347	390	336	326	1399	529	626	600	506	2261	3660
1800	359	363	299	293	1314	446	438	368	361	1613	2927
1900	253	232	172	170	827	323	315	271	271	1180	2007
2000	160	148	151	96	555	253	250	263	255	1021	1576
2100	121	98	83	82	384	228	270	202	132	832	1216
2200	77	73	59	44	253	119	111	94	103	427	680
2300	45	30	23	25	123	70	57	49	38	214	337
24-Hour Totals:					20923					22012	42935

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	745	2120	730	1215	745	3334
P.M.	1200	1469	1645	2269	1645	3730
Daily	745	2120	1645	2269	1645	3730

Generated by SPS 5.0.44P

County: 93
Station: 1054
Description: PGA BETWEEN I-95 RAMPS
Start Date: 04/25/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	20	16	13	15	64	52	51	40	36	179	243
0100	15	12	4	6	37	32	28	7	9	76	113
0200	7	4	3	4	18	13	19	4	10	46	64
0300	9	5	11	10	35	14	7	7	11	39	74
0400	10	5	19	25	59	15	6	11	24	56	115
0500	26	30	43	59	158	15	35	55	51	156	314
0600	57	86	118	193	454	72	78	155	186	491	945
0700	246	398	413	595	1652	173	277	304	312	1066	2718
0800	477	538	478	528	2021	314	321	311	307	1253	3274
0900	475	424	351	396	1646	256	236	254	233	979	2625
1000	308	324	346	403	1381	232	273	274	287	1066	2447
1100	322	322	383	403	1430	276	274	296	357	1203	2633
1200	329	352	406	375	1462	310	386	374	357	1427	2889
1300	336	383	394	360	1473	377	336	392	388	1493	2966
1400	298	316	335	400	1349	374	426	356	390	1546	2895
1500	324	336	352	356	1368	402	456	470	516	1844	3212
1600	323	359	379	351	1412	465	458	457	520	1900	3312
1700	326	330	320	380	1356	576	615	568	522	2281	3637
1800	343	359	354	282	1338	479	450	412	383	1724	3062
1900	263	244	208	185	900	316	320	271	251	1158	2058
2000	198	155	164	150	667	286	281	261	243	1071	1738
2100	109	120	91	100	420	247	270	211	204	932	1352
2200	100	68	72	59	299	156	122	109	112	499	798
2300	62	52	28	29	171	90	91	69	54	304	475
24-Hour Totals:					21170					22789	43959

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	745	2088	745	1258	745	3346
P.M.	1230	1500	1700	2281	1700	3637
Daily	745	2088	1700	2281	1700	3637

Generated by SPS 5.0.44P

County: 93
Station: 1055
Description: PGA W OF RCA
Start Date: 04/23/2013
Start Time: 0000

Appendix B - Data Collection

Time	Direction: E 1st	2nd	3rd	4th	Total	Direction: W 1st	2nd	3rd	4th	Total	Combined Total
0000	42	39	45	33	159	14	24	16	20	74	233
0100	23	19	11	17	70	8	8	6	8	30	100
0200	16	8	12	10	46	4	10	13	12	39	85
0300	13	13	19	20	65	5	4	1	5	15	80
0400	15	15	26	47	103	4	4	3	6	17	120
0500	53	56	99	144	352	10	13	21	27	71	423
0600	130	181	211	446	968	26	39	54	79	198	1166
0700	434	655	847	1103	3039	96	106	138	162	502	3541
0800	1007	956	931	1019	3913	164	166	99	169	598	4511
0900	802	819	623	634	2878	146	147	115	175	583	3461
1000	574	588	572	684	2418	143	194	178	221	736	3154
1100	569	595	623	674	2461	206	229	236	262	933	3394
1200	651	664	641	720	2676	248	271	248	251	1018	3694
1300	628	644	604	679	2555	261	259	291	336	1147	3702
1400	609	546	602	650	2407	332	303	296	315	1246	3653
1500	625	589	674	663	2551	318	289	381	331	1319	3870
1600	593	602	604	660	2459	320	397	327	389	1433	3892
1700	658	760	735	730	2883	406	473	456	349	1684	4567
1800	650	667	561	538	2416	361	380	336	260	1337	3753
1900	435	364	312	310	1421	238	273	273	214	998	2419
2000	335	276	264	236	1111	196	263	233	204	896	2007
2100	191	212	175	186	764	202	201	142	108	653	1417
2200	135	140	129	160	564	105	92	56	43	296	860
2300	111	92	86	81	370	56	47	37	22	162	532
24-Hour Totals:					38649					15985	54634

Peak Volume Information

	Direction: E Hour	Volume	Direction: W Hour	Volume	Combined Directions Hour	Volume
A.M.	745	3997	730	630	745	4588
P.M.	1700	2883	1645	1724	1700	4567
Daily	745	3997	1645	1724	745	4588

Generated by SPS 5.0.44P

County: 93
Station: 1055
Description: PGA W OF RCA
Start Date: 04/24/2013
Start Time: 0000

Appendix B - Data Collection

Time	Direction: E 1st	2nd	3rd	4th	Total	Direction: W 1st	2nd	3rd	4th	Total	Combined Total
0000	62	35	41	23	161	14	20	25	17	76	237
0100	24	24	12	20	80	7	6	7	5	25	105
0200	18	11	9	7	45	9	5	7	3	24	69
0300	12	12	16	22	62	6	3	1	4	14	76
0400	16	16	31	50	113	4	2	10	5	21	134
0500	52	75	90	164	381	7	15	19	30	71	452
0600	142	176	248	428	994	37	38	68	86	229	1223
0700	478	674	844	1111	3107	106	100	126	178	510	3617
0800	1037	1002	908	1043	3990	177	144	132	139	592	4582
0900	834	787	672	664	2957	152	165	135	167	619	3576
1000	565	639	638	692	2534	128	224	184	235	771	3305
1100	611	617	605	690	2523	230	240	233	276	979	3502
1200	681	722	702	686	2791	254	303	281	235	1073	3864
1300	647	647	597	733	2624	259	276	279	318	1132	3756
1400	588	551	615	697	2451	302	345	331	292	1270	3721
1500	596	637	641	694	2568	347	345	337	354	1383	3951
1600	629	661	660	747	2697	353	360	364	397	1474	4171
1700	683	821	801	699	3004	409	478	475	419	1781	4785
1800	693	742	596	489	2520	336	340	298	331	1305	3825
1900	502	394	354	294	1544	264	264	250	250	1028	2572
2000	332	315	275	250	1172	277	240	214	239	970	2142
2100	221	211	193	183	808	212	249	188	132	781	1589
2200	176	151	141	143	611	103	79	76	55	313	924
2300	124	86	74	69	353	54	38	39	26	157	510
24-Hour Totals:					40090					16598	56688

Peak Volume Information

	Direction: E Hour	Volume	Direction: W Hour	Volume	Combined Directions Hour	Volume
A.M.	745	4058	745	631	745	4689
P.M.	1645	3052	1700	1781	1645	4811
Daily	745	4058	1700	1781	1645	4811

Generated by SPS 5.0.44P

County: 93
Station: 1055
Description: PGA W OF RCA
Start Date: 04/25/2013
Start Time: 0000

Appendix B - Data Collection

Time	Direction: E 1st	2nd	3rd	4th	Total	Direction: W 1st	2nd	3rd	4th	Total	Combined Total
0000	62	61	45	36	204	35	22	28	21	106	310
0100	29	29	18	20	96	18	16	7	7	48	144
0200	17	16	11	8	52	12	9	3	1	25	77
0300	12	16	18	22	68	13	3	2	4	22	90
0400	18	18	42	42	120	6	6	5	12	29	149
0500	53	59	95	153	360	10	13	26	24	73	433
0600	150	186	250	421	1007	33	46	59	82	220	1227
0700	412	673	825	1052	2962	99	127	144	152	522	3484
0800	955	948	954	998	3855	171	162	168	158	659	4514
0900	830	793	644	672	2939	147	156	155	160	618	3557
1000	611	536	632	682	2461	130	189	206	218	743	3204
1100	579	587	688	682	2536	226	204	229	281	940	3476
1200	635	662	681	723	2701	235	308	284	291	1118	3819
1300	652	645	687	668	2652	309	282	290	316	1197	3849
1400	610	606	668	680	2564	310	338	281	304	1233	3797
1500	687	660	674	661	2682	339	380	376	356	1451	4133
1600	633	639	675	764	2711	377	393	348	395	1513	4224
1700	660	765	709	796	2930	471	488	445	410	1814	4744
1800	713	734	616	569	2632	371	363	323	319	1376	4008
1900	498	430	410	368	1706	285	302	278	219	1084	2790
2000	298	337	309	274	1218	251	225	238	222	936	2154
2100	236	216	203	217	872	241	228	214	168	851	1723
2200	216	153	154	188	711	133	111	104	70	418	1129
2300	149	117	98	93	457	66	96	51	45	258	715
24-Hour Totals:					40496					17254	57750

Peak Volume Information

	Direction: E Hour	Volume	Direction: W Hour	Volume	Combined Directions Hour	Volume
A.M.	745	3909	800	659	745	4562
P.M.	1715	2983	1700	1814	1700	4744
Daily	745	3909	1700	1814	1700	4744

Generated by SPS 5.0.44P

County: 93
Station: 1043
Description: MILITARY TRAIL N OF NB I-95
Start Date: 04/23/2013
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	11	16	9	3	39	12	10	12	7	41	80
0100	8	8	6	3	25	4	10	3	3	20	45
0200	3	7	2	5	17	3	3	3	4	13	30
0300	7	4	3	5	19	3	5	8	4	20	39
0400	2	3	6	4	15	7	10	9	12	38	53
0500	9	15	37	40	101	16	25	49	57	147	248
0600	32	68	109	192	401	53	87	106	155	401	802
0700	199	273	203	270	945	225	268	328	317	1138	2083
0800	237	245	261	232	975	348	291	242	294	1175	2150
0900	244	183	207	201	835	246	229	225	223	923	1758
1000	159	179	162	180	680	201	218	190	210	819	1499
1100	183	159	169	212	723	187	213	211	233	844	1567
1200	212	229	237	219	897	234	245	216	219	914	1811
1300	194	214	211	222	841	240	220	235	218	913	1754
1400	218	234	225	263	940	202	203	259	315	979	1919
1500	246	226	262	269	1003	278	274	284	271	1107	2110
1600	235	227	224	302	988	255	280	293	277	1105	2093
1700	336	352	331	291	1310	292	288	285	293	1158	2468
1800	268	246	220	223	957	240	230	216	179	865	1822
1900	186	167	173	163	689	149	136	139	110	534	1223
2000	161	146	144	99	550	119	99	104	85	407	957
2100	132	119	94	91	436	106	74	69	48	297	733
2200	80	65	49	51	245	52	51	41	45	189	434
2300	33	24	26	32	115	42	31	27	21	121	236
24-Hour Totals:					13746					14168	27914

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	745	1013	730	1284	715	2244
P.M.	1645	1321	1700	1158	1700	2468
Daily	1645	1321	730	1284	1700	2468

Generated by SPS 5.0.44P

County: 93
Station: 1043
Description: MILITARY TRAIL N OF NB I-95
Start Date: 04/24/2013
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	32	17	9	7	65	14	19	8	11	52	117
0100	6	2	13	7	28	10	3	4	3	20	48
0200	5	5	4	5	19	5	2	2	3	12	31
0300	6	3	3	1	13	6	3	6	5	20	33
0400	2	0	3	10	15	6	11	2	13	32	47
0500	11	27	30	34	102	13	26	45	61	145	247
0600	37	55	121	170	383	55	98	112	177	442	825
0700	189	279	228	267	963	201	246	343	333	1123	2086
0800	237	250	253	243	983	309	300	280	292	1181	2164
0900	233	183	185	179	780	226	247	211	213	897	1677
1000	160	184	158	188	690	201	196	201	191	789	1479
1100	160	177	216	200	753	204	250	198	287	939	1692
1200	197	253	231	225	906	221	236	242	205	904	1810
1300	248	195	214	201	858	216	217	198	222	853	1711
1400	186	241	248	248	923	218	237	237	322	1014	1937
1500	231	218	263	287	999	265	256	291	281	1093	2092
1600	240	257	269	300	1066	259	292	277	260	1088	2154
1700	315	350	305	314	1284	325	315	309	293	1242	2526
1800	247	241	230	218	936	271	251	210	217	949	1885
1900	196	176	170	165	707	182	144	165	128	619	1326
2000	176	161	174	159	670	115	105	93	97	410	1080
2100	143	113	151	111	518	91	78	76	58	303	821
2200	71	62	46	45	224	56	59	40	32	187	411
2300	41	33	31	17	122	33	32	29	18	112	234
24-Hour Totals:					14007					14426	28433

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	715	1011	730	1285	730	2267
P.M.	1700	1284	1700	1242	1700	2526
Daily	1700	1284	730	1285	1700	2526

Generated by SPS 5.0.44P

County: 93
Station: 1043
Description: MILITARY TRAIL N OF NB I-95
Start Date: 04/25/2013
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	20	20	10	17	67	13	17	11	6	47	114
0100	9	9	1	3	22	16	10	2	4	32	54
0200	8	2	6	0	16	6	8	7	2	23	39
0300	5	5	2	8	20	2	2	7	5	16	36
0400	6	3	7	7	23	12	11	9	9	41	64
0500	13	21	29	37	100	16	14	32	51	113	213
0600	44	77	108	154	383	52	88	110	158	408	791
0700	183	271	246	279	979	243	206	339	329	1117	2096
0800	289	271	265	232	1057	314	301	224	268	1107	2164
0900	252	192	179	188	811	231	245	232	244	952	1763
1000	171	145	175	203	694	212	204	204	213	833	1527
1100	185	181	201	229	796	194	233	228	286	941	1737
1200	187	229	238	215	869	272	262	216	243	993	1862
1300	254	214	224	228	920	230	211	224	224	889	1809
1400	193	233	242	220	888	225	227	271	314	1037	1925
1500	239	232	254	274	999	325	264	292	249	1130	2129
1600	259	262	298	283	1102	238	304	284	268	1094	2196
1700	327	341	340	283	1291	316	321	287	317	1241	2532
1800	288	236	249	232	1005	253	242	216	185	896	1901
1900	211	191	164	168	734	171	143	136	142	592	1326
2000	164	181	130	150	625	123	98	127	102	450	1075
2100	132	114	124	98	468	86	97	124	116	423	891
2200	89	72	65	57	283	96	57	70	48	271	554
2300	52	35	38	33	158	52	39	25	30	146	304
24-Hour Totals:					14310					14792	29102

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	745	1104	730	1283	730	2368
P.M.	1645	1291	1700	1241	1700	2532
Daily	1645	1291	730	1283	1700	2532

Generated by SPS 5.0.44P

County: 93
Station: 1044
Description: KYOTO GARDENS E OF MIITARY TRAIL
Start Date: 04/23/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	5	1	1	1	8	7	5	3	0	15	23
0100	2	1	0	1	4	1	3	1	1	6	10
0200	3	0	0	1	4	1	1	2	1	5	9
0300	0	1	1	2	4	0	2	1	1	4	8
0400	0	1	2	5	8	1	0	1	2	4	12
0500	1	4	10	11	26	3	2	3	5	13	39
0600	4	3	9	22	38	7	13	16	21	57	95
0700	23	54	80	100	257	25	33	44	51	153	410
0800	91	72	62	72	297	53	66	37	32	188	485
0900	71	67	33	55	226	30	39	46	36	151	377
1000	58	38	50	36	182	27	42	46	45	160	342
1100	52	43	60	64	219	35	46	40	70	191	410
1200	55	61	63	65	244	77	79	86	71	313	557
1300	49	72	56	74	251	83	69	57	82	291	542
1400	62	48	60	58	228	71	64	61	66	262	490
1500	52	47	46	57	202	65	80	103	101	349	551
1600	52	62	66	79	259	91	91	96	141	419	678
1700	70	69	76	54	269	188	163	194	118	663	932
1800	60	60	56	50	226	117	90	71	67	345	571
1900	35	41	38	30	144	62	73	60	57	252	396
2000	29	36	23	24	112	74	52	54	37	217	329
2100	18	16	21	15	70	52	32	36	30	150	220
2200	16	17	9	18	60	17	19	13	10	59	119
2300	3	11	8	0	22	9	8	7	5	29	51
24-Hour Totals:					3360					4296	7656

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	730	343	730	214	730	557
P.M.	1645	294	1645	686	1645	980
Daily	730	343	1645	686	1645	980

Generated by SPS 5.0.44P

County: 93
Station: 1044
Description: KYOTO GARDENS E OF MIITARY TRAIL
Start Date: 04/24/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	5	2	3	0	10	8	6	4	3	21	31
0100	2	3	2	2	9	4	3	1	1	9	18
0200	2	1	0	1	4	4	1	2	0	7	11
0300	0	0	2	0	2	0	1	1	0	2	4
0400	1	0	2	2	5	3	2	3	1	9	14
0500	2	7	7	15	31	1	1	10	8	20	51
0600	6	6	16	25	53	9	11	15	19	54	107
0700	21	53	90	97	261	32	17	48	26	123	384
0800	96	81	82	74	333	57	43	44	30	174	507
0900	53	65	48	59	225	45	40	42	50	177	402
1000	40	42	48	39	169	42	33	35	49	159	328
1100	60	59	58	70	247	50	52	55	76	233	480
1200	51	53	71	65	240	81	91	72	75	319	559
1300	58	66	67	54	245	67	76	87	63	293	538
1400	46	59	70	55	230	74	50	75	76	275	505
1500	71	55	68	68	262	75	85	74	84	318	580
1600	51	64	64	62	241	95	91	112	112	410	651
1700	81	78	69	83	311	220	209	177	171	777	1088
1800	58	56	59	50	223	128	97	77	76	378	601
1900	43	40	37	36	156	88	59	76	72	295	451
2000	22	37	29	23	111	70	75	46	47	238	349
2100	24	16	26	20	86	51	51	31	34	167	253
2200	10	15	11	16	52	30	20	24	14	88	140
2300	5	5	4	5	19	13	12	14	10	49	68
24-Hour Totals:					3525					4595	8120

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	730	364	730	174	730	538
P.M.	1700	311	1700	777	1700	1088
Daily	730	364	1700	777	1700	1088

Generated by SPS 5.0.44P

County: 93
Station: 1044
Description: KYOTO GARDENS E OF MIITARY TRAIL
Start Date: 04/25/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	7	1	4	1	13	7	12	3	8	30	43
0100	1	2	0	2	5	7	3	3	2	15	20
0200	2	0	1	1	4	3	3	1	2	9	13
0300	1	0	3	2	6	1	1	1	0	3	9
0400	2	1	0	3	6	1	1	0	2	4	10
0500	0	0	10	13	23	2	1	8	8	19	42
0600	3	6	14	23	46	4	6	17	20	47	93
0700	27	44	81	107	259	20	32	50	47	149	408
0800	96	79	60	86	321	43	59	46	40	188	509
0900	60	69	50	58	237	26	35	35	37	133	370
1000	43	46	58	60	207	38	41	49	45	173	380
1100	32	51	44	56	183	47	44	50	86	227	410
1200	67	65	63	63	258	78	81	65	71	295	553
1300	59	59	63	64	245	79	63	69	69	280	525
1400	57	58	61	66	242	81	76	72	58	287	529
1500	60	52	50	57	219	73	99	104	100	376	595
1600	43	55	77	60	235	96	120	96	110	422	657
1700	69	60	85	79	293	177	163	191	139	670	963
1800	75	57	56	53	241	115	98	87	99	399	640
1900	43	31	48	28	150	55	90	74	83	302	452
2000	30	27	25	24	106	57	55	64	49	225	331
2100	29	20	24	17	90	58	62	53	46	219	309
2200	25	23	18	10	76	33	29	13	23	98	174
2300	10	11	5	14	40	21	22	14	15	72	112
24-Hour Totals:					3505					4642	8147

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	730	363	730	199	730	562
P.M.	1715	299	1700	670	1700	963
Daily	730	363	1700	670	1700	963

Generated by SPS 5.0.44P

County: 93
Station: 1045
Description: MILITARY TRAIL BETWEEN RAMPS NB
Start Date: 04/23/2013
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	22	19	9	5	55	10	14	13	6	43	98
0100	11	8	10	4	33	6	10	2	4	22	55
0200	5	8	6	5	24	3	4	5	3	15	39
0300	9	3	5	7	24	3	5	6	4	18	42
0400	9	5	8	6	28	8	10	13	6	37	65
0500	13	18	47	42	120	17	27	47	56	147	267
0600	39	75	120	198	432	57	92	111	150	410	842
0700	234	256	239	323	1052	208	242	309	308	1067	2119
0800	299	255	289	289	1132	291	244	248	239	1022	2154
0900	261	266	194	219	940	233	219	215	202	869	1809
1000	215	188	206	206	815	190	206	186	212	794	1609
1100	186	202	205	249	842	187	195	225	230	837	1679
1200	270	243	287	259	1059	243	236	217	266	962	2021
1300	227	269	224	285	1005	245	244	233	218	940	1945
1400	293	222	280	320	1115	209	223	254	336	1022	2137
1500	286	280	286	320	1172	272	277	289	286	1124	2296
1600	297	296	290	381	1264	259	296	279	306	1140	2404
1700	412	401	403	344	1560	313	291	320	318	1242	2802
1800	325	316	266	287	1194	254	239	221	181	895	2089
1900	251	220	221	199	891	162	157	155	130	604	1495
2000	183	172	188	163	706	128	117	121	102	468	1174
2100	174	133	137	109	553	124	87	80	61	352	905
2200	103	92	72	71	338	56	58	45	39	198	536
2300	53	33	39	39	164	46	32	30	21	129	293
24-Hour Totals:					16518					14357	30875

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	745	1166	730	1152	730	2268
P.M.	1645	1597	1700	1242	1645	2827
Daily	1645	1597	1700	1242	1645	2827

Generated by SPS 5.0.44P

County: 93
Station: 1045
Description: MILITARY TRAIL BETWEEN RAMPS NB
Start Date: 04/24/2013
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	42	18	19	8	87	17	18	9	16	60	147
0100	10	8	17	9	44	13	3	4	2	22	66
0200	7	6	7	7	27	7	4	3	4	18	45
0300	7	5	2	2	16	4	2	5	4	15	31
0400	5	2	7	11	25	9	12	3	12	36	61
0500	14	29	37	37	117	13	24	48	60	145	262
0600	44	68	135	164	411	63	89	114	173	439	850
0700	239	267	259	325	1090	198	231	309	267	1005	2095
0800	280	276	304	287	1147	278	252	268	245	1043	2190
0900	241	230	194	226	891	224	240	201	207	872	1763
1000	205	180	201	214	800	192	203	180	208	783	1583
1100	186	224	252	254	916	202	221	231	275	929	1845
1200	251	258	271	271	1051	248	250	243	228	969	2020
1300	255	252	242	243	992	209	249	229	229	916	1908
1400	251	253	300	288	1092	226	243	232	306	1007	2099
1500	274	287	286	346	1193	269	269	291	252	1081	2274
1600	307	314	327	376	1324	279	306	275	271	1131	2455
1700	388	390	386	330	1494	349	332	332	307	1320	2814
1800	300	276	287	268	1131	278	270	199	236	983	2114
1900	241	223	222	200	886	185	173	172	149	679	1565
2000	192	220	222	208	842	125	136	112	107	480	1322
2100	167	156	211	139	673	102	94	88	69	353	1026
2200	96	85	56	77	314	71	63	51	40	225	539
2300	50	43	34	25	152	36	43	36	22	137	289
24-Hour Totals:					16715					14648	31363

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	745	1185	730	1106	745	2250
P.M.	1645	1540	1700	1320	1645	2824
Daily	1645	1540	1700	1320	1645	2824

Generated by SPS 5.0.44P

County: 93
Station: 1045
Description: MILITARY TRAIL BETWEEN RAMPS NB
Start Date: 04/25/2013
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	34	24	15	19	92	13	19	12	10	54	146
0100	12	9	5	7	33	20	9	3	5	37	70
0200	9	5	7	2	23	10	8	6	3	27	50
0300	6	7	4	12	29	2	6	3	7	18	47
0400	8	5	8	11	32	10	12	9	10	41	73
0500	13	21	39	41	114	17	14	36	44	111	225
0600	46	89	122	160	417	56	86	117	151	410	827
0700	222	278	269	341	1110	229	218	301	312	1060	2170
0800	327	293	279	328	1227	257	277	228	232	994	2221
0900	257	241	193	216	907	205	226	211	232	874	1781
1000	211	167	227	226	831	200	217	179	203	799	1630
1100	211	226	217	231	885	200	234	228	290	952	1837
1200	227	247	286	269	1029	284	264	229	266	1043	2072
1300	272	273	256	253	1054	235	216	220	238	909	1963
1400	239	255	287	282	1063	230	252	265	307	1054	2117
1500	270	308	295	344	1217	326	290	300	276	1192	2409
1600	334	319	355	352	1360	268	329	271	289	1157	2517
1700	404	398	399	368	1569	346	341	304	340	1331	2900
1800	331	288	328	271	1218	262	265	225	235	987	2205
1900	300	219	209	202	930	177	173	146	141	637	1567
2000	201	213	176	190	780	146	112	144	117	519	1299
2100	176	126	143	124	569	95	115	151	133	494	1063
2200	127	114	89	72	402	109	68	73	53	303	705
2300	58	54	41	58	211	57	37	30	27	151	362
24-Hour Totals:					17102					15154	32256

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	745	1240	730	1147	730	2377
P.M.	1700	1569	1700	1331	1700	2900
Daily	1700	1569	1700	1331	1700	2900

Generated by SPS 5.0.44P

County: 93
Station: 1132
Description: ROAN N OF NORTHLAKE
Start Date: 04/30/2013
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	10	10	2	6	28	5	2	4	3	14	42
0100	4	0	3	6	13	2	1	0	1	4	17
0200	2	1	1	0	4	1	1	1	0	3	7
0300	3	2	3	4	12	2	1	2	3	8	20
0400	1	2	4	6	13	3	2	1	2	8	21
0500	3	2	6	3	14	6	9	8	11	34	48
0600	12	13	11	15	51	10	23	16	28	77	128
0700	19	30	46	89	184	23	60	46	72	201	385
0800	25	24	15	19	83	44	28	29	30	131	214
0900	28	21	21	24	94	31	25	18	17	91	185
1000	21	19	29	18	87	11	20	23	24	78	165
1100	18	24	18	22	82	18	7	14	17	56	138
1200	18	28	29	33	108	15	22	16	17	70	178
1300	16	38	27	30	111	11	17	21	24	73	184
1400	34	42	40	60	176	28	32	37	44	141	317
1500	65	44	49	41	199	67	29	23	27	146	345
1600	41	51	48	56	196	35	30	23	28	116	312
1700	42	39	54	46	181	25	28	29	22	104	285
1800	32	49	35	42	158	21	18	22	19	80	238
1900	42	34	31	34	141	27	21	21	19	88	229
2000	33	25	39	34	131	11	14	26	13	64	195
2100	36	18	34	26	114	14	9	15	14	52	166
2200	21	27	16	18	82	7	9	7	7	30	112
2300	20	12	8	13	53	8	7	5	6	26	79
24-Hour Totals:					2315					1695	4010

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	715	190	715	222	715	412
P.M.	1445	218	1415	180	1415	387
Daily	1445	218	715	222	715	412

Generated by SPS 5.0.44P

County: 93
Station: 1132
Description: ROAN N OF NORTHLAKE
Start Date: 05/01/2013
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	14	3	11	7	35	3	4	0	4	11	46
0100	0	4	0	8	12	1	1	2	5	9	21
0200	6	3	2	1	12	1	0	1	1	3	15
0300	4	4	1	2	11	0	0	0	3	3	14
0400	1	1	0	7	9	2	1	2	5	10	19
0500	4	2	6	3	15	1	6	10	11	28	43
0600	3	5	10	11	29	11	15	17	25	68	97
0700	20	29	64	88	201	34	65	73	71	243	444
0800	44	13	21	20	98	41	32	32	28	133	231
0900	19	18	23	15	75	22	29	20	15	86	161
1000	18	11	29	16	74	18	15	29	15	77	151
1100	31	20	25	27	103	20	21	27	17	85	188
1200	28	21	26	36	111	18	15	18	23	74	185
1300	32	21	21	27	101	20	17	15	28	80	181
1400	30	31	40	61	162	22	29	16	44	111	273
1500	60	46	41	49	196	38	29	31	25	123	319
1600	37	55	48	42	182	23	34	36	31	124	306
1700	45	51	54	39	189	27	25	26	23	101	290
1800	39	45	44	49	177	28	20	18	22	88	265
1900	41	33	29	27	130	18	10	22	22	72	202
2000	37	31	32	22	122	9	15	28	27	79	201
2100	26	34	35	31	126	13	13	12	9	47	173
2200	16	22	19	22	79	7	7	7	12	33	112
2300	16	15	15	8	54	5	9	6	3	23	77
24-Hour Totals:					2303					1711	4014

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	715	225	715	250	715	475
P.M.	1445	208	1445	142	1445	350
Daily	715	225	715	250	715	475

Generated by SPS 5.0.44P

County: 93
Station: 1132
Description: ROAN N OF NORTHLAKE
Start Date: 05/02/2013
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	5	8	7	3	23	1	1	4	3	9	32
0100	4	9	1	6	20	1	2	2	7	12	32
0200	4	3	2	1	10	2	0	1	1	4	14
0300	2	4	4	1	11	1	2	1	4	8	19
0400	2	3	1	1	7	2	0	4	4	10	17
0500	5	4	3	5	17	2	4	8	10	24	41
0600	4	7	10	9	30	15	8	22	25	70	100
0700	21	22	58	73	174	42	58	62	84	246	420
0800	32	23	9	18	82	53	25	31	25	134	216
0900	25	23	24	20	92	17	18	20	19	74	166
1000	17	12	12	17	58	22	16	13	24	75	133
1100	18	23	24	22	87	17	15	20	14	66	153
1200	31	24	30	20	105	15	8	14	12	49	154
1300	21	36	26	27	110	23	11	21	18	73	183
1400	24	37	45	59	165	18	31	23	43	115	280
1500	62	37	42	49	190	45	32	22	28	127	317
1600	47	50	56	39	192	26	27	30	31	114	306
1700	43	42	46	45	176	20	28	26	37	111	287
1800	41	40	28	20	129	17	15	14	17	63	192
1900	29	26	23	34	112	20	14	9	20	63	175
2000	28	28	27	25	108	8	14	9	17	48	156
2100	18	31	27	17	93	11	11	9	13	44	137
2200	26	19	15	14	74	8	9	6	13	36	110
2300	13	16	16	9	54	6	7	13	4	30	84
24-Hour Totals:					2119					1605	3724

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	730	186	715	257	715	442
P.M.	1415	203	1430	143	1430	346
Daily	1415	203	715	257	715	442

Generated by SPS 5.0.44P

County: 93
Station: 1042
Description: MILITARY TRAIL N OF PGA S OF I-95
Start Date: 04/23/2013
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	23	20	7	6	56	18	21	16	10	65	121
0100	11	7	10	4	32	9	11	3	4	27	59
0200	5	9	4	6	24	5	4	8	4	21	45
0300	8	3	5	8	24	6	5	7	5	23	47
0400	8	6	7	8	29	11	15	16	13	55	84
0500	14	18	49	39	120	23	34	57	76	190	310
0600	38	86	121	199	444	75	118	156	223	572	1016
0700	231	245	277	313	1066	281	327	419	423	1450	2516
0800	277	256	312	266	1111	402	349	344	350	1445	2556
0900	270	247	217	202	936	294	277	275	258	1104	2040
1000	206	197	196	210	809	223	256	232	253	964	1773
1100	203	183	235	227	848	221	235	282	281	1019	1867
1200	281	245	265	260	1051	287	274	256	312	1129	2180
1300	243	258	238	273	1012	278	281	287	263	1109	2121
1400	292	246	262	334	1134	248	257	316	378	1199	2333
1500	291	254	322	282	1149	304	339	335	345	1323	2472
1600	306	285	310	367	1268	306	345	342	382	1375	2643
1700	416	415	391	354	1576	411	374	385	387	1557	3133
1800	313	315	279	257	1164	323	296	288	233	1140	2304
1900	253	218	224	196	891	218	195	192	158	763	1654
2000	193	165	178	164	700	162	140	146	124	572	1272
2100	176	139	127	106	548	142	109	101	81	433	981
2200	104	89	74	73	340	69	73	59	49	250	590
2300	49	35	39	37	160	59	44	36	24	163	323
24-Hour Totals:					16492					17948	34440

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	745	1158	730	1593	730	2716
P.M.	1645	1589	1700	1557	1645	3141
Daily	1645	1589	730	1593	1645	3141

Generated by SPS 5.0.44P

County: 93
Station: 1042
Description: MILITARY TRAIL N OF PGA S OF I-95
Start Date: 04/24/2013
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	40	19	19	6	84	25	27	11	21	84	168
0100	11	7	17	9	44	14	4	7	5	30	74
0200	8	6	6	7	27	8	6	4	7	25	52
0300	7	5	2	2	16	9	2	5	5	21	37
0400	5	2	8	11	26	9	17	9	17	52	78
0500	15	30	35	44	124	16	27	66	79	188	312
0600	42	69	136	186	433	78	129	164	228	599	1032
0700	225	265	281	310	1081	278	312	394	394	1378	2459
0800	280	287	330	254	1151	404	355	356	330	1445	2596
0900	261	206	209	221	897	306	292	246	272	1116	2013
1000	199	187	194	211	791	231	236	222	259	948	1739
1100	201	214	276	243	934	240	278	288	347	1153	2087
1200	244	267	263	275	1049	303	307	302	274	1186	2235
1300	264	228	271	234	997	237	293	275	290	1095	2092
1400	246	274	279	306	1105	264	274	283	353	1174	2279
1500	277	277	320	326	1200	314	329	354	294	1291	2491
1600	306	318	328	379	1331	321	388	337	341	1387	2718
1700	396	390	387	325	1498	414	400	399	399	1612	3110
1800	298	278	292	268	1136	323	332	271	295	1221	2357
1900	240	230	215	207	892	247	211	202	171	831	1723
2000	183	232	215	207	837	161	165	133	132	591	1428
2100	160	161	208	145	674	117	110	101	81	409	1083
2200	90	89	55	71	305	90	85	73	48	296	601
2300	50	44	35	25	154	50	50	45	29	174	328
24-Hour Totals:					16786					18306	35092

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	745	1207	730	1547	745	2716
P.M.	1645	1552	1700	1612	1700	3110
Daily	1645	1552	1700	1612	1700	3110

Generated by SPS 5.0.44P

County: 93
Station: 1042
Description: MILITARY TRAIL N OF PGA S OF I-95
Start Date: 04/25/2013
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	33	25	13	19	90	18	22	18	14	72	162
0100	12	9	4	8	33	23	12	3	7	45	78
0200	9	4	7	3	23	12	8	8	6	34	57
0300	6	5	5	11	27	6	6	3	10	25	52
0400	8	6	7	12	33	12	23	13	16	64	97
0500	13	21	43	42	119	20	23	50	57	150	269
0600	51	83	138	168	440	70	118	161	220	569	1009
0700	211	279	306	319	1115	296	293	384	427	1400	2515
0800	313	314	297	295	1219	381	367	311	323	1382	2601
0900	281	226	209	197	913	284	312	258	289	1143	2056
1000	204	189	203	245	841	248	268	218	249	983	1824
1100	215	223	227	225	890	239	273	277	360	1149	2039
1200	223	261	282	284	1050	334	314	270	313	1231	2281
1300	271	263	282	240	1056	269	265	280	269	1083	2139
1400	228	276	262	304	1070	274	285	325	355	1239	2309
1500	261	289	313	337	1200	367	354	346	326	1393	2593
1600	324	319	353	340	1336	323	376	330	368	1397	2733
1700	426	392	390	368	1576	431	400	397	425	1653	3229
1800	335	283	335	279	1232	344	334	266	283	1227	2459
1900	293	212	211	200	916	228	213	185	172	798	1714
2000	207	206	189	175	777	185	143	170	139	637	1414
2100	178	129	134	137	578	124	143	176	154	597	1175
2200	116	111	89	72	388	136	84	91	75	386	774
2300	53	55	41	58	207	66	49	38	37	190	397
24-Hour Totals:					17129					18847	35976

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	730	1252	730	1559	730	2811
P.M.	1700	1576	1700	1653	1700	3229
Daily	1700	1576	1700	1653	1700	3229

Generated by SPS 5.0.44P

County: 93
Station: 1053
Description: MILITARY TRAIL S OF PGA
Start Date: 04/23/2013
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	25	17	12	11	65	30	28	18	28	104	169
0100	13	6	6	5	30	14	12	11	7	44	74
0200	4	6	5	3	18	11	4	8	6	29	47
0300	4	4	2	10	20	6	9	3	2	20	40
0400	11	12	12	21	56	7	10	13	11	41	97
0500	25	29	58	66	178	17	27	49	53	146	324
0600	61	108	141	217	527	55	82	129	186	452	979
0700	283	336	408	396	1423	227	278	345	364	1214	2637
0800	385	367	393	366	1511	359	325	239	349	1272	2783
0900	389	335	273	279	1276	264	256	249	243	1012	2288
1000	214	257	281	290	1042	230	221	230	267	948	1990
1100	285	285	286	316	1172	210	261	280	300	1051	2223
1200	343	339	360	295	1337	270	263	308	288	1129	2466
1300	333	304	297	350	1284	263	292	312	305	1172	2456
1400	308	290	322	358	1278	334	355	330	378	1397	2675
1500	357	327	434	396	1514	371	349	365	343	1428	2942
1600	380	389	424	445	1638	390	404	371	388	1553	3191
1700	545	488	455	417	1905	430	486	397	396	1709	3614
1800	356	362	348	338	1404	384	330	317	296	1327	2731
1900	306	282	251	234	1073	271	273	241	180	965	2038
2000	230	151	202	184	767	172	192	174	155	693	1460
2100	203	161	131	76	571	163	155	143	130	591	1162
2200	85	63	64	53	265	111	105	66	79	361	626
2300	54	38	33	15	140	85	63	54	54	256	396
24-Hour Totals:					20494					18914	39408

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	730	1556	730	1393	730	2949
P.M.	1645	1933	1700	1709	1645	3634
Daily	1645	1933	1700	1709	1645	3634

Generated by SPS 5.0.44P

County: 93
Station: 1053
Description: MILITARY TRAIL S OF PGA
Start Date: 04/24/2013
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	18	17	14	9	58	30	28	23	24	105	163
0100	17	4	15	12	48	19	11	8	6	44	92
0200	7	5	10	9	31	8	8	13	5	34	65
0300	5	7	8	6	26	10	3	3	8	24	50
0400	11	12	8	27	58	3	10	9	14	36	94
0500	28	39	55	72	194	8	30	38	69	145	339
0600	76	98	164	200	538	69	80	129	187	465	1003
0700	276	388	397	390	1451	257	251	346	362	1216	2667
0800	409	377	432	340	1558	344	343	259	323	1269	2827
0900	376	297	274	295	1242	275	269	242	239	1025	2267
1000	270	240	269	271	1050	223	254	216	248	941	1991
1100	256	284	304	292	1136	228	267	248	373	1116	2252
1200	361	330	338	327	1356	312	233	282	317	1144	2500
1300	306	293	304	338	1241	257	316	313	340	1226	2467
1400	267	350	314	384	1315	292	332	360	389	1373	2688
1500	353	363	427	434	1577	359	413	337	379	1488	3065
1600	401	375	433	466	1675	357	415	331	391	1494	3169
1700	498	480	448	417	1843	396	473	477	463	1809	3652
1800	377	337	367	324	1405	388	345	301	343	1377	2782
1900	303	216	250	245	1014	277	268	229	229	1003	2017
2000	223	296	236	185	940	177	198	179	175	729	1669
2100	148	161	181	135	625	185	176	160	113	634	1259
2200	84	81	57	52	274	127	101	90	68	386	660
2300	62	51	37	27	177	85	68	56	41	250	427
24-Hour Totals:					20832					19333	40165

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	745	1608	730	1395	730	2968
P.M.	1645	1892	1700	1809	1700	3652
Daily	1645	1892	1700	1809	1700	3652

Generated by SPS 5.0.44P

County: 93
Station: 1053
Description: MILITARY TRAIL S OF PGA
Start Date: 04/25/2013
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	21	14	12	12	59	34	25	20	17	96	155
0100	8	6	7	6	27	25	17	9	14	65	92
0200	6	5	7	3	21	12	10	9	7	38	59
0300	8	6	5	12	31	9	6	3	12	30	61
0400	7	10	18	24	59	6	13	11	7	37	96
0500	21	30	57	69	177	7	19	46	47	119	296
0600	67	99	147	174	487	65	100	138	184	487	974
0700	294	402	414	327	1437	215	236	327	383	1161	2598
0800	399	380	401	378	1558	307	370	247	317	1241	2799
0900	385	295	294	288	1262	279	247	256	271	1053	2315
1000	243	265	280	297	1085	225	258	241	236	960	2045
1100	275	272	307	323	1177	227	239	274	341	1081	2258
1200	336	329	337	347	1349	319	291	283	330	1223	2572
1300	320	278	312	261	1171	279	270	297	287	1133	2304
1400	319	310	311	373	1313	267	355	307	398	1327	2640
1500	362	349	420	431	1562	337	414	370	343	1464	3026
1600	413	379	420	420	1632	356	392	388	385	1521	3153
1700	485	500	474	434	1893	448	408	382	417	1655	3548
1800	386	344	351	315	1396	338	354	301	277	1270	2666
1900	332	233	275	256	1096	231	223	192	208	854	1950
2000	210	206	201	151	768	223	178	213	169	783	1551
2100	148	86	118	100	452	161	163	187	158	669	1121
2200	90	78	71	65	304	137	116	108	104	465	769
2300	59	57	40	41	197	87	79	62	52	280	477
24-Hour Totals:					20513					19012	39525

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	800	1558	730	1387	730	2907
P.M.	1700	1893	1700	1655	1700	3548
Daily	1700	1893	1700	1655	1700	3548

Generated by SPS 5.0.44P

24 HOUR ARTERIAL VOLUME COUNT REPORTS

County: 93
Station: 1022
Description: CENTRAL S\O 117TH CT
Start Date: 04/18/2013
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	6	5	1	3	15	5	3	4	0	12	27
0100	3	1	2	4	10	2	2	3	0	7	17
0200	1	2	1	2	6	1	1	0	1	3	9
0300	1	1	0	0	2	1	1	1	1	4	6
0400	2	3	0	1	6	2	2	5	6	15	21
0500	1	3	6	10	20	5	10	12	16	43	63
0600	20	33	31	61	145	31	36	38	65	170	315
0700	91	187	325	280	883	62	126	260	280	728	1611
0800	141	152	169	168	630	191	155	136	152	634	1264
0900	207	140	103	91	541	166	196	91	93	546	1087
1000	70	60	76	90	296	69	86	57	71	283	579
1100	78	77	66	84	305	76	82	85	94	337	642
1200	81	82	88	93	344	84	88	96	90	358	702
1300	101	98	114	144	457	92	96	90	84	362	819
1400	128	118	84	84	414	189	153	91	127	560	974
1500	106	99	104	202	511	119	125	116	118	478	989
1600	159	136	125	91	511	257	228	157	109	751	1262
1700	141	137	128	125	531	134	193	165	147	639	1170
1800	106	94	107	67	374	100	124	76	70	370	744
1900	69	56	51	56	232	77	62	60	47	246	478
2000	59	67	64	40	230	44	53	29	49	175	405
2100	42	32	33	33	140	46	35	33	23	137	277
2200	29	24	13	11	77	31	13	13	10	67	144
2300	19	15	7	4	45	15	8	11	7	41	86
24-Hour Totals:					6725					6966	13691

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	715	933	730	886	715	1790
P.M.	1545	622	1545	760	1545	1382
Daily	715	933	730	886	715	1790

Generated by SPS 5.0.44P

County: 93
Station: 1023
Description: 117TH CT E\O CENTRAL
Start Date: 04/18/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	0	0	0	1	1	0	0	0	0	0	1
0100	1	0	0	0	1	1	1	0	0	2	3
0200	0	0	1	1	2	0	0	0	1	1	3
0300	0	1	0	1	2	0	1	1	0	2	4
0400	0	0	0	0	0	1	0	0	0	1	1
0500	0	0	2	2	4	0	0	0	0	0	4
0600	0	5	6	11	22	0	0	0	5	5	27
0700	30	146	289	219	684	5	49	192	248	494	1178
0800	44	49	79	126	298	94	31	41	77	243	541
0900	189	59	19	12	279	150	155	15	16	336	615
1000	6	12	10	8	36	5	4	10	11	30	66
1100	6	10	6	13	35	11	11	10	13	45	80
1200	4	9	8	16	37	9	21	13	14	57	94
1300	18	30	31	80	159	14	20	13	8	55	214
1400	96	37	24	20	177	134	93	28	35	290	467
1500	20	44	72	137	273	32	31	41	45	149	422
1600	84	64	31	19	198	281	162	51	31	525	723
1700	34	41	36	23	134	27	55	39	34	155	289
1800	16	27	18	7	68	21	11	11	7	50	118
1900	3	5	3	9	20	7	19	30	5	61	81
2000	4	1	0	2	7	4	10	5	3	22	29
2100	1	1	0	4	6	3	2	3	5	13	19
2200	0	0	0	0	0	12	2	0	0	14	14
2300	0	0	0	0	0	1	0	4	0	5	5
24-Hour Totals:					2443					2555	4998

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	715	698	715	583	715	1281
P.M.	1530	357	1545	539	1530	886
Daily	715	698	715	583	715	1281

Generated by SPS 5.0.44P

County: 93
Station: 1024
Description: CENTRAL N\O 117TH CT
Start Date: 04/18/2013
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	5	5	1	3	14	5	3	4	1	13	27
0100	2	1	2	5	10	1	1	3	0	5	15
0200	0	2	1	1	4	1	1	0	2	4	8
0300	1	1	1	1	4	0	2	2	1	5	9
0400	2	2	0	1	5	1	3	6	6	16	21
0500	1	4	6	10	21	4	10	16	19	49	70
0600	22	28	25	61	136	26	40	45	69	180	316
0700	85	111	147	155	498	72	152	210	185	619	1117
0800	151	120	121	125	517	145	143	127	142	557	1074
0900	127	148	91	92	458	157	107	89	82	435	893
1000	64	52	73	87	276	78	77	52	69	276	552
1100	83	72	74	85	314	68	76	82	93	319	633
1200	71	85	90	88	334	74	83	86	90	333	667
1300	94	92	72	82	340	86	93	86	111	376	716
1400	121	109	75	93	398	108	87	83	122	400	798
1500	92	80	85	129	386	97	112	128	128	465	851
1600	175	126	112	84	497	134	131	121	89	475	972
1700	128	118	118	116	480	143	156	143	129	571	1051
1800	102	79	103	67	351	88	121	80	64	353	704
1900	71	54	60	55	240	77	45	39	46	207	447
2000	59	67	65	42	233	43	50	25	47	165	398
2100	39	37	33	30	139	47	33	29	22	131	270
2200	41	16	15	11	83	21	12	14	12	59	142
2300	19	13	8	4	44	12	8	7	8	35	79
24-Hour Totals:					5782					6048	11830

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	730	573	715	692	715	1256
P.M.	1545	542	1700	571	1545	1056
Daily	730	573	715	692	715	1256

Generated by SPS 5.0.44P

County: 93
Station: 1010
Description: CENTRAL N\O HOOD
Start Date: 04/18/2013
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	8	5	3	2	18	7	8	7	1	23	41
0100	4	3	2	4	13	3	2	1	0	6	19
0200	3	1	0	2	6	2	1	0	1	4	10
0300	2	1	0	1	4	1	1	2	0	4	8
0400	2	3	1	1	7	1	2	6	6	15	22
0500	4	5	7	5	21	2	8	12	15	37	58
0600	12	25	24	38	99	20	37	35	64	156	255
0700	51	89	135	157	432	82	124	162	193	561	993
0800	137	134	119	138	528	160	152	127	143	582	1110
0900	118	124	109	86	437	126	109	84	97	416	853
1000	72	58	54	80	264	75	87	69	58	289	553
1100	81	78	85	88	332	78	88	81	94	341	673
1200	77	82	93	96	348	79	97	90	95	361	709
1300	87	87	82	92	348	85	105	101	95	386	734
1400	99	132	89	111	431	96	90	144	130	460	891
1500	125	95	100	115	435	112	115	109	112	448	883
1600	146	150	110	114	520	137	123	122	100	482	1002
1700	122	145	137	135	539	167	175	142	153	637	1176
1800	126	87	99	70	382	109	135	79	82	405	787
1900	92	69	62	60	283	82	54	49	59	244	527
2000	69	76	53	49	247	58	55	34	54	201	448
2100	57	35	27	44	163	57	37	39	36	169	332
2200	27	33	11	11	82	29	22	24	11	86	168
2300	14	14	4	6	38	24	13	6	12	55	93
24-Hour Totals:					5977					6368	12345

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	730	563	730	667	730	1230
P.M.	1715	543	1700	637	1700	1176
Daily	730	563	730	667	730	1230

Generated by SPS 5.0.44P

County: 93
Station: 1011
Description: HOOD E\O CENTRAL
Start Date: 04/18/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	4	2	2	0	8	8	3	2	6	19	27
0100	1	1	0	1	3	1	3	3	0	7	10
0200	0	3	2	2	7	5	2	1	2	10	17
0300	1	1	4	2	8	6	1	1	2	10	18
0400	1	2	3	2	8	2	1	1	1	5	13
0500	7	4	10	20	41	4	8	10	7	29	70
0600	14	33	37	56	140	15	19	28	50	112	252
0700	104	110	134	209	557	51	107	147	101	406	963
0800	128	108	123	134	493	65	85	70	72	292	785
0900	127	117	92	92	428	70	83	62	64	279	707
1000	72	88	75	80	315	38	54	35	57	184	499
1100	83	77	71	99	330	60	77	78	82	297	627
1200	82	76	89	84	331	52	87	71	77	287	618
1300	88	91	86	56	321	71	83	64	103	321	642
1400	104	133	155	107	499	76	96	89	108	369	868
1500	111	97	103	119	430	100	89	91	122	402	832
1600	102	99	89	81	371	104	95	95	113	407	778
1700	102	119	116	103	440	109	151	105	110	475	915
1800	91	111	75	60	337	101	97	84	82	364	701
1900	72	52	34	48	206	106	74	71	56	307	513
2000	32	36	39	30	137	56	71	50	51	228	365
2100	44	17	30	15	106	44	40	43	33	160	266
2200	12	10	4	11	37	18	26	10	20	74	111
2300	12	8	9	9	38	18	9	7	9	43	81
24-Hour Totals:					5591					5087	10678

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	715	581	715	420	715	1001
P.M.	1415	506	1645	478	1700	915
Daily	715	581	1645	478	715	1001

Generated by SPS 5.0.44P

County: 93
Station: 1012
Description: CENTRAL S\O HOOD
Start Date: 04/18/2013
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	7	10	12	15	44	7	9	9	6	31	75
0100	7	5	3	3	18	5	3	5	0	13	31
0200	4	1	2	4	11	1	1	3	0	5	16
0300	2	2	1	1	6	1	1	0	1	3	9
0400	1	1	1	0	3	1	1	2	0	4	7
0500	2	3	0	1	6	1	2	5	9	17	23
0600	0	4	5	5	14	2	10	15	16	43	57
0700	12	21	29	40	102	32	40	42	69	183	285
0800	80	92	127	158	457	74	143	181	161	559	1016
0900	128	132	127	123	510	148	165	122	140	575	1085
1000	142	140	105	95	482	143	131	86	81	441	923
1100	69	63	64	81	277	70	89	53	65	277	554
1200	91	72	71	82	316	70	76	82	90	318	634
1300	85	78	84	94	341	76	71	90	91	328	669
1400	93	91	84	86	354	80	93	84	88	345	699
1500	105	109	85	91	390	106	89	85	111	391	781
1600	111	85	85	125	406	95	116	115	118	444	850
1700	161	156	112	91	520	129	133	120	99	481	1001
1800	119	131	126	120	496	134	151	142	127	554	1050
1900	114	90	108	74	386	87	112	81	71	351	737
2000	87	61	63	48	259	79	40	40	47	206	465
2100	61	66	68	41	236	44	49	26	50	169	405
2200	52	31	33	37	153	43	35	30	21	129	282
2300	27	34	15	14	90	24	13	13	9	59	149
24-Hour Totals:					5877					5926	11803

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	830	545	830	655	830	1200
P.M.	1645	554	1800	554	1645	1054
Daily	1645	554	830	655	830	1200

Generated by SPS 5.0.44P

County: 93
Station: 1013
Description: HOOD W\O CENTRAL
Start Date: 04/18/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	6	2	2	1	11	11	9	5	8	33	44
0100	1	1	1	2	5	2	2	3	0	7	12
0200	0	2	3	2	7	6	3	0	3	12	19
0300	1	1	3	3	8	5	1	1	2	9	17
0400	1	3	3	5	12	2	1	1	1	5	17
0500	8	3	12	20	43	2	5	3	6	16	59
0600	19	33	37	54	143	8	14	23	49	94	237
0700	78	96	150	149	473	62	83	107	73	325	798
0800	120	106	105	127	458	79	71	72	58	280	738
0900	107	89	83	76	355	66	64	74	66	270	625
1000	67	77	66	82	292	54	51	55	60	220	512
1100	79	61	71	85	296	64	65	65	86	280	576
1200	78	65	92	80	315	72	92	62	75	301	616
1300	81	74	69	68	292	79	85	75	92	331	623
1400	93	122	88	78	381	87	67	86	95	335	716
1500	86	95	99	78	358	82	68	76	89	315	673
1600	95	78	75	78	326	99	100	87	96	382	708
1700	80	81	104	84	349	96	117	109	105	427	776
1800	70	87	58	56	271	87	102	73	82	344	615
1900	59	49	33	29	170	87	69	91	46	293	463
2000	33	35	32	27	127	63	73	61	51	248	375
2100	27	13	15	16	71	53	53	45	40	191	262
2200	16	7	3	8	34	33	33	24	22	112	146
2300	8	7	8	8	31	21	15	14	12	62	93
24-Hour Totals:					4828					4892	9720

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	730	525	715	342	715	857
P.M.	1400	381	1700	427	1700	776
Daily	730	525	1700	427	715	857

Generated by SPS 5.0.44P

County: 93
Station: 1014
Description: CENTRAL S\O VICTORIA FALLS
Start Date: 04/18/2013
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	6	6	1	2	15	5	4	3	0	12	27
0100	3	1	2	5	11	1	1	3	0	5	16
0200	1	2	0	1	4	1	1	0	2	4	8
0300	1	1	1	0	3	0	1	2	0	3	6
0400	2	3	0	1	6	1	3	6	7	17	23
0500	1	3	5	8	17	3	10	17	19	49	66
0600	12	19	28	51	110	29	44	45	72	190	300
0700	75	107	149	158	489	72	155	204	184	615	1104
0800	141	119	135	107	502	147	151	123	141	562	1064
0900	142	150	94	94	480	161	111	89	80	441	921
1000	66	58	66	85	275	77	80	54	66	277	552
1100	90	72	74	86	322	73	81	81	91	326	648
1200	79	84	92	85	340	71	83	86	89	329	669
1300	91	88	79	80	338	83	95	85	102	365	703
1400	113	114	83	84	394	104	86	86	115	391	785
1500	104	88	84	122	398	97	113	130	122	462	860
1600	180	144	112	93	529	134	135	116	92	477	1006
1700	127	122	118	121	488	148	160	143	124	575	1063
1800	110	81	105	74	370	90	111	81	64	346	716
1900	74	58	62	53	247	74	43	43	44	204	451
2000	56	70	65	40	231	46	48	25	51	170	401
2100	49	31	36	32	148	46	32	29	20	127	275
2200	34	26	13	11	84	22	12	14	12	60	144
2300	19	17	8	4	48	12	9	7	7	35	83
24-Hour Totals:					5849					6042	11891

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	730	567	715	690	730	1253
P.M.	1545	558	1700	575	1545	1065
Daily	730	567	715	690	730	1253

Generated by SPS 5.0.44P

County: 93
Station: 1015
Description: VICTORIA FALLS E\O CENTRAL
Start Date: 04/18/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	1	0	0	0	1	0	1	0	1	2	3
0100	0	0	0	0	0	0	0	0	0	0	0
0200	0	0	0	0	0	1	0	0	0	1	1
0300	0	0	0	0	0	0	0	0	0	0	0
0400	0	0	0	0	0	0	0	0	0	0	0
0500	0	0	0	0	0	0	0	0	2	2	2
0600	3	1	1	6	11	2	6	4	9	21	32
0700	5	10	17	22	54	7	19	34	30	90	144
0800	15	8	8	7	38	6	13	12	16	47	85
0900	9	16	5	10	40	22	7	14	8	51	91
1000	5	4	6	11	26	10	4	8	10	32	58
1100	6	7	4	10	27	5	6	5	5	21	48
1200	2	4	14	6	26	8	10	12	6	36	62
1300	5	7	5	7	24	10	10	13	20	53	77
1400	16	9	5	6	36	9	4	8	8	29	65
1500	9	5	6	7	27	8	7	14	21	50	77
1600	19	17	9	6	51	16	13	8	8	45	96
1700	12	8	10	9	39	9	11	15	9	44	83
1800	7	13	10	4	34	16	11	5	13	45	79
1900	4	8	5	3	20	6	6	5	7	24	44
2000	6	2	5	2	15	3	7	5	1	16	31
2100	3	4	0	4	11	4	3	1	1	9	20
2200	2	1	0	2	5	1	2	2	4	9	14
2300	2	0	1	0	3	0	2	2	0	4	7
24-Hour Totals:					488					631	1119

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	715	64	700	90	715	153
P.M.	1545	52	1530	64	1530	113
Daily	715	64	700	90	715	153

Generated by SPS 5.0.44P

County: 93
Station: 2101
Description: CENTRAL N OF VICTORIA FALLS
Start Date: 04/18/2013
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	7	10	12	15	44	7	9	9	6	31	75
0100	7	5	3	3	18	5	3	5	0	13	31
0200	4	1	2	4	11	1	1	3	0	5	16
0300	2	2	1	1	6	1	1	0	1	3	9
0400	1	1	1	0	3	1	1	2	0	4	7
0500	2	3	0	1	6	1	2	5	9	17	23
0600	0	4	5	5	14	2	10	15	16	43	57
0700	12	21	29	40	102	32	40	42	69	183	285
0800	80	92	127	158	457	74	143	181	161	559	1016
0900	128	132	127	123	510	148	165	122	140	575	1085
1000	142	140	105	95	482	143	131	86	81	441	923
1100	69	63	64	81	277	70	89	53	65	277	554
1200	91	72	71	82	316	70	76	82	90	318	634
1300	85	78	84	94	341	76	71	90	91	328	669
1400	93	91	84	86	354	80	93	84	88	345	699
1500	105	109	85	91	390	106	89	85	111	391	781
1600	111	85	85	125	406	95	116	115	118	444	850
1700	161	156	112	91	520	129	133	120	99	481	1001
1800	119	131	126	120	496	134	151	142	127	554	1050
1900	114	90	108	74	386	87	112	81	71	351	737
2000	87	61	63	48	259	79	40	40	47	206	465
2100	61	66	68	41	236	44	49	26	50	169	405
2200	52	31	33	37	153	43	35	30	21	129	282
2300	27	34	15	14	90	24	13	13	9	59	149
24-Hour Totals:					5877					5926	11803

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	830	545	830	655	830	1200
P.M.	1645	554	1800	554	1645	1054
Daily	1645	554	830	655	830	1200

Generated by SPS 5.0.44P

County: 93
Station: 1072
Description: EASTPOINTE WAY S OF DONALD ROSS
Start Date: 04/25/2013
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	1	0	0	0	1	0	0	0	0	0	1
0100	0	0	0	0	0	0	0	0	0	0	0
0200	2	0	0	0	2	0	0	0	0	0	2
0300	0	0	0	1	1	0	0	0	0	0	1
0400	0	0	0	0	0	0	0	0	0	0	0
0500	0	0	0	1	1	0	0	0	0	0	1
0600	1	0	4	5	10	2	3	0	0	5	15
0700	3	2	4	8	17	5	0	4	5	14	31
0800	5	6	6	1	18	13	5	2	0	20	38
0900	4	6	7	6	23	4	0	4	16	24	47
1000	11	10	5	4	30	2	4	5	4	15	45
1100	9	8	5	11	33	5	9	23	10	47	80
1200	8	4	2	15	29	12	20	8	3	43	72
1300	7	9	13	8	37	4	10	3	4	21	58
1400	10	12	8	4	34	3	1	7	2	13	47
1500	7	4	16	11	38	6	6	14	5	31	69
1600	3	10	8	8	29	8	3	12	4	27	56
1700	12	3	2	19	36	7	10	18	21	56	92
1800	14	3	6	5	28	11	3	21	16	51	79
1900	8	2	3	3	16	3	3	6	3	15	31
2000	4	7	5	2	18	1	6	2	3	12	30
2100	1	0	5	7	13	8	5	11	5	29	42
2200	1	1	0	0	2	2	2	1	2	7	9
2300	0	2	0	0	2	1	0	0	0	1	3
24-Hour Totals:					418					431	849

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	745	25	730	27	730	50
P.M.	1245	44	1715	60	1715	98
Daily	1245	44	1130	65	1715	98

Generated by SPS 5.0.44P

County: 93
Station: 1073
Description: 64 DR N OF DONALD ROSS
Start Date: 04/25/2013
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	1	0	0	0	1	1	1	0	0	2	3
0100	0	0	0	0	0	1	0	1	0	2	2
0200	0	1	0	0	1	0	0	0	0	0	1
0300	0	0	0	0	0	0	0	0	0	0	0
0400	0	1	0	1	2	1	1	0	4	6	8
0500	0	1	1	1	3	2	2	4	3	11	14
0600	0	0	1	0	1	3	3	5	6	17	18
0700	1	6	3	6	16	15	14	12	21	62	78
0800	7	11	3	7	28	16	10	15	13	54	82
0900	9	10	6	7	32	9	7	11	10	37	69
1000	9	6	8	4	27	7	5	1	8	21	48
1100	2	2	3	7	14	7	6	3	7	23	37
1200	6	4	6	4	20	8	8	6	6	28	48
1300	12	11	7	7	37	7	9	6	10	32	69
1400	2	7	6	7	22	3	8	5	9	25	47
1500	9	6	9	15	39	6	11	6	9	32	71
1600	8	10	5	10	33	3	6	5	6	20	53
1700	8	7	21	14	50	7	6	6	9	28	78
1800	10	13	14	7	44	10	7	12	1	30	74
1900	7	14	8	8	37	5	8	15	7	35	72
2000	2	10	9	5	26	5	7	4	4	20	46
2100	5	4	5	4	18	3	3	0	1	7	25
2200	7	5	5	1	18	4	2	2	1	9	27
2300	3	1	1	1	6	1	0	0	2	3	9
24-Hour Totals:					475					504	979

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	845	32	715	63	745	89
P.M.	1730	58	1745	38	1730	90
Daily	1730	58	715	63	1730	90

Generated by SPS 5.0.44P

County: 93
Station: 4601
Description: DONALD ROSS W OF 64 DR
Start Date: 04/25/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	2	0	2	3	7	17	9	5	3	34	41
0100	2	3	1	1	7	4	3	0	1	8	15
0200	4	0	1	2	7	5	2	1	0	8	15
0300	1	0	1	1	3	2	0	2	1	5	8
0400	2	5	5	5	17	1	1	2	4	8	25
0500	13	15	18	23	69	1	5	14	7	27	96
0600	30	59	88	115	292	19	13	27	37	96	388
0700	169	188	191	179	727	41	91	57	84	273	1000
0800	147	150	161	157	615	81	77	74	90	322	937
0900	120	100	98	127	445	77	89	97	88	351	796
1000	78	104	95	84	361	58	75	92	68	293	654
1100	78	92	108	81	359	87	82	84	82	335	694
1200	75	84	75	99	333	81	79	86	87	333	666
1300	94	92	80	97	363	102	79	80	93	354	717
1400	89	100	91	93	373	111	101	77	118	407	780
1500	103	91	115	114	423	109	118	102	123	452	875
1600	144	100	102	100	446	134	156	120	146	556	1002
1700	110	88	113	103	414	141	154	162	158	615	1029
1800	94	93	94	85	366	152	121	109	111	493	859
1900	59	57	57	55	228	119	98	92	97	406	634
2000	41	38	31	36	146	77	57	81	93	308	454
2100	30	40	26	14	110	65	71	49	56	241	351
2200	23	16	16	17	72	55	28	35	28	146	218
2300	8	11	7	11	37	24	17	19	14	74	111
24-Hour Totals:					6220					6145	12365

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	700	727	845	353	715	1018
P.M.	1530	473	1715	626	1700	1029
Daily	700	727	1715	626	1700	1029

Generated by SPS 5.0.44P

County: 93
Station: 6301
Description: DONALD ROSS W OF SB I-95
Start Date: 04/25/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	3	1	3	3	10	27	10	3	6	46	56
0100	2	4	1	1	8	5	5	0	2	12	20
0200	5	1	1	2	9	7	3	1	0	11	20
0300	1	0	0	3	4	1	1	1	3	6	10
0400	2	6	4	10	22	3	2	2	8	15	37
0500	15	18	17	28	78	4	8	15	12	39	117
0600	36	58	86	122	302	23	19	34	52	128	430
0700	173	215	204	196	788	46	110	73	104	333	1121
0800	179	165	173	186	703	107	92	90	121	410	1113
0900	135	125	110	149	519	94	117	106	110	427	946
1000	93	126	112	88	419	75	96	112	82	365	784
1100	92	116	100	109	417	90	102	95	105	392	809
1200	96	90	87	104	377	98	92	103	88	381	758
1300	107	104	100	123	434	127	93	100	101	421	855
1400	97	120	103	113	433	118	118	93	120	449	882
1500	111	109	129	130	479	129	138	116	134	517	996
1600	151	130	111	115	507	157	181	147	170	655	1162
1700	121	113	105	138	477	168	186	200	189	743	1220
1800	112	114	102	104	432	198	143	145	149	635	1067
1900	73	66	67	66	272	142	143	124	143	552	824
2000	48	50	37	50	185	112	93	113	130	448	633
2100	37	33	34	18	122	96	91	75	75	337	459
2200	31	20	17	22	90	82	51	48	29	210	300
2300	8	11	10	12	41	47	23	31	21	122	163
24-Hour Totals:					7128					7654	14782

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	715	794	845	438	715	1188
P.M.	1530	540	1715	773	1715	1241
Daily	715	794	1715	773	1715	1241

Generated by SPS 5.0.44P

County: 93
Station: 0511
Description: DONALD ROSS W OF CENTRAL
Start Date: 05/02/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	18	20	19	14	71	18	12	15	16	61	132
0100	15	9	5	7	36	17	10	10	4	41	77
0200	7	8	9	7	31	12	7	0	4	23	54
0300	11	12	8	8	39	7	6	8	7	28	67
0400	8	12	21	30	71	17	13	17	14	61	132
0500	24	30	44	44	142	11	16	27	34	88	230
0600	52	71	156	239	518	63	51	122	138	374	892
0700	310	444	424	528	1706	167	244	287	243	941	2647
0800	432	398	370	354	1554	252	207	231	221	911	2465
0900	360	268	243	252	1123	217	253	246	211	927	2050
1000	198	197	220	202	817	205	216	210	203	834	1651
1100	216	213	198	227	854	193	259	209	248	909	1763
1200	167	218	194	202	781	257	253	248	226	984	1765
1300	191	192	207	216	806	343	247	275	223	1088	1894
1400	209	210	235	234	888	260	259	240	351	1110	1998
1500	230	234	220	220	904	322	324	307	263	1216	2120
1600	240	238	223	252	953	322	391	363	390	1466	2419
1700	220	317	286	267	1090	410	468	421	329	1628	2718
1800	232	226	186	158	802	345	313	250	240	1148	1950
1900	146	136	133	127	542	211	221	183	180	795	1337
2000	113	91	94	71	369	135	147	133	120	535	904
2100	69	68	80	83	300	126	127	95	77	425	725
2200	61	65	69	49	244	77	74	49	55	255	499
2300	53	48	30	30	161	45	42	26	26	139	300
24-Hour Totals:					14802					15987	30789

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	715	1828	715	1026	715	2854
P.M.	1715	1102	1645	1689	1645	2764
Daily	715	1828	1645	1689	715	2854

Generated by SPS 5.0.44P

County: 93
Station: 1148
Description: CENTRAL N OF DONALD ROSS
Start Date: 05/02/2013
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	12	12	4	7	35	11	5	9	5	30	65
0100	9	6	7	3	25	4	1	2	3	10	35
0200	0	6	8	3	17	1	5	2	1	9	26
0300	0	0	4	2	6	0	0	3	0	3	9
0400	1	1	5	7	14	2	5	5	8	20	34
0500	13	6	4	13	36	7	14	18	16	55	91
0600	10	15	26	47	98	30	42	61	69	202	300
0700	51	86	99	141	377	91	125	123	149	488	865
0800	118	152	135	152	557	143	108	130	124	505	1062
0900	134	121	96	86	437	121	111	102	75	409	846
1000	91	61	84	92	328	79	81	57	64	281	609
1100	57	95	80	87	319	74	75	96	81	326	645
1200	77	90	99	104	370	77	85	131	138	431	801
1300	84	107	111	124	426	108	71	93	78	350	776
1400	98	104	112	136	450	80	110	84	85	359	809
1500	125	129	129	110	493	93	134	101	83	411	904
1600	173	140	121	154	588	95	130	107	110	442	1030
1700	150	197	172	165	684	158	165	116	123	562	1246
1800	121	125	122	88	456	98	99	81	84	362	818
1900	74	79	61	81	295	67	52	38	56	213	508
2000	55	69	66	50	240	46	39	39	20	144	384
2100	42	52	29	30	153	42	24	30	20	116	269
2200	38	41	42	30	151	26	20	15	12	73	224
2300	25	17	18	18	78	17	10	14	9	50	128
24-Hour Totals:					6633					5851	12484

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	815	573	715	540	745	1076
P.M.	1700	684	1700	562	1700	1246
Daily	1700	684	1700	562	1700	1246

Generated by SPS 5.0.44P

County: 93
Station: 1149
Description: CENTRAL S OF DONALD ROSS
Start Date: 05/02/2013
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	5	3	3	1	12	8	1	12	3	24	36
0100	5	2	4	1	12	0	4	0	5	9	21
0200	3	0	1	1	5	2	2	4	1	9	14
0300	1	2	3	1	7	0	1	2	2	5	12
0400	0	1	2	5	8	2	1	6	8	17	25
0500	4	8	8	12	32	9	13	20	16	58	90
0600	15	23	45	50	133	30	36	65	107	238	371
0700	82	100	127	161	470	126	182	245	280	833	1303
0800	142	128	149	157	576	170	155	167	186	678	1254
0900	155	132	116	106	509	174	153	114	114	555	1064
1000	92	76	83	94	345	94	110	83	85	372	717
1100	90	86	82	98	356	88	91	121	123	423	779
1200	89	92	89	116	386	107	118	130	113	468	854
1300	100	105	110	100	415	116	121	82	121	440	855
1400	87	112	189	199	587	115	132	138	119	504	1091
1500	128	121	98	110	457	118	104	121	132	475	932
1600	140	149	132	111	532	115	119	133	124	491	1023
1700	137	136	139	144	556	187	174	112	130	603	1159
1800	136	108	113	74	431	97	96	84	88	365	796
1900	74	55	70	61	260	73	62	57	65	257	517
2000	44	49	49	41	183	50	50	57	27	184	367
2100	29	43	25	29	126	43	50	41	31	165	291
2200	38	33	12	20	103	38	25	18	17	98	201
2300	20	6	9	9	44	16	9	9	6	40	84
24-Hour Totals:					6545					7311	13856

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	830	593	715	877	730	1408
P.M.	1430	637	1630	618	1700	1159
Daily	1430	637	715	877	730	1408

Generated by SPS 5.0.44P

County: 93
Station: 7411
Description: DONALD ROSS E OF CENTRAL
Start Date: 05/02/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	17	16	19	11	63	16	12	17	13	58	121
0100	12	6	3	6	27	11	10	10	3	34	61
0200	6	8	2	9	25	9	10	2	4	25	50
0300	9	10	8	5	32	9	2	4	7	22	54
0400	5	9	13	22	49	16	9	8	16	49	98
0500	14	27	35	39	115	10	12	13	27	62	177
0600	47	63	124	185	419	55	38	64	100	257	676
0700	265	373	417	435	1490	110	203	296	276	885	2375
0800	471	391	319	344	1525	225	222	226	220	893	2418
0900	304	274	241	233	1052	214	243	199	214	870	1922
1000	215	189	215	205	824	219	229	207	187	842	1666
1100	199	207	199	214	819	187	211	199	273	870	1689
1200	185	217	202	248	852	241	266	277	237	1021	1873
1300	201	179	231	187	798	288	234	260	229	1011	1809
1400	212	205	269	253	939	241	257	255	349	1102	2041
1500	223	212	201	216	852	282	269	272	264	1087	1939
1600	201	238	196	208	843	319	305	317	378	1319	2162
1700	217	272	251	217	957	393	410	316	289	1408	2365
1800	194	201	158	153	706	277	276	203	207	963	1669
1900	132	109	119	127	487	194	198	140	155	687	1174
2000	94	89	74	58	315	108	120	117	91	436	751
2100	58	75	61	91	285	100	120	65	53	338	623
2200	53	58	61	43	215	73	52	45	44	214	429
2300	55	47	27	27	156	25	37	20	22	104	260
24-Hour Totals:					13845					14557	28402

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	730	1714	730	1019	730	2733
P.M.	1430	957	1630	1498	1645	2445
Daily	730	1714	1630	1498	730	2733

Generated by SPS 5.0.44P

County: 93
Station: 1145
Description: MILITARY TRAIL S OF DONALD ROSS
Start Date: 05/01/2013
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	16	12	10	6	44	15	12	9	12	48	92
0100	5	3	4	6	18	5	3	6	8	22	40
0200	4	6	6	3	19	1	10	8	4	23	42
0300	4	0	2	2	8	3	1	5	1	10	18
0400	4	1	4	11	20	2	2	7	10	21	41
0500	8	13	27	32	80	12	14	25	36	87	167
0600	25	43	63	108	239	37	52	84	127	300	539
0700	132	222	290	249	893	211	413	267	235	1126	2019
0800	230	185	194	192	801	194	211	168	208	781	1582
0900	186	211	169	198	764	211	244	156	192	803	1567
1000	159	135	142	166	602	155	152	196	181	684	1286
1100	144	139	176	171	630	203	197	253	220	873	1503
1200	149	187	173	196	705	211	198	180	210	799	1504
1300	180	169	165	169	683	175	197	186	181	739	1422
1400	138	177	187	322	824	212	183	264	243	902	1726
1500	235	179	240	205	859	273	277	226	272	1048	1907
1600	181	164	233	203	781	258	211	288	200	957	1738
1700	215	208	223	200	846	293	322	208	233	1056	1902
1800	160	127	107	119	513	203	193	173	167	736	1249
1900	111	100	85	84	380	115	134	104	104	457	837
2000	70	82	151	90	393	76	91	71	65	303	696
2100	67	41	52	47	207	61	52	53	40	206	413
2200	41	31	34	34	140	61	39	32	24	156	296
2300	16	18	15	12	61	30	36	15	14	95	156
24-Hour Totals:					10510					12232	22742

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	715	991	700	1126	715	2100
P.M.	1445	976	1630	1103	1445	1995
Daily	715	991	700	1126	715	2100

Generated by SPS 5.0.44P

County: 93
Station: 1146
Description: MILITARY TRAIL N OF DONALD ROSS
Start Date: 05/01/2013
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	18	15	10	5	48	9	11	7	10	37	85
0100	7	7	4	5	23	12	5	8	4	29	52
0200	4	3	2	4	13	3	1	4	2	10	23
0300	5	1	3	5	14	3	5	5	6	19	33
0400	4	8	12	7	31	6	12	14	25	57	88
0500	8	18	25	41	92	19	28	47	38	132	224
0600	45	57	91	173	366	66	82	105	173	426	792
0700	171	291	351	383	1196	213	348	389	447	1397	2593
0800	348	395	337	335	1415	391	389	323	328	1431	2846
0900	346	309	266	310	1231	352	363	290	288	1293	2524
1000	209	241	262	281	993	256	303	324	270	1153	2146
1100	274	246	260	248	1028	295	299	325	339	1258	2286
1200	249	320	226	272	1067	353	294	240	265	1152	2219
1300	254	286	297	308	1145	304	312	306	291	1213	2358
1400	266	330	329	320	1245	315	295	386	341	1337	2582
1500	354	339	397	368	1458	392	387	473	534	1786	3244
1600	294	290	302	300	1186	423	409	384	381	1597	2783
1700	310	321	328	306	1265	445	438	353	314	1550	2815
1800	231	262	227	208	928	311	236	245	200	992	1920
1900	183	130	156	123	592	161	147	148	113	569	1161
2000	133	114	99	89	435	121	115	117	149	502	937
2100	100	81	68	74	323	124	86	52	66	328	651
2200	51	59	41	33	184	60	44	37	30	171	355
2300	41	28	26	12	107	32	31	18	19	100	207
24-Hour Totals:					16385					18539	34924

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	730	1477	730	1616	730	3093
P.M.	1500	1458	1530	1839	1500	3244
Daily	730	1477	1530	1839	1500	3244

Generated by SPS 5.0.44P

County: 93
Station: 4117
Description: DONALD ROSS W OF MILITARY TRAIL
Start Date: 05/01/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	21	19	14	17	71	9	18	18	12	57	128
0100	8	10	19	11	48	9	7	2	11	29	77
0200	10	0	6	5	21	4	11	5	4	24	45
0300	3	3	5	0	11	4	1	4	7	16	27
0400	6	7	6	13	32	10	5	11	6	32	64
0500	16	26	33	45	120	14	25	19	36	94	214
0600	54	68	130	197	449	38	51	72	110	271	720
0700	264	407	416	411	1498	121	237	289	235	882	2380
0800	399	393	334	367	1493	241	228	196	254	919	2412
0900	271	260	242	243	1016	192	193	208	209	802	1818
1000	225	194	212	201	832	193	207	225	199	824	1656
1100	195	229	217	254	895	217	244	222	263	946	1841
1200	199	233	218	252	902	247	258	256	240	1001	1903
1300	198	233	249	248	928	247	235	205	276	963	1891
1400	254	216	298	255	1023	271	286	247	319	1123	2146
1500	231	256	243	244	974	317	298	327	317	1259	2233
1600	272	222	216	258	968	364	364	377	342	1447	2415
1700	275	208	266	255	1004	444	464	376	298	1582	2586
1800	196	227	168	198	789	303	293	196	193	985	1774
1900	146	155	117	104	522	185	190	144	149	668	1190
2000	96	109	97	76	378	103	144	122	128	497	875
2100	75	58	71	61	265	124	88	96	72	380	645
2200	64	48	62	44	218	58	56	35	33	182	400
2300	40	28	25	23	116	32	26	27	22	107	223
24-Hour Totals:					14573					15090	29663

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	715	1633	715	1002	715	2635
P.M.	1430	1040	1630	1627	1645	2633
Daily	715	1633	1630	1627	715	2635

Generated by SPS 5.0.44P

County: 93
Station: 4411
Description: DONALD ROSS E OF MILITARY TRAIL
Start Date: 05/01/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	15	10	10	11	46	11	16	17	11	55	101
0100	2	5	14	8	29	12	6	6	8	32	61
0200	11	7	3	3	24	1	10	2	3	16	40
0300	4	1	1	3	9	4	1	4	4	13	22
0400	2	6	7	12	27	7	4	9	6	26	53
0500	9	18	34	39	100	8	14	11	33	66	166
0600	47	55	112	160	374	37	43	53	89	222	596
0700	182	249	348	435	1214	136	194	206	227	763	1977
0800	355	347	328	320	1350	179	212	180	245	816	2166
0900	271	245	238	242	996	189	191	178	195	753	1749
1000	229	222	214	219	884	197	204	199	205	805	1689
1100	214	235	239	250	938	208	222	209	234	873	1811
1200	206	239	228	211	884	227	248	216	234	925	1809
1300	211	229	226	220	886	207	247	193	289	936	1822
1400	214	213	238	270	935	265	260	239	276	1040	1975
1500	219	276	242	226	963	278	280	262	323	1143	2106
1600	253	208	206	274	941	294	314	292	327	1227	2168
1700	238	222	209	192	861	341	431	304	270	1346	2207
1800	199	170	157	175	701	251	255	185	197	888	1589
1900	136	141	110	99	486	140	156	123	127	546	1032
2000	84	96	98	89	367	89	121	98	99	407	774
2100	81	58	75	57	271	110	91	84	66	351	622
2200	52	41	49	43	185	56	55	37	36	184	369
2300	31	34	19	18	102	33	17	26	29	105	207
24-Hour Totals:					13573					13538	27111

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	730	1485	815	826	730	2309
P.M.	1445	1007	1645	1403	1645	2346
Daily	730	1485	1645	1403	1645	2346

Generated by SPS 5.0.44P

County: 93
Station: 0115
Description: DONALD ROSS E OF PARKSIDE
Start Date: 05/01/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	23	12	17	11	63	6	12	18	20	56	119
0100	10	7	11	5	33	10	6	10	13	39	72
0200	10	5	6	5	26	5	13	7	7	32	58
0300	6	4	5	2	17	3	2	5	9	19	36
0400	5	8	8	17	38	13	8	12	11	44	82
0500	19	29	39	65	152	16	32	30	33	111	263
0600	58	79	176	238	551	53	74	118	138	383	934
0700	323	452	443	516	1734	189	253	321	260	1023	2757
0800	409	368	391	393	1561	295	213	247	266	1021	2582
0900	322	236	239	247	1044	255	215	215	198	883	1927
1000	201	211	208	229	849	232	194	201	212	839	1688
1100	206	221	206	241	874	222	256	215	249	942	1816
1200	235	196	234	222	887	212	234	237	204	887	1774
1300	206	228	203	257	894	252	211	208	237	908	1802
1400	237	243	267	249	996	248	254	225	330	1057	2053
1500	226	274	271	260	1031	321	298	339	313	1271	2302
1600	289	251	245	303	1088	428	402	409	399	1638	2726
1700	301	251	257	289	1098	546	530	413	323	1812	2910
1800	260	234	221	205	920	363	324	222	243	1152	2072
1900	154	131	129	102	516	191	199	167	161	718	1234
2000	126	106	100	101	433	128	179	158	146	611	1044
2100	76	67	79	78	300	142	106	116	94	458	758
2200	67	50	86	40	243	80	92	58	55	285	528
2300	45	34	35	21	135	52	34	34	21	141	276
24-Hour Totals:					15483					16330	31813

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	715	1820	715	1129	715	2949
P.M.	1645	1112	1645	1888	1645	3000
Daily	715	1820	1645	1888	1645	3000

Generated by SPS 5.0.44P

County: 93
Station: 1151
Description: PARKSIDE N OF DONALD ROSS
Start Date: 05/01/2013
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	6	3	3	6	18	3	5	6	5	19	37
0100	4	2	4	3	13	4	1	0	1	6	19
0200	5	2	0	0	7	2	0	2	1	5	12
0300	1	2	0	0	3	2	4	2	0	8	11
0400	0	1	1	4	6	4	2	3	5	14	20
0500	1	2	4	5	12	5	9	12	14	40	52
0600	5	13	23	47	88	20	19	42	52	133	221
0700	48	64	92	78	282	69	76	80	80	305	587
0800	70	68	87	98	323	89	74	110	86	359	682
0900	69	54	46	32	201	87	31	43	36	197	398
1000	44	39	43	39	165	30	27	32	34	123	288
1100	34	45	53	55	187	29	25	49	37	140	327
1200	43	37	39	42	161	40	27	46	41	154	315
1300	41	41	37	32	151	40	34	54	60	188	339
1400	50	41	46	63	200	53	37	45	44	179	379
1500	56	54	76	77	263	49	47	56	70	222	485
1600	92	64	77	56	289	107	77	68	69	321	610
1700	84	78	65	72	299	93	73	61	79	306	605
1800	82	46	48	48	224	67	71	66	64	268	492
1900	53	37	33	31	154	28	28	39	27	122	276
2000	40	17	22	30	109	19	18	31	28	96	205
2100	27	19	25	20	91	29	15	11	17	72	163
2200	23	21	19	13	76	6	7	6	10	29	105
2300	7	13	8	8	36	12	8	3	8	31	67
24-Hour Totals:					3358					3337	6695

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	800	323	800	359	800	682
P.M.	1545	310	1545	322	1545	632
Daily	800	323	800	359	800	682

Generated by SPS 5.0.44P

County: 93
Station: 2511
Description: DONALD ROSS W OF PARKSIDE
Start Date: 05/01/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	20	26	11	15	72	26	13	15	10	64	136
0100	9	9	9	6	33	8	5	6	5	24	57
0200	6	3	4	4	17	1	9	3	3	16	33
0300	4	2	6	1	13	2	7	7	11	27	40
0400	7	5	14	17	43	9	9	14	17	49	92
0500	19	33	43	63	158	21	25	36	37	119	277
0600	46	94	151	241	532	58	70	125	122	375	907
0700	316	469	529	562	1876	199	216	291	267	973	2849
0800	432	445	439	451	1767	237	250	221	233	941	2708
0900	361	269	232	252	1114	241	216	190	190	837	1951
1000	246	240	242	236	964	158	212	182	156	708	1672
1100	223	211	224	260	918	185	203	210	188	786	1704
1200	241	214	255	241	951	227	239	178	156	800	1751
1300	245	260	235	253	993	234	270	197	196	897	1890
1400	214	233	273	276	996	236	207	246	270	959	1955
1500	352	361	406	345	1464	299	311	327	300	1237	2701
1600	313	293	274	297	1177	333	353	309	353	1348	2525
1700	262	349	396	368	1375	437	452	343	342	1574	2949
1800	302	272	258	211	1043	274	234	232	193	933	1976
1900	211	144	146	111	612	199	175	179	163	716	1328
2000	137	118	102	118	475	159	143	137	143	582	1057
2100	120	77	67	79	343	115	110	89	86	400	743
2200	61	55	63	35	214	74	65	71	45	255	469
2300	43	28	31	35	137	47	33	13	28	121	258
24-Hour Totals:					17287					14741	32028

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	715	1992	730	1045	730	3013
P.M.	1500	1464	1645	1585	1700	2949
Daily	715	1992	1645	1585	730	3013

Generated by SPS 5.0.44P

County: 93
Station: 1016
Description: HOOD W\O EAST POINT
Start Date: 04/18/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	2	1	3	0	6	2	3	1	1	7	13
0100	0	1	0	1	2	1	0	0	0	1	3
0200	0	0	0	0	0	0	0	0	0	0	0
0300	0	0	1	0	1	1	0	4	0	5	6
0400	2	0	0	1	3	2	1	0	0	3	6
0500	0	2	5	3	10	0	3	3	2	8	18
0600	3	7	10	9	29	1	3	3	10	17	46
0700	25	47	77	92	241	16	44	93	61	214	455
0800	69	37	51	52	209	32	24	23	24	103	312
0900	60	30	26	26	142	20	30	23	21	94	236
1000	26	21	30	31	108	28	23	16	20	87	195
1100	22	24	21	31	98	18	22	19	31	90	188
1200	22	20	21	39	102	20	30	24	28	102	204
1300	25	27	30	22	104	24	26	25	40	115	219
1400	38	61	30	30	159	41	37	28	45	151	310
1500	36	33	20	32	121	31	24	30	36	121	242
1600	37	26	26	25	114	38	49	25	39	151	265
1700	36	35	38	36	145	35	49	30	39	153	298
1800	34	23	24	15	96	31	27	31	20	109	205
1900	21	19	13	12	65	26	24	12	17	79	144
2000	13	9	8	13	43	17	23	13	21	74	117
2100	5	6	2	5	18	13	20	9	10	52	70
2200	7	3	0	3	13	13	9	4	3	29	42
2300	1	0	2	3	6	3	5	5	2	15	21
24-Hour Totals:					1835					1780	3615

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	715	285	715	230	715	515
P.M.	1400	159	1530	153	1400	310
Daily	715	285	715	230	715	515

Generated by SPS 5.0.44P

County: 93
Station: 1017
Description: EAST POINT N\O HOOD
Start Date: 04/18/2013
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	0	0	2	0	2	0	0	0	0	0	2
0100	0	1	1	0	2	0	0	0	0	0	2
0200	1	0	0	1	2	0	0	0	1	1	3
0300	1	0	0	0	1	1	0	0	0	1	2
0400	1	0	0	0	1	0	0	0	0	0	1
0500	0	2	0	0	2	1	0	1	1	3	5
0600	2	1	1	0	4	0	1	1	4	6	10
0700	5	7	2	6	20	6	11	11	6	34	54
0800	20	20	12	14	66	9	14	14	15	52	118
0900	16	24	23	29	92	12	16	23	15	66	158
1000	10	21	18	14	63	17	19	21	16	73	136
1100	23	21	18	19	81	20	8	23	14	65	146
1200	13	20	16	14	63	13	18	23	25	79	142
1300	8	17	16	25	66	12	15	11	17	55	121
1400	12	17	15	21	65	31	19	26	18	94	159
1500	21	15	14	15	65	22	31	14	13	80	145
1600	21	16	9	29	75	17	20	15	13	65	140
1700	16	21	12	18	67	17	13	12	10	52	119
1800	14	14	7	10	45	9	6	6	4	25	70
1900	19	11	15	10	55	6	5	6	7	24	79
2000	11	8	10	8	37	3	8	3	4	18	55
2100	11	4	6	1	22	5	2	3	0	10	32
2200	1	2	5	1	9	2	1	0	0	3	12
2300	4	2	0	4	10	1	2	0	1	4	14
24-Hour Totals:					915					810	1725

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	845	77	845	66	845	143
P.M.	1645	78	1430	97	1430	169
Daily	900	92	1430	97	1430	169

Generated by SPS 5.0.44P

County: 93
Station: 1018
Description: HOOD E\O EAST POINT
Start Date: 04/18/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	2	2	2	0	6	2	3	2	1	8	14
0100	0	1	0	1	2	1	1	1	0	3	5
0200	0	0	0	1	1	1	0	0	1	2	3
0300	0	0	1	0	1	1	3	1	0	5	6
0400	0	0	0	1	1	2	1	0	0	3	4
0500	0	2	5	6	13	2	2	3	3	10	23
0600	2	7	11	12	32	1	5	5	9	20	52
0700	32	46	80	98	256	21	48	91	59	219	475
0800	72	48	59	63	242	41	41	35	30	147	389
0900	63	39	36	33	171	29	41	39	37	146	317
1000	34	35	32	48	149	32	31	33	29	125	274
1100	36	26	38	36	136	35	37	33	38	143	279
1200	35	32	38	47	152	28	46	31	37	142	294
1300	44	37	41	35	157	32	43	38	48	161	318
1400	46	78	46	44	214	51	38	37	64	190	404
1500	55	55	31	42	183	42	40	43	45	170	353
1600	47	46	37	35	165	47	67	29	59	202	367
1700	44	41	46	42	173	46	64	36	51	197	370
1800	41	30	25	22	118	38	39	40	27	144	262
1900	22	22	16	14	74	37	32	23	27	119	193
2000	16	12	11	15	54	20	31	19	28	98	152
2100	9	10	2	6	27	24	23	14	12	73	100
2200	8	4	0	2	14	12	10	8	4	34	48
2300	2	1	3	1	7	6	7	5	2	20	27
24-Hour Totals:					2348					2381	4729

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	730	298	715	239	715	535
P.M.	1415	223	1645	205	1400	404
Daily	730	298	715	239	715	535

Generated by SPS 5.0.44P

County: 93
Station: 1019
Description: MILITARY TRAIL S\O HOOD
Start Date: 04/18/2013
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	4	2	3	3	12	5	2	2	3	12	24
0100	8	3	7	2	20	4	5	2	7	18	38
0200	4	4	3	7	18	7	5	3	8	23	41
0300	13	10	23	38	84	10	20	28	49	107	191
0400	32	69	106	141	348	35	69	87	143	334	682
0500	180	287	227	264	958	163	202	263	255	883	1841
0600	227	240	219	222	908	248	237	181	244	910	1818
0700	230	177	170	181	758	200	174	180	211	765	1523
0800	131	158	164	178	631	166	172	192	171	701	1332
0900	171	189	146	185	691	202	164	213	220	799	1490
1000	161	195	186	185	727	197	237	182	207	823	1550
1100	178	165	219	203	765	209	180	169	185	743	1508
1200	188	218	226	218	850	199	199	235	328	961	1811
1300	210	204	226	223	863	293	232	235	231	991	1854
1400	204	220	214	249	887	205	257	263	279	1004	1891
1500	255	277	239	251	1022	306	283	245	255	1089	2111
1600	217	209	201	178	805	225	210	192	206	833	1638
1700	152	143	124	114	533	196	151	150	134	631	1164
1800	122	127	128	132	509	107	96	115	94	412	921
1900	108	84	87	60	339	83	84	72	67	306	645
2000	58	54	40	37	189	59	54	70	48	231	420
2100	30	29	22	19	100	37	50	26	15	128	228
2200	24	9	11	12	56	14	14	12	6	46	102
2300	6	5	5	6	22	4	6	10	8	28	50
24-Hour Totals:					12095					12778	24873

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	645	799	645	798	645	1597
P.M.	1500	1022	1430	1131	1445	2133
Daily	1500	1022	1430	1131	1445	2133

Generated by SPS 5.0.44P

County: 93
Station: 1020
Description: HOOD E\O MILITARY TRAIL
Start Date: 04/18/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	9	3	3	3	18	9	2	4	2	17	35
0100	1	2	4	1	8	2	2	1	0	5	13
0200	1	3	5	4	13	2	2	1	1	6	19
0300	0	0	2	2	4	3	0	0	2	5	9
0400	0	2	5	11	18	2	0	3	2	7	25
0500	9	4	14	24	51	1	9	6	8	24	75
0600	13	27	32	49	121	9	11	27	40	87	208
0700	69	136	182	208	595	88	150	134	117	489	1084
0800	165	122	134	152	573	67	85	68	78	298	871
0900	153	144	111	101	509	93	90	64	82	329	838
1000	90	98	109	112	409	52	65	72	87	276	685
1100	120	137	104	134	495	81	86	88	82	337	832
1200	106	116	123	117	462	94	110	112	112	428	890
1300	126	113	118	96	453	101	118	99	128	446	899
1400	105	135	170	219	629	101	114	135	95	445	1074
1500	166	120	103	138	527	159	101	134	129	523	1050
1600	125	158	109	129	521	130	134	129	128	521	1042
1700	158	148	132	127	565	151	166	141	166	624	1189
1800	128	122	96	86	432	133	140	105	108	486	918
1900	98	95	62	68	323	96	89	93	69	347	670
2000	49	50	63	42	204	63	77	56	60	256	460
2100	53	30	35	26	144	50	56	42	32	180	324
2200	24	26	17	16	83	23	27	17	20	87	170
2300	14	14	12	9	49	20	13	6	11	50	99
24-Hour Totals:					7206					6273	13479

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	715	691	700	489	715	1159
P.M.	1415	690	1700	624	1415	1193
Daily	715	691	1700	624	1415	1193

Generated by SPS 5.0.44P

County: 93
Station: 1021
Description: MILITARY TRAIL N\O HOOD
Start Date: 04/18/2013
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	9	11	11	9	40	16	9	21	8	54	94
0100	6	2	3	6	17	6	5	13	9	33	50
0200	1	0	4	2	7	7	2	5	5	19	26
0300	5	1	9	2	17	3	4	2	8	17	34
0400	3	4	2	5	14	7	4	5	11	27	41
0500	5	8	20	29	62	12	16	32	49	109	171
0600	26	54	67	125	272	33	61	68	135	297	569
0700	242	336	230	295	1103	158	272	352	268	1050	2153
0800	211	190	195	204	800	262	229	189	246	926	1726
0900	202	180	166	161	709	204	186	198	196	784	1493
1000	145	127	150	188	610	170	164	184	191	709	1319
1100	139	170	130	165	604	197	197	219	219	832	1436
1200	175	175	178	204	732	206	237	189	204	836	1568
1300	170	180	205	170	725	232	178	167	188	765	1490
1400	215	204	230	231	880	183	213	233	456	1085	1965
1500	205	184	226	206	821	307	217	235	237	996	1817
1600	206	209	223	219	857	204	286	245	299	1034	1891
1700	227	255	259	284	1025	331	268	270	245	1114	2139
1800	179	214	191	171	755	222	198	173	228	821	1576
1900	135	128	116	101	480	232	146	163	122	663	1143
2000	108	117	105	125	455	110	99	120	93	422	877
2100	97	77	80	57	311	71	79	55	73	278	589
2200	51	43	43	33	170	64	56	75	45	240	410
2300	23	20	20	18	81	35	43	26	12	116	197
24-Hour Totals:					11547					13227	24774

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	700	1103	715	1154	715	2226
P.M.	1700	1025	1445	1215	1700	2139
Daily	700	1103	1445	1215	715	2226

Generated by SPS 5.0.44P

County: 93
Station: 1101
Description: HOOD W OF MILITARY TRL
Start Date: 04/18/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	4	2	2	0	8	8	3	2	6	19	27
0100	1	1	0	1	3	1	3	3	0	7	10
0200	0	3	2	2	7	5	2	1	2	10	17
0300	1	1	4	2	8	6	1	1	2	10	18
0400	1	2	3	2	8	2	1	1	1	5	13
0500	7	4	10	20	41	4	8	10	7	29	70
0600	14	33	37	56	140	15	19	28	50	112	252
0700	104	110	134	209	557	51	107	147	101	406	963
0800	128	108	123	134	493	65	85	70	72	292	785
0900	127	117	92	92	428	70	83	62	64	279	707
1000	72	88	75	80	315	38	54	35	57	184	499
1100	83	77	71	99	330	60	77	78	82	297	627
1200	82	76	89	84	331	52	87	71	77	287	618
1300	88	91	86	56	321	71	83	64	103	321	642
1400	104	133	155	107	499	76	96	89	108	369	868
1500	111	97	103	119	430	100	89	91	122	402	832
1600	102	99	89	81	371	104	95	95	113	407	778
1700	102	119	116	103	440	109	151	105	110	475	915
1800	91	111	75	60	337	101	97	84	82	364	701
1900	72	52	34	48	206	106	74	71	56	307	513
2000	32	36	39	30	137	56	71	50	51	228	365
2100	44	17	30	15	106	44	40	43	33	160	266
2200	12	10	4	11	37	18	26	10	20	74	111
2300	12	8	9	9	38	18	9	7	9	43	81
24-Hour Totals:					5591					5087	10678

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	715	581	715	420	715	1001
P.M.	1415	506	1645	478	1700	915
Daily	715	581	1645	478	715	1001

Generated by SPS 5.0.44P

County: 93
Station: 0411
Description: NORTHLAKE W OF KEATING
Start Date: 04/30/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	27	14	22	16	79	29	30	27	21	107	186
0100	10	8	8	9	35	15	18	15	10	58	93
0200	12	11	12	6	41	10	13	9	9	41	82
0300	11	5	16	6	38	13	10	14	4	41	79
0400	16	16	36	29	97	2	9	13	17	41	138
0500	37	39	69	99	244	24	33	45	67	169	413
0600	100	136	212	311	759	57	75	124	183	439	1198
0700	382	515	549	597	2043	208	222	223	354	1007	3050
0800	573	543	502	501	2119	322	326	317	360	1325	3444
0900	458	421	465	450	1794	302	258	284	305	1149	2943
1000	448	397	454	481	1780	278	265	338	301	1182	2962
1100	436	467	489	547	1939	341	342	336	393	1412	3351
1200	539	536	483	485	2043	347	438	444	382	1611	3654
1300	469	490	506	427	1892	450	425	357	419	1651	3543
1400	407	412	414	411	1644	353	349	390	388	1480	3124
1500	446	476	515	480	1917	420	402	382	389	1593	3510
1600	411	499	518	506	1934	454	445	453	449	1801	3735
1700	522	531	561	463	2077	499	546	523	562	2130	4207
1800	438	373	395	313	1519	426	402	371	440	1639	3158
1900	311	246	240	260	1057	346	313	336	263	1258	2315
2000	204	177	184	201	766	240	328	236	243	1047	1813
2100	194	140	144	107	585	190	188	157	160	695	1280
2200	129	78	67	48	322	154	144	120	69	487	809
2300	52	44	40	42	178	87	64	70	47	268	446
24-Hour Totals:					26902					22631	49533

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	730	2262	800	1325	745	3534
P.M.	1645	2120	1700	2130	1700	4207
Daily	730	2262	1700	2130	1700	4207

Generated by SPS 5.0.44P

County: 93
Station: 1138
Description: KEATING S OF NORTHLAKE
Start Date: 04/30/2013
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	5	5	1	1	12	1	1	0	0	2	14
0100	0	1	1	7	9	0	0	0	0	0	9
0200	0	1	0	3	4	0	1	0	0	1	5
0300	0	0	0	0	0	0	0	0	0	0	0
0400	0	0	5	1	6	5	3	3	9	20	26
0500	5	2	0	4	11	4	4	5	8	21	32
0600	0	18	9	9	36	5	7	9	14	35	71
0700	13	17	25	22	77	21	17	21	31	90	167
0800	39	41	36	50	166	44	39	43	51	177	343
0900	43	60	60	72	235	51	47	52	58	208	443
1000	64	71	65	97	297	71	56	72	108	307	604
1100	100	119	114	124	457	80	115	140	144	479	936
1200	129	179	168	175	651	188	141	121	127	577	1228
1300	174	171	147	138	630	96	123	100	77	396	1026
1400	102	113	98	104	417	79	75	85	46	285	702
1500	73	108	97	103	381	73	73	84	120	350	731
1600	107	116	142	119	484	89	119	112	143	463	947
1700	137	152	160	169	618	128	153	145	135	561	1179
1800	149	145	139	112	545	106	111	125	95	437	982
1900	138	124	102	120	484	117	107	79	97	400	884
2000	139	85	107	90	421	77	63	43	62	245	666
2100	100	89	58	49	296	68	36	47	26	177	473
2200	53	54	25	35	167	30	19	13	7	69	236
2300	26	21	13	20	80	5	3	5	0	13	93
24-Hour Totals:					6484					5313	11797

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	845	213	845	201	845	414
P.M.	1215	696	1200	577	1200	1228
Daily	1215	696	1130	613	1200	1228

Generated by SPS 5.0.44P

County: 93
Station: 1139
Description: KEATING N OF NORTHLAKE
Start Date: 04/30/2013
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	4	2	4	2	12	2	0	2	0	4	16
0100	5	2	3	2	12	0	2	0	0	2	14
0200	0	4	2	0	6	2	1	0	0	3	9
0300	2	1	0	1	4	2	0	3	0	5	9
0400	0	0	1	0	1	0	4	5	4	13	14
0500	0	0	5	2	7	3	8	12	10	33	40
0600	1	5	7	13	26	9	20	25	30	84	110
0700	8	11	11	12	42	37	39	43	41	160	202
0800	16	11	12	11	50	39	41	33	33	146	196
0900	17	14	20	5	56	24	18	29	16	87	143
1000	17	14	18	19	68	18	22	22	21	83	151
1100	25	19	8	30	82	17	19	18	26	80	162
1200	33	23	27	17	100	19	28	25	22	94	194
1300	22	22	25	29	98	25	22	12	19	78	176
1400	18	27	33	32	110	30	26	22	22	100	210
1500	37	42	20	24	123	34	19	29	32	114	237
1600	38	37	43	33	151	29	25	34	28	116	267
1700	49	59	59	47	214	27	28	27	34	116	330
1800	39	30	38	29	136	31	22	31	26	110	246
1900	31	29	30	29	119	35	22	21	10	88	207
2000	34	29	29	22	114	29	17	19	10	75	189
2100	23	22	15	24	84	13	7	8	7	35	119
2200	12	12	11	8	43	14	9	11	3	37	80
2300	9	4	9	9	31	6	7	1	5	19	50
24-Hour Totals:					1689					1682	3371

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	845	62	730	164	730	214
P.M.	1700	214	1545	120	1700	330
Daily	1700	214	730	164	1700	330

Generated by SPS 5.0.44P

County: 93
Station: 7311
Description: NORTHLAKE E OF KEATING
Start Date: 04/30/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	38	15	26	16	95	46	29	34	26	135	230
0100	11	15	12	12	50	27	21	23	9	80	130
0200	13	15	15	5	48	9	18	18	7	52	100
0300	10	3	18	5	36	13	10	16	5	44	80
0400	12	15	39	35	101	1	8	18	26	53	154
0500	43	47	75	102	267	26	33	49	75	183	450
0600	107	159	231	292	789	62	88	128	211	489	1278
0700	374	475	576	558	1983	222	240	235	372	1069	3052
0800	501	576	509	464	2050	352	385	342	395	1474	3524
0900	467	419	393	437	1716	368	303	275	341	1287	3003
1000	393	415	404	445	1657	312	325	365	368	1370	3027
1100	403	396	440	465	1704	364	362	402	398	1526	3230
1200	474	492	446	474	1886	449	466	477	446	1838	3724
1300	428	472	483	406	1789	426	502	395	437	1760	3549
1400	408	380	363	383	1534	408	388	451	461	1708	3242
1500	363	381	480	412	1636	478	446	422	476	1822	3458
1600	367	418	452	452	1689	492	511	526	515	2044	3733
1700	463	463	490	439	1855	550	600	621	578	2349	4204
1800	425	372	362	303	1462	485	460	419	427	1791	3253
1900	341	270	230	239	1080	415	338	317	298	1368	2448
2000	242	180	204	208	834	271	331	272	234	1108	1942
2100	218	150	164	111	643	218	183	192	164	757	1400
2200	133	91	88	63	375	175	155	123	75	528	903
2300	69	56	45	52	222	79	67	74	59	279	501
24-Hour Totals:					25501					25114	50615

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	730	2211	815	1490	745	3595
P.M.	1200	1886	1700	2349	1700	4204
Daily	730	2211	1700	2349	1700	4204

Generated by SPS 5.0.44P

County: 93
Station: 1129
Description: SANDTREE S OF NORTHLAKE
Start Date: 04/30/2013
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	2	4	3	1	10	4	6	2	2	14	24
0100	4	1	1	1	7	3	0	1	2	6	13
0200	1	0	0	1	2	3	1	0	4	8	10
0300	0	0	1	0	1	0	2	0	1	3	4
0400	2	1	2	2	7	0	2	2	3	7	14
0500	3	3	9	12	27	3	3	3	6	15	42
0600	10	20	33	32	95	6	16	21	12	55	150
0700	38	41	73	68	220	24	41	41	70	176	396
0800	89	64	83	87	323	51	56	53	81	241	564
0900	97	95	89	93	374	54	70	60	77	261	635
1000	114	105	125	131	475	64	73	98	61	296	771
1100	126	123	135	127	511	73	64	64	89	290	801
1200	152	140	145	146	583	73	92	94	75	334	917
1300	144	131	112	150	537	70	67	78	88	303	840
1400	138	120	122	81	461	88	79	79	72	318	779
1500	140	94	104	113	451	73	88	71	77	309	760
1600	101	115	113	127	456	65	71	66	79	281	737
1700	161	151	124	107	543	75	60	79	57	271	814
1800	114	116	76	90	396	66	42	54	50	212	608
1900	85	54	83	53	275	48	40	32	21	141	416
2000	52	67	44	50	213	40	30	26	24	120	333
2100	44	35	48	29	156	21	25	13	17	76	232
2200	34	11	9	10	64	13	12	8	7	40	104
2300	17	3	5	1	26	10	3	7	5	25	51
24-Hour Totals:					6213					3802	10015

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	845	368	845	265	845	633
P.M.	1200	583	1200	334	1200	917
Daily	1200	583	1145	348	1200	917

Generated by SPS 5.0.44P

County: 93
Station: 1130
Description: NORTHLAKE E OF SANDTREE
Start Date: 04/30/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	42	35	25	23	125	45	42	37	19	143	268
0100	19	14	11	12	56	29	17	14	14	74	130
0200	15	13	8	12	48	12	9	13	10	44	92
0300	13	13	14	27	67	6	9	15	7	37	104
0400	13	11	20	35	79	11	16	23	21	71	150
0500	40	54	67	106	267	31	28	52	70	181	448
0600	63	115	208	272	658	94	104	161	185	544	1202
0700	320	366	512	549	1747	286	260	330	432	1308	3055
0800	523	431	512	551	2017	433	341	333	397	1504	3521
0900	441	391	441	401	1674	350	317	322	341	1330	3004
1000	442	378	436	395	1651	324	366	437	374	1501	3152
1100	463	453	426	481	1823	460	395	482	495	1832	3655
1200	518	522	494	508	2042	456	497	521	519	1993	4035
1300	467	465	434	502	1868	538	499	489	467	1993	3861
1400	461	413	427	423	1724	432	467	431	410	1740	3464
1500	422	528	429	460	1839	469	478	480	461	1888	3727
1600	495	527	471	492	1985	523	536	531	494	2084	4069
1700	465	522	530	519	2036	586	627	560	578	2351	4387
1800	457	439	352	418	1666	494	436	445	420	1795	3461
1900	326	296	256	239	1117	374	355	316	279	1324	2441
2000	250	234	203	210	897	319	324	269	246	1158	2055
2100	166	188	134	134	622	203	147	159	160	669	1291
2200	132	105	78	78	393	144	107	96	67	414	807
2300	101	72	56	63	292	90	63	60	50	263	555
24-Hour Totals:					26693					26241	52934

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	800	2017	745	1539	745	3554
P.M.	1200	2042	1700	2351	1700	4387
Daily	1200	2042	1700	2351	1700	4387

Generated by SPS 5.0.44P

County: 93
Station: 1131
Description: SUNRISE DR N OF NORTHLAKE
Start Date: 04/30/2013
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	1	4	4	2	11	9	9	6	4	28	39
0100	1	1	1	0	3	3	0	6	4	13	16
0200	2	0	0	0	2	3	2	0	0	5	7
0300	1	2	0	2	5	4	2	0	3	9	14
0400	3	2	1	2	8	5	3	3	7	18	26
0500	2	0	0	0	2	6	5	6	12	29	31
0600	8	11	7	8	34	17	20	17	27	81	115
0700	16	15	19	18	68	49	45	68	64	226	294
0800	17	24	27	24	92	64	51	60	63	238	330
0900	36	19	23	20	98	45	43	42	51	181	279
1000	16	21	23	11	71	45	39	56	42	182	253
1100	13	11	20	24	68	35	56	43	60	194	262
1200	25	26	28	24	103	55	55	53	62	225	328
1300	13	23	19	26	81	57	44	40	48	189	270
1400	29	29	17	25	100	39	57	54	37	187	287
1500	27	26	35	24	112	66	55	44	65	230	342
1600	21	21	28	49	119	54	41	55	65	215	334
1700	25	23	29	26	103	54	48	41	45	188	291
1800	13	17	17	18	65	40	22	38	36	136	201
1900	7	15	15	8	45	26	19	30	20	95	140
2000	22	16	10	18	66	26	40	23	41	130	196
2100	8	20	6	11	45	32	27	21	27	107	152
2200	12	5	3	7	27	12	16	13	24	65	92
2300	5	5	4	2	16	15	19	11	9	54	70
24-Hour Totals:					1344					3025	4369

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	815	111	730	247	800	330
P.M.	1645	126	1500	230	1630	347
Daily	1645	126	730	247	1630	347

Generated by SPS 5.0.44P

County: 93
Station: 8211
Description: NORTHLAKE E OF ROAN
Start Date: 04/30/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	38	34	27	21	120	41	41	44	22	148	268
0100	24	15	8	18	65	32	27	16	12	87	152
0200	17	15	6	16	54	16	14	14	14	58	112
0300	13	14	14	26	67	7	10	18	6	41	108
0400	10	14	25	47	96	14	16	24	28	82	178
0500	33	61	76	112	282	29	37	58	79	203	485
0600	74	134	241	286	735	100	121	186	243	650	1385
0700	341	456	544	607	1948	315	304	400	485	1504	3452
0800	575	554	581	593	2303	481	383	402	440	1706	4009
0900	492	441	454	530	1917	400	348	374	396	1518	3435
1000	481	472	491	528	1972	393	414	464	430	1701	3673
1100	482	495	515	573	2065	520	474	488	585	2067	4132
1200	582	585	551	561	2279	507	578	606	594	2285	4564
1300	485	536	498	560	2079	606	569	535	542	2252	4331
1400	482	444	441	510	1877	496	547	507	458	2008	3885
1500	431	517	523	521	1992	528	536	548	538	2150	4142
1600	537	556	522	527	2142	572	575	598	562	2307	4449
1700	497	593	611	530	2231	664	710	662	638	2674	4905
1800	479	484	408	382	1753	561	526	458	506	2051	3804
1900	352	322	254	252	1180	436	402	377	319	1534	2714
2000	272	234	223	212	941	343	379	302	304	1328	2269
2100	170	175	143	132	620	247	192	211	193	843	1463
2200	133	113	82	84	412	177	139	123	80	519	931
2300	91	78	58	58	285	113	76	73	50	312	597
24-Hour Totals:					29415					30028	59443

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	745	2317	745	1751	745	4068
P.M.	1200	2279	1700	2674	1700	4905
Daily	745	2317	1700	2674	1700	4905

Generated by SPS 5.0.44P

County: 93
Station: 1068
Description: LAKE VICTORIA S OF PGA
Start Date: 04/24/2013
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	2	7	4	7	20	13	4	11	5	33	53
0100	4	3	1	5	13	5	3	2	2	12	25
0200	3	2	1	3	9	6	3	2	0	11	20
0300	3	0	0	3	6	0	3	2	4	9	15
0400	0	1	1	5	7	2	3	3	9	17	24
0500	4	7	7	18	36	6	8	15	30	59	95
0600	17	17	36	32	102	32	38	29	34	133	235
0700	43	57	73	80	253	52	82	103	99	336	589
0800	102	91	79	73	345	95	99	89	96	379	724
0900	65	72	70	56	263	58	62	53	47	220	483
1000	71	66	78	85	300	46	50	50	47	193	493
1100	71	81	71	69	292	56	63	51	52	222	514
1200	89	85	72	69	315	59	68	46	57	230	545
1300	107	91	92	92	382	56	65	45	69	235	617
1400	91	70	123	88	372	64	48	49	60	221	593
1500	107	106	113	103	429	63	56	87	72	278	707
1600	96	87	97	112	392	88	89	98	83	358	750
1700	118	116	125	116	475	90	103	100	89	382	857
1800	106	93	67	96	362	88	94	73	64	319	681
1900	89	58	57	44	248	41	41	47	30	159	407
2000	53	43	52	23	171	48	42	46	40	176	347
2100	40	28	25	24	117	34	28	34	42	138	255
2200	22	8	16	11	57	28	30	25	31	114	171
2300	11	7	6	12	36	27	10	23	9	69	105
24-Hour Totals:					5002					4303	9305

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	745	352	730	396	730	742
P.M.	1700	475	1700	382	1700	857
Daily	1700	475	730	396	1700	857

Generated by SPS 5.0.44P

County: 93
Station: 1069
Description: PGA PASS E OF LAKE VICTORIA
Start Date: 04/24/2013
Start Time: 0000

Direction: W

Time	1st	2nd	3rd	4th	Total
0000	4	4	1	0	9
0100	1	0	1	3	5
0200	3	0	1	1	5
0300	0	2	2	0	4
0400	1	0	1	0	2
0500	0	3	2	3	8
0600	3	3	11	9	26
0700	8	11	16	25	60
0800	43	30	23	35	131
0900	44	26	41	40	151
1000	38	46	54	60	198
1100	53	54	63	67	237
1200	52	70	54	52	228
1300	58	59	55	60	232
1400	51	71	58	68	248
1500	77	86	58	58	279
1600	62	58	67	60	247
1700	63	71	63	70	267
1800	56	56	43	49	204
1900	53	49	58	43	203
2000	42	48	42	40	172
2100	41	65	31	16	153
2200	20	11	16	13	60
2300	6	6	9	0	21
24-Hour Totals:					3150

Peak Volume Information

	Hour	Volume
A.M.	845	146
P.M.	1430	289
Daily	1430	289

Generated by SPS 5.0.44P

County: 93
Station: 1070
Description: LAKE VICTORIA N OF PGA
Start Date: 04/24/2013
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	5	5	2	4	16	10	13	7	9	39	55
0100	3	2	0	2	7	7	6	6	2	21	28
0200	1	0	1	2	4	2	2	7	4	15	19
0300	3	3	0	0	6	3	2	1	2	8	14
0400	0	2	4	6	12	1	3	0	5	9	21
0500	9	7	10	20	46	4	1	0	2	7	53
0600	18	17	20	52	107	3	5	8	2	18	125
0700	32	45	51	74	202	11	16	11	16	54	256
0800	96	92	87	89	364	22	13	18	20	73	437
0900	89	63	68	74	294	27	18	24	23	92	386
1000	55	82	57	80	274	22	21	32	34	109	383
1100	73	79	85	95	332	25	49	64	69	207	539
1200	108	94	75	87	364	45	50	40	66	201	565
1300	76	88	64	77	305	81	77	84	70	312	617
1400	78	70	55	103	306	85	82	60	58	285	591
1500	69	62	100	77	308	73	69	77	78	297	605
1600	62	75	81	89	307	92	66	63	40	261	568
1700	99	102	123	93	417	116	95	74	66	351	768
1800	96	76	78	68	318	82	58	37	59	236	554
1900	79	64	69	49	261	53	55	70	63	241	502
2000	47	52	49	54	202	61	62	51	42	216	418
2100	35	53	32	33	153	48	35	49	47	179	332
2200	20	35	24	26	105	58	25	37	51	171	276
2300	18	16	12	10	56	48	21	40	14	123	179
24-Hour Totals:					4766					3525	8291

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	800	364	845	89	800	437
P.M.	1700	417	1700	351	1700	768
Daily	1700	417	1700	351	1700	768

Generated by SPS 5.0.44P

County: 93
Station: 1071
Description: PGA PASS W OF LAKE VICTORIA
Start Date: 04/24/2013
Start Time: 0000

	Direction: W				
Time	1st	2nd	3rd	4th	Total
0000	4	2	1	2	9
0100	3	0	2	3	8
0200	4	0	2	0	6
0300	0	2	2	2	6
0400	0	0	1	1	2
0500	4	1	2	3	10
0600	4	3	12	6	25
0700	5	15	13	22	55
0800	26	26	20	27	99
0900	32	25	32	30	119
1000	35	34	37	59	165
1100	39	44	48	49	180
1200	57	54	43	42	196
1300	48	51	58	52	209
1400	56	59	43	62	220
1500	65	84	63	52	264
1600	57	46	53	49	205
1700	61	56	49	49	215
1800	49	49	32	44	174
1900	48	31	48	41	168
2000	34	40	32	35	141
2100	35	41	27	17	120
2200	17	13	13	11	54
2300	12	6	8	2	28
24-Hour Totals:					2678

Peak Volume Information

	Hour	Volume
A.M.	845	116
P.M.	1445	274
Daily	1445	274

Generated by SPS 5.0.44P

County: 93
Station: 6501
Description: PGA W OF LAKE VICTORIA
Start Date: 04/24/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	54	39	36	24	153	40	47	40	31	158	311
0100	17	21	14	18	70	21	18	15	9	63	133
0200	19	9	10	6	44	19	13	15	10	57	101
0300	10	13	8	15	46	18	6	1	11	36	82
0400	13	12	27	46	98	10	11	17	20	58	156
0500	41	57	77	143	318	21	32	42	62	157	475
0600	112	139	176	336	763	71	91	154	167	483	1246
0700	393	541	694	960	2588	220	219	267	333	1039	3627
0800	886	897	826	969	3578	376	308	295	314	1293	4871
0900	751	760	626	658	2795	297	325	279	333	1234	4029
1000	528	597	617	681	2423	286	400	355	445	1486	3909
1100	601	618	606	661	2486	464	436	465	506	1871	4357
1200	678	737	690	673	2778	477	544	503	465	1989	4767
1300	610	609	590	688	2497	494	530	531	632	2187	4684
1400	584	539	572	662	2357	530	634	609	546	2319	4676
1500	580	611	619	692	2502	639	643	641	622	2545	5047
1600	601	635	648	753	2637	620	667	702	717	2706	5343
1700	683	795	807	705	2990	756	782	776	724	3038	6028
1800	720	732	597	487	2536	664	616	536	572	2388	4924
1900	506	374	369	292	1541	499	464	455	460	1878	3419
2000	328	299	279	245	1151	469	471	429	411	1780	2931
2100	224	213	197	174	808	409	444	340	249	1442	2250
2200	167	150	132	135	584	235	167	158	145	705	1289
2300	122	80	76	57	335	136	104	103	58	401	736
24-Hour Totals:					38078					31313	69391

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	800	3578	745	1312	745	4881
P.M.	1645	3038	1700	3038	1645	6069
Daily	800	3578	1700	3038	1645	6069

Generated by SPS 5.0.44P

County: 93
Station: 7501
Description: PGA E OF LAKE VICTORIA GARDENS
Start Date: 04/24/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	62	60	55	53	230	104	92	59	40	295	525
0100	38	20	21	14	93	32	25	27	21	105	198
0200	9	13	12	16	50	12	6	11	8	37	87
0300	8	7	4	8	27	15	10	12	3	40	67
0400	4	6	8	11	29	10	4	3	6	23	52
0500	9	9	24	33	75	11	6	18	13	48	123
0600	30	43	72	84	229	19	28	38	50	135	364
0700	66	85	183	282	616	62	72	142	146	422	1038
0800	304	449	595	789	2137	171	183	229	243	826	2963
0900	706	678	652	774	2810	312	248	249	253	1062	3872
1000	646	621	546	549	2362	308	263	300	277	1148	3510
1100	456	527	565	568	2116	291	387	281	469	1428	3544
1200	553	484	553	559	2149	433	421	443	452	1749	3898
1300	573	660	569	539	2341	478	507	437	471	1893	4234
1400	534	476	565	571	2146	411	472	506	555	1944	4090
1500	436	493	502	542	1973	514	563	525	558	2160	4133
1600	516	450	542	560	2068	554	601	582	490	2227	4295
1700	483	491	507	598	2079	610	586	629	648	2473	4552
1800	493	638	559	532	2222	626	698	641	588	2553	4775
1900	564	589	421	390	1964	575	544	489	464	2072	4036
2000	374	291	243	239	1147	478	406	420	418	1722	2869
2100	240	230	184	147	801	392	426	368	382	1568	2369
2200	161	148	115	128	552	364	436	302	199	1301	1853
2300	106	90	86	83	365	195	142	123	105	565	930
24-Hour Totals:					30581					27796	58377

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	845	2825	845	1052	845	3877
P.M.	1245	2361	1745	2613	1745	4901
Daily	845	2825	1745	2613	1745	4901

Generated by SPS 5.0.44P

County: 93
Station: 1115
Description: CENTRAL N OF PGA
Start Date: 04/23/2013
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	5	4	0	2	11	5	2	3	1	11	22
0100	1	1	2	2	6	1	1	2	1	5	11
0200	0	2	2	2	6	1	1	3	0	5	11
0300	0	2	1	4	7	1	0	0	0	1	8
0400	1	0	0	3	4	4	2	4	3	13	17
0500	2	1	6	10	19	7	11	20	24	62	81
0600	31	37	37	99	204	32	38	48	62	180	384
0700	120	183	333	248	884	70	159	287	339	855	1739
0800	182	160	192	207	741	238	148	145	186	717	1458
0900	193	143	114	109	559	236	160	86	102	584	1143
1000	97	105	87	92	381	88	93	91	100	372	753
1100	86	77	99	80	342	83	102	86	117	388	730
1200	104	91	90	93	378	103	96	104	98	401	779
1300	89	109	137	163	498	103	96	87	112	398	896
1400	155	101	102	105	463	168	144	111	131	554	1017
1500	110	115	142	195	562	153	152	130	126	561	1123
1600	141	125	153	140	559	256	223	163	157	799	1358
1700	156	145	160	151	612	202	182	198	184	766	1378
1800	114	106	99	108	427	103	109	95	70	377	804
1900	64	81	59	53	257	72	66	68	39	245	502
2000	45	50	43	39	177	47	33	48	49	177	354
2100	33	34	40	32	139	69	41	29	15	154	293
2200	16	20	18	15	69	22	15	16	7	60	129
2300	16	21	15	10	62	3	9	10	4	26	88
24-Hour Totals:					7367					7711	15078

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	715	946	715	1023	715	1969
P.M.	1545	614	1600	799	1545	1382
Daily	715	946	715	1023	715	1969

Generated by SPS 5.0.44P

County: 93
Station: 1116
Description: AVENUE OF THE PGA S OF PGA
Start Date: 04/23/2013
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	0	1	2	0	3	0	3	2	0	5	8
0100	0	0	0	0	0	1	0	0	0	1	1
0200	0	0	0	0	0	0	0	0	0	0	0
0300	0	0	0	0	0	0	0	0	0	0	0
0400	0	3	0	0	3	0	5	0	1	6	9
0500	2	2	0	4	8	0	0	2	0	2	10
0600	3	8	11	11	33	2	2	0	6	10	43
0700	13	25	11	24	73	7	10	16	25	58	131
0800	25	31	25	45	126	16	11	22	24	73	199
0900	42	36	33	34	145	41	23	24	26	114	259
1000	21	27	43	20	111	24	19	27	31	101	212
1100	26	38	36	30	130	29	28	31	35	123	253
1200	32	16	31	23	102	41	24	31	27	123	225
1300	27	23	25	28	103	26	25	20	33	104	207
1400	32	32	33	32	129	16	23	17	35	91	220
1500	28	39	49	25	141	24	38	44	27	133	274
1600	23	25	22	37	107	17	18	28	21	84	191
1700	30	29	35	20	114	33	34	43	28	138	252
1800	18	33	24	31	106	41	28	23	18	110	216
1900	22	21	15	9	67	21	30	25	8	84	151
2000	14	9	2	4	29	21	12	8	16	57	86
2100	3	0	6	0	9	19	11	9	5	44	53
2200	9	2	1	1	13	9	0	5	13	27	40
2300	4	0	1	1	6	0	4	1	2	7	13
24-Hour Totals:					1558					1495	3053

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	845	156	845	112	845	268
P.M.	1445	148	1715	146	1445	289
Daily	845	156	1715	146	1445	289

Generated by SPS 5.0.44P

County: 93
Station: 1117
Description: PGA E OF CENTRAL
Start Date: 04/23/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	18	23	13	11	65	15	24	11	18	68	133
0100	8	7	9	9	33	12	5	7	6	30	63
0200	9	6	6	8	29	1	5	11	9	26	55
0300	8	3	2	6	19	4	4	5	6	19	38
0400	7	12	18	13	50	11	13	8	13	45	95
0500	19	31	27	41	118	21	31	49	56	157	275
0600	69	71	115	174	429	78	87	120	185	470	899
0700	242	301	497	591	1631	200	283	388	410	1281	2912
0800	465	468	455	449	1837	332	333	345	317	1327	3164
0900	455	402	323	347	1527	313	259	225	257	1054	2581
1000	292	275	308	309	1184	209	248	239	239	935	2119
1100	286	289	322	359	1256	237	247	267	255	1006	2262
1200	353	356	354	342	1405	300	257	284	346	1187	2592
1300	281	306	294	343	1224	296	333	314	440	1383	2607
1400	347	364	340	301	1352	368	293	318	346	1325	2677
1500	334	338	337	321	1330	332	327	379	433	1471	2801
1600	415	388	369	359	1531	399	447	399	446	1691	3222
1700	459	415	460	452	1786	471	493	566	474	2004	3790
1800	355	365	326	332	1378	369	376	349	291	1385	2763
1900	262	226	161	159	808	292	247	244	217	1000	1808
2000	158	124	119	96	497	224	225	203	201	853	1350
2100	111	109	85	87	392	208	180	158	108	654	1046
2200	87	84	49	66	286	91	82	69	67	309	595
2300	44	34	48	53	179	64	43	39	26	172	351
24-Hour Totals:					20346					19852	40198

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	730	2021	730	1463	730	3484
P.M.	1700	1786	1700	2004	1700	3790
Daily	730	2021	1700	2004	1700	3790

Generated by SPS 5.0.44P

County: 93
Station: 4111
Description: PGA W OF CENTRAL
Start Date: 04/23/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	21	23	12	10	66	16	23	11	18	68	134
0100	12	9	10	9	40	14	7	11	6	38	78
0200	8	5	7	10	30	1	4	12	12	29	59
0300	8	5	2	7	22	5	4	4	3	16	38
0400	6	12	16	15	49	11	15	10	15	51	100
0500	19	27	34	45	125	27	36	70	75	208	333
0600	84	88	128	220	520	92	112	145	201	550	1070
0700	299	364	553	570	1786	220	271	381	448	1320	3106
0800	455	540	521	470	1986	417	403	353	332	1505	3491
0900	467	397	362	379	1605	318	301	248	286	1153	2758
1000	329	325	335	331	1320	237	261	271	311	1080	2400
1100	321	309	357	376	1363	244	285	291	298	1118	2481
1200	389	386	380	341	1496	310	278	306	348	1242	2738
1300	302	328	339	368	1337	325	336	344	387	1392	2729
1400	339	358	358	326	1381	335	353	343	383	1414	2795
1500	325	347	367	342	1381	366	369	365	380	1480	2861
1600	369	338	406	394	1507	442	506	411	482	1841	3348
1700	501	472	478	477	1928	511	556	627	520	2214	4142
1800	397	414	343	378	1532	399	411	362	293	1465	2997
1900	282	246	193	173	894	317	258	259	225	1059	1953
2000	168	150	126	111	555	250	218	217	224	909	1464
2100	104	115	102	106	427	231	181	171	110	693	1120
2200	98	97	52	78	325	105	92	69	68	334	659
2300	52	45	61	54	212	61	41	42	26	170	382
24-Hour Totals:					21887					21349	43236

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	730	2118	730	1649	730	3767
P.M.	1700	1928	1700	2214	1700	4142
Daily	730	2118	1700	2214	1700	4142

Generated by SPS 5.0.44P

County: 93
Station: 1110
Description: PGA W OF FL TRPK
Start Date: 04/23/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	16	10	5	5	36	13	14	8	10	45	81
0100	2	4	4	3	13	6	4	4	5	19	32
0200	4	1	2	5	12	2	1	9	3	15	27
0300	1	1	1	2	5	1	2	4	1	8	13
0400	7	8	6	6	27	8	14	4	7	33	60
0500	16	16	22	28	82	14	35	57	65	171	253
0600	33	46	64	80	223	60	53	87	124	324	547
0700	121	187	277	259	844	131	160	239	287	817	1661
0800	173	215	207	173	768	287	255	245	230	1017	1785
0900	180	182	153	161	676	207	178	166	164	715	1391
1000	135	158	132	163	588	157	174	211	180	722	1310
1100	179	182	148	199	708	191	216	185	192	784	1492
1200	209	180	179	165	733	237	193	221	226	877	1610
1300	152	145	183	157	637	221	247	224	275	967	1604
1400	169	222	180	167	738	240	222	214	255	931	1669
1500	159	173	186	177	695	238	276	242	260	1016	1711
1600	186	169	186	188	729	252	303	265	294	1114	1843
1700	213	213	231	190	847	281	294	328	318	1221	2068
1800	207	149	175	169	700	224	268	228	218	938	1638
1900	119	83	78	84	364	213	170	161	165	709	1073
2000	87	70	67	51	275	160	133	141	154	588	863
2100	53	61	51	40	205	143	118	138	90	489	694
2200	47	35	19	39	140	88	74	61	58	281	421
2300	16	10	20	15	61	49	36	43	31	159	220
24-Hour Totals:					10106					13960	24066

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	730	924	745	1074	730	1992
P.M.	1700	847	1700	1221	1700	2068
Daily	730	924	1700	1221	1700	2068

Generated by SPS 5.0.44P

County: 93
Station: 1111
Description: FAIRWAY DR S OF PGA BLVD
Start Date: 04/23/2013
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	9	6	5	3	23	7	9	4	0	20	43
0100	5	7	1	3	16	7	6	3	1	17	33
0200	2	1	0	2	5	6	7	2	0	15	20
0300	2	1	0	3	6	3	2	0	1	6	12
0400	0	5	7	3	15	3	8	4	11	26	41
0500	7	7	7	11	32	23	19	28	20	90	122
0600	17	31	61	81	190	21	36	37	62	156	346
0700	95	108	177	143	523	68	114	124	157	463	986
0800	106	149	126	150	531	194	196	173	162	725	1256
0900	130	117	135	116	498	139	168	114	134	555	1053
1000	117	144	153	121	535	108	80	112	115	415	950
1100	110	116	149	158	533	85	102	128	143	458	991
1200	185	176	172	154	687	153	132	145	117	547	1234
1300	134	167	150	173	624	121	120	144	114	499	1123
1400	163	150	141	130	584	132	123	108	104	467	1051
1500	127	113	129	144	513	88	110	114	131	443	956
1600	164	154	211	212	741	117	139	106	149	511	1252
1700	327	230	222	222	1001	133	164	180	166	643	1644
1800	164	169	169	135	637	116	132	122	108	478	1115
1900	145	122	98	84	449	102	96	93	91	382	831
2000	89	72	47	47	255	74	67	67	69	277	532
2100	63	40	57	36	196	95	57	72	42	266	462
2200	34	41	24	28	127	28	33	24	28	113	240
2300	15	12	16	22	65	14	20	17	11	62	127
24-Hour Totals:					8786					7634	16420

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	730	575	800	725	800	1256
P.M.	1700	1001	1700	643	1700	1644
Daily	1700	1001	800	725	1700	1644

Generated by SPS 5.0.44P

County: 93
Station: 1112
Description: FL TRPK ENT/EXIT N OF PGA
Start Date: 04/23/2013
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	14	8	6	14	42	11	13	3	5	32	74
0100	11	3	3	5	22	8	6	4	4	22	44
0200	1	4	4	9	18	5	2	7	7	21	39
0300	6	0	2	1	9	3	1	1	2	7	16
0400	6	12	11	3	32	10	9	5	8	32	64
0500	11	9	25	38	83	12	23	26	43	104	187
0600	50	70	97	106	323	53	66	95	135	349	672
0700	133	162	195	201	691	196	215	330	315	1056	1747
0800	186	169	149	121	625	367	370	347	338	1422	2047
0900	117	133	110	104	464	253	229	192	184	858	1322
1000	97	105	103	134	439	139	144	152	124	559	998
1100	104	112	102	102	420	110	118	114	117	459	879
1200	103	95	118	127	443	110	124	119	116	469	912
1300	115	117	111	131	474	103	129	128	108	468	942
1400	115	161	143	174	593	111	101	107	130	449	1042
1500	154	158	156	170	638	125	165	154	142	586	1224
1600	228	243	239	265	975	166	151	187	173	677	1652
1700	320	315	333	298	1266	154	187	211	201	753	2019
1800	228	191	169	118	706	167	205	136	151	659	1365
1900	120	97	98	66	381	102	76	73	64	315	696
2000	82	94	78	55	309	47	63	46	47	203	512
2100	87	73	69	31	260	30	53	80	67	230	490
2200	35	27	27	31	120	54	56	32	55	197	317
2300	36	22	19	14	91	52	42	60	42	196	287
24-Hour Totals:					9424					10123	19547

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	730	751	800	1422	730	2133
P.M.	1700	1266	1730	784	1700	2019
Daily	1700	1266	800	1422	730	2133

Generated by SPS 5.0.44P

County: 93
Station: 1113
Description: PGA E O FL TURNPIKE
Start Date: 04/23/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	23	24	11	8	66	19	21	12	17	69	135
0100	11	9	14	6	40	14	6	12	6	38	78
0200	7	2	7	15	31	1	5	12	11	29	60
0300	3	5	1	7	16	4	5	4	3	16	32
0400	5	14	15	14	48	11	14	9	14	48	96
0500	16	30	32	44	122	24	37	65	71	197	319
0600	85	97	140	207	529	88	111	141	175	515	1044
0700	298	346	577	541	1762	214	265	347	445	1271	3033
0800	448	533	494	487	1962	398	385	339	311	1433	3395
0900	454	385	349	371	1559	295	270	249	262	1076	2635
1000	301	326	315	301	1243	223	244	245	289	1001	2244
1100	295	274	322	335	1226	221	265	267	269	1022	2248
1200	346	357	351	311	1365	275	261	281	315	1132	2497
1300	285	295	297	344	1221	301	293	306	344	1244	2465
1400	316	322	329	318	1285	315	329	315	366	1325	2610
1500	305	314	335	321	1275	344	335	328	364	1371	2646
1600	326	295	377	361	1359	400	476	388	452	1716	3075
1700	485	452	431	433	1801	497	526	599	506	2128	3929
1800	357	336	340	260	1293	375	370	315	255	1315	2608
1900	261	189	201	131	782	260	239	198	207	904	1686
2000	140	131	106	101	478	209	182	187	156	734	1212
2100	86	89	90	73	338	153	142	126	112	533	871
2200	84	76	41	55	256	84	76	70	51	281	537
2300	51	38	35	29	153	45	41	32	20	138	291
24-Hour Totals:					20210					19536	39746

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	730	2099	730	1575	730	3674
P.M.	1700	1801	1700	2128	1700	3929
Daily	730	2099	1700	2128	1700	3929

Generated by SPS 5.0.44P

County: 93
Station: 1061
Description: WB PGA-SB SR-811 TO SB I-95
Start Date: 04/25/2013
Start Time: 0000

	Direction: S				
Time	1st	2nd	3rd	4th	Total
0000	56	56	22	42	176
0100	30	22	19	11	82
0200	9	18	8	15	50
0300	13	8	20	9	50
0400	10	22	34	28	94
0500	37	37	65	81	220
0600	85	145	212	241	683
0700	297	287	396	413	1393
0800	386	379	353	346	1464
0900	272	283	280	298	1133
1000	272	288	280	291	1131
1100	305	298	314	347	1264
1200	300	344	332	304	1280
1300	306	311	322	385	1324
1400	372	385	335	379	1471
1500	387	405	433	377	1602
1600	392	396	409	429	1626
1700	427	442	413	431	1713
1800	415	407	364	296	1482
1900	298	290	289	248	1125
2000	294	294	254	245	1087
2100	259	281	245	215	1000
2200	196	177	159	95	627
2300	106	103	77	70	356
24-Hour Totals:					22433

Peak Volume Information

	Hour	Volume
A.M.	730	1574
P.M.	1700	1713
Daily	1700	1713

Truck Percentage 3.84 NaN 3.84

Classification Summary Database

Dir	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TotTrk	TotVol
S	53	18731	2788	106	393	38	1	70	186	60	2	0	5	0	0	861	22433

Generated by SPS 5.0.44P

County: 93
Station: 1067
Description: RCA S OF PGA
Start Date: 04/25/2013
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	10	2	3	2	17	6	4	5	3	18	35
0100	0	0	0	0	0	4	4	0	4	12	12
0200	2	0	0	0	2	2	1	0	0	3	5
0300	2	0	0	4	6	3	3	9	5	20	26
0400	1	2	0	4	7	3	6	4	5	18	25
0500	0	1	1	3	5	13	14	16	32	75	80
0600	3	5	8	20	36	28	46	56	93	223	259
0700	13	21	40	19	93	98	174	167	260	699	792
0800	46	33	27	38	144	197	226	179	209	811	955
0900	23	30	31	30	114	126	98	78	100	402	516
1000	28	31	28	26	113	67	59	56	83	265	378
1100	38	33	29	45	145	51	52	70	66	239	384
1200	54	40	32	35	161	56	52	65	86	259	420
1300	37	28	37	55	157	65	76	67	82	290	447
1400	46	44	37	21	148	63	63	72	75	273	421
1500	40	38	35	32	145	87	91	98	74	350	495
1600	53	47	71	57	228	74	81	93	91	339	567
1700	73	46	72	67	258	80	107	94	79	360	618
1800	47	53	51	36	187	78	62	69	58	267	454
1900	28	39	34	33	134	42	62	33	45	182	316
2000	28	28	31	32	119	38	36	32	29	135	254
2100	30	16	20	28	94	33	28	21	31	113	207
2200	19	6	9	10	44	26	22	15	20	83	127
2300	12	19	18	6	55	13	15	9	9	46	101
24-Hour Totals:					2412					5482	7894

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	800	144	745	862	730	988
P.M.	1700	258	1645	372	1645	620
Daily	1700	258	745	862	730	988

Generated by SPS 5.0.44P

County: 93
Station: 5501
Description: PGA W OF RCA
Start Date: 04/25/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	62	61	45	36	204	35	22	28	21	106	310
0100	29	29	18	20	96	18	16	7	7	48	144
0200	17	16	11	8	52	12	9	3	1	25	77
0300	12	16	18	22	68	13	3	2	4	22	90
0400	18	18	42	42	120	6	6	5	12	29	149
0500	53	59	95	153	360	10	13	26	24	73	433
0600	150	186	250	421	1007	33	46	59	82	220	1227
0700	412	673	825	1052	2962	99	127	144	152	522	3484
0800	955	948	954	998	3855	171	162	168	158	659	4514
0900	830	793	644	672	2939	147	156	155	160	618	3557
1000	611	536	632	682	2461	130	189	206	218	743	3204
1100	579	587	688	682	2536	226	204	229	281	940	3476
1200	635	662	681	723	2701	235	308	284	291	1118	3819
1300	652	645	687	668	2652	309	282	290	316	1197	3849
1400	610	606	668	680	2564	310	338	281	304	1233	3797
1500	687	660	674	661	2682	339	380	376	356	1451	4133
1600	633	639	675	764	2711	377	393	348	395	1513	4224
1700	660	765	709	796	2930	471	488	445	410	1814	4744
1800	713	734	616	569	2632	371	363	323	319	1376	4008
1900	498	430	410	368	1706	285	302	278	219	1084	2790
2000	298	337	309	274	1218	251	225	238	222	936	2154
2100	236	216	203	217	872	241	228	214	168	851	1723
2200	216	153	154	188	711	133	111	104	70	418	1129
2300	149	117	98	93	457	66	96	51	45	258	715
24-Hour Totals:					40496					17254	57750

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	745	3909	800	659	745	4562
P.M.	1715	2983	1700	1814	1700	4744
Daily	745	3909	1700	1814	1700	4744

Generated by SPS 5.0.44P

County: 93
Station: 5610
Description: PGA W OF LAKE VICTORIA
Start Date: 04/25/2013
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	69	54	42	31	196	67	60	46	54	227	423
0100	31	27	18	17	93	45	39	19	14	117	210
0200	19	15	11	8	53	23	22	7	9	61	114
0300	13	13	12	18	56	18	9	10	8	45	101
0400	13	19	36	41	109	11	17	17	24	69	178
0500	41	43	80	131	295	27	35	49	57	168	463
0600	113	148	195	328	784	64	101	141	171	477	1261
0700	348	526	692	923	2489	211	219	289	328	1047	3536
0800	813	832	833	918	3396	371	342	327	301	1341	4737
0900	754	769	607	628	2758	298	297	324	326	1245	4003
1000	598	530	619	655	2402	285	377	389	425	1476	3878
1100	586	578	679	683	2526	450	404	439	527	1820	4346
1200	661	673	656	699	2689	451	552	547	510	2060	4749
1300	629	645	657	679	2610	523	506	506	619	2154	4764
1400	605	594	646	643	2488	594	641	519	585	2339	4827
1500	680	630	630	660	2600	596	669	691	613	2569	5169
1600	621	641	641	749	2652	641	687	634	694	2656	5308
1700	677	720	726	806	2929	823	784	760	713	3080	6009
1800	716	746	638	552	2652	673	656	561	528	2418	5070
1900	482	441	419	360	1702	498	502	473	413	1886	3588
2000	309	325	309	274	1217	483	460	452	415	1810	3027
2100	252	211	201	212	876	460	455	401	322	1638	2514
2200	207	151	150	175	683	284	232	212	139	867	1550
2300	141	126	107	90	464	145	172	109	98	524	988
24-Hour Totals:					38719					32094	70813

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	745	3401	745	1368	745	4769
P.M.	1730	2994	1700	3080	1700	6009
Daily	745	3401	1700	3080	1700	6009

Generated by SPS 5.0.44P

3 DAY TURNING MOVEMENT COUNT REPORTS

Appendix B - Data Collection

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: I 95 at Donald Ross East Ramps
Site Code:
Start Date: 04/23/2013
Page No: 1

Turning Movement Data

Start Time	I 95 NB Off Ramp Northbound				Southbound Approach Southbound		Donald Ross Rd Eastbound					Donald Ross Rd Westbound				
	Left	Thru	Peds	App. Total	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Peds	App. Total	Int. Total
7:00 AM	11	1	0	12	0	0	0	25	141	0	166	0	217	0	217	395
7:15 AM	21	0	0	21	0	0	0	29	255	0	284	0	245	0	245	550
7:30 AM	22	0	0	22	0	0	0	33	217	0	250	0	303	0	303	575
7:45 AM	25	0	0	25	0	0	0	32	273	0	305	0	324	0	324	654
Hourly Total	79	1	0	80	0	0	0	119	886	0	1005	0	1089	0	1089	2174
8:00 AM	38	0	0	38	0	0	0	26	211	0	237	0	263	0	263	538
8:15 AM	27	0	0	27	0	0	0	22	157	0	179	0	284	0	284	490
8:30 AM	28	0	0	28	1	0	0	23	208	0	231	0	247	0	247	506
8:45 AM	39	0	0	39	0	0	0	29	196	0	225	0	219	0	219	483
Hourly Total	132	0	0	132	1	0	0	100	772	0	872	0	1013	0	1013	2017
9:00 AM	27	0	0	27	0	0	0	20	150	0	170	0	240	0	240	437
9:15 AM	33	0	1	33	0	0	0	19	125	0	144	0	169	0	169	346
9:30 AM	20	0	0	20	1	0	0	15	94	0	109	0	173	0	173	302
9:45 AM	36	0	0	36	0	0	0	16	113	0	129	0	167	0	167	332
Hourly Total	116	0	1	116	1	0	0	70	482	0	552	0	749	0	749	1417
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM	22	1	0	23	0	0	0	21	103	0	124	0	145	0	145	292
11:15 AM	24	1	0	25	0	0	0	23	86	0	109	0	160	0	160	294
11:30 AM	33	1	0	34	1	0	0	17	69	0	86	0	175	0	175	295
11:45 AM	23	0	0	23	2	0	0	27	88	0	115	0	152	0	152	290
Hourly Total	102	3	0	105	3	0	0	88	346	0	434	0	632	0	632	1171
12:00 PM	32	0	0	32	0	0	0	13	72	0	85	0	160	0	160	277
12:15 PM	45	0	0	45	0	0	0	17	69	0	86	0	133	0	133	264
12:30 PM	20	0	0	20	0	0	0	18	87	0	105	0	168	0	168	293
12:45 PM	30	0	0	30	1	0	0	14	64	0	78	0	181	0	181	289
Hourly Total	127	0	0	127	1	0	0	62	292	0	354	0	642	0	642	1123
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00 PM	38	0	0	38	0	0	0	32	77	0	109	0	222	0	222	369
3:15 PM	35	0	0	35	0	0	0	31	103	0	134	0	222	0	222	391
3:30 PM	57	0	0	57	1	0	0	34	92	0	126	0	189	0	189	372
3:45 PM	43	1	0	44	1	0	0	33	101	0	134	0	186	0	186	364
Hourly Total	173	1	0	174	2	0	0	130	373	0	503	0	819	0	819	1496
4:00 PM	32	0	0	32	0	0	0	25	120	0	145	0	249	0	249	426
4:15 PM	49	0	0	49	0	0	0	28	93	0	121	0	244	0	244	414
4:30 PM	47	0	0	47	0	0	0	16	94	0	110	0	255	0	255	412
4:45 PM	71	0	0	71	0	0	0	31	131	0	162	0	225	0	225	458
Hourly Total	199	0	0	199	0	0	0	100	438	0	538	0	973	0	973	1710
5:00 PM	58	0	0	58	0	0	0	14	87	0	101	0	273	0	273	432
5:15 PM	79	0	0	79	0	0	0	38	110	0	148	0	290	0	290	517
5:30 PM	90	0	0	90	0	0	0	35	99	0	134	0	248	0	248	472
5:45 PM	76	0	0	76	0	0	0	25	134	0	159	0	234	0	234	469
Hourly Total	303	0	0	303	0	0	0	112	430	0	542	0	1045	0	1045	1890
Grand Total	1231	5	1	1236	8	0	0	781	4019	0	4800	0	6962	0	6962	12998
Approach %	99.6	0.4	-	-	-	-	0.0	16.3	83.7	-	-	0.0	100.0	-	-	-
Total %	9.5	0.0	-	9.5	-	0.0	0.0	6.0	30.9	-	36.9	0.0	53.6	-	53.6	-
Car	1195	1	-	1196	-	0	0	740	3918	-	4658	0	6765	-	6765	12619
% Car	97.1	20.0	-	96.8	-	-	-	94.8	97.5	-	97.0	-	97.2	-	97.2	97.1
Truck	36	4	-	40	-	0	0	41	101	-	142	0	197	-	197	379
% Truck	2.9	80.0	-	3.2	-	-	-	5.2	2.5	-	3.0	-	2.8	-	2.8	2.9
Ped	-	-	1	-	8	-	-	-	-	0	-	-	-	0	-	-
% Ped	-	-	100.0	-	100.0	-	-	-	-	-	-	-	-	-	-	-

Appendix B - Data Collection

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: I 95 at Donald Ross
East Ramps
Site Code:
Start Date: 04/24/2013
Page No: 1

Turning Movement Data

Start Time	I 95 NB Off Ramp				Southbound Approach		Donald Ross Rd					Donald Ross Rd				
	Northbound				Southbound		Eastbound					Westbound				
	Left	Thru	Peds	App. Total	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Peds	App. Total	Int. Total
7:00 AM	10	1	0	11	0	0	0	31	141	0	172	2	225	0	227	410
7:15 AM	19	0	0	19	0	0	0	30	267	0	297	0	244	0	244	560
7:30 AM	21	0	0	21	0	0	0	35	213	0	248	0	292	0	292	561
7:45 AM	27	0	0	27	0	0	0	18	273	0	291	0	332	0	332	650
Hourly Total	77	1	0	78	0	0	0	114	894	0	1008	2	1093	0	1095	2181
8:00 AM	30	0	0	30	1	0	0	32	202	0	234	0	263	0	263	527
8:15 AM	31	0	0	31	1	0	0	24	199	0	223	1	260	0	261	515
8:30 AM	27	0	0	27	0	0	0	20	203	0	223	0	270	0	270	520
8:45 AM	31	0	0	31	0	0	0	40	196	0	236	0	210	0	210	477
Hourly Total	119	0	0	119	2	0	0	116	800	0	916	1	1003	0	1004	2039
9:00 AM	34	0	0	34	0	0	0	17	168	0	185	0	234	0	234	453
9:15 AM	35	0	0	35	0	0	0	15	119	0	134	0	164	0	164	333
9:30 AM	23	0	0	23	0	0	0	21	90	0	111	0	162	0	162	296
9:45 AM	26	3	4	29	0	0	0	25	100	0	125	0	162	0	162	316
Hourly Total	118	3	4	121	0	0	0	78	477	0	555	0	722	0	722	1398
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM	38	0	0	38	0	0	0	13	89	0	102	0	157	0	157	297
11:15 AM	17	0	0	17	0	0	0	17	103	0	120	0	163	0	163	300
11:30 AM	17	0	0	17	0	0	0	21	85	0	106	0	151	0	151	274
11:45 AM	38	0	0	38	1	0	0	11	96	0	107	0	180	0	180	325
Hourly Total	110	0	0	110	1	0	0	62	373	0	435	0	651	0	651	1196
12:00 PM	32	1	0	33	0	0	0	11	67	0	78	0	178	0	178	289
12:15 PM	38	0	0	38	1	0	0	19	80	0	99	0	168	0	168	305
12:30 PM	22	0	0	22	0	0	0	13	90	0	103	0	193	0	193	318
12:45 PM	23	0	0	23	0	0	0	21	99	0	120	0	145	0	145	288
Hourly Total	115	1	0	116	1	0	0	64	336	0	400	0	684	0	684	1200
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00 PM	40	1	1	41	0	0	0	27	86	0	113	0	216	1	216	370
3:15 PM	39	0	0	39	0	0	0	23	121	0	144	0	218	0	218	401
3:30 PM	55	0	0	55	0	0	0	37	123	0	160	0	199	0	199	414
3:45 PM	45	0	0	45	0	0	0	24	108	0	132	0	191	0	191	368
Hourly Total	179	1	1	180	0	0	0	111	438	0	549	0	824	1	824	1553
4:00 PM	55	0	2	55	1	0	0	24	103	0	127	0	221	0	221	403
4:15 PM	61	0	0	61	0	0	0	33	102	0	135	0	235	0	235	431
4:30 PM	51	0	0	51	0	0	0	32	102	0	134	0	258	0	258	443
4:45 PM	65	0	0	65	0	0	0	32	108	0	140	0	229	0	229	434
Hourly Total	232	0	2	232	1	0	0	121	415	0	536	0	943	0	943	1711
5:00 PM	69	0	0	69	0	0	0	29	99	0	128	0	289	0	289	486
5:15 PM	55	0	0	55	0	0	0	32	117	0	149	0	313	0	313	517
5:30 PM	79	0	0	79	1	0	0	34	119	0	153	0	247	0	247	479
5:45 PM	65	0	0	65	0	0	0	18	99	0	117	0	204	0	204	386
Hourly Total	268	0	0	268	1	0	0	113	434	0	547	0	1053	0	1053	1868
Grand Total	1218	6	7	1224	6	0	0	779	4167	0	4946	3	6973	1	6976	13146
Approach %	99.5	0.5	-	-	-	-	0.0	15.8	84.2	-	-	0.0	100.0	-	-	-
Total %	9.3	0.0	-	9.3	-	0.0	0.0	5.9	31.7	-	37.6	0.0	53.0	-	53.1	-
Car	1183	5	-	1188	-	0	0	743	4073	-	4816	3	6795	-	6798	12802
% Car	97.1	83.3	-	97.1	-	-	-	95.4	97.7	-	97.4	100.0	97.4	-	97.4	97.4
Truck	35	1	-	36	-	0	0	36	94	-	130	0	178	-	178	344
% Truck	2.9	16.7	-	2.9	-	-	-	4.6	2.3	-	2.6	0.0	2.6	-	2.6	2.6
Ped	-	-	7	-	6	-	-	-	-	0	-	-	-	1	-	-
% Ped	-	-	100.0	-	100.0	-	-	-	-	-	-	-	-	100.0	-	-

Appendix B - Data Collection

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: I 95 at Donald Ross East Ramps
Site Code:
Start Date: 04/25/2013
Page No: 1

Turning Movement Data

Start Time	I 92 NB Off Ramp Northbound				Southbound Approach Southbound		Donald Ross Rd Eastbound					Donald Ross Rd Westbound				
	Left	Thru	Peds	App. Total	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Peds	App. Total	Int. Total
7:00 AM	10	1	0	11	0	0	0	23	144	0	167	0	223	0	223	401
7:15 AM	22	1	0	23	0	0	0	36	228	0	264	0	250	0	250	537
7:30 AM	14	0	0	14	0	0	0	38	194	0	232	0	272	0	272	518
7:45 AM	26	0	0	26	0	0	0	23	223	0	246	0	311	0	311	583
Hourly Total	72	2	0	74	0	0	0	120	789	0	909	0	1056	0	1056	2039
8:00 AM	23	1	0	24	0	0	0	27	220	0	247	0	263	0	263	534
8:15 AM	32	2	0	34	0	0	0	23	152	0	175	0	261	0	261	470
8:30 AM	28	0	0	28	1	0	0	23	170	0	193	1	225	0	226	447
8:45 AM	34	0	0	34	0	0	0	26	193	0	219	0	230	0	230	483
Hourly Total	117	3	0	120	1	0	0	99	735	0	834	1	979	0	980	1934
9:00 AM	28	0	0	28	0	0	0	16	161	0	177	0	224	0	224	429
9:15 AM	44	0	0	44	0	0	0	27	109	0	136	0	183	0	183	363
9:30 AM	31	0	0	31	0	0	0	22	122	0	144	0	179	0	179	354
9:45 AM	31	0	0	31	0	0	0	28	115	0	143	0	188	0	188	362
Hourly Total	134	0	0	134	0	0	0	93	507	0	600	0	774	0	774	1508
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM	32	0	0	32	0	0	0	14	98	0	112	0	139	0	139	283
11:15 AM	21	0	0	21	0	0	0	14	106	0	120	0	160	0	160	301
11:30 AM	40	0	0	40	0	0	0	9	98	0	107	0	179	0	179	326
11:45 AM	28	0	0	28	1	0	0	21	103	0	124	0	167	0	167	319
Hourly Total	121	0	0	121	1	0	0	58	405	0	463	0	645	0	645	1229
12:00 PM	29	0	0	29	0	0	0	25	107	0	132	1	170	0	171	332
12:15 PM	34	0	0	34	0	0	0	18	103	0	121	0	176	0	176	331
12:30 PM	28	0	0	28	0	0	0	18	91	0	109	0	187	0	187	324
12:45 PM	34	0	0	34	1	0	0	26	102	0	128	0	161	0	161	323
Hourly Total	125	0	0	125	1	0	0	87	403	0	490	1	694	0	695	1310
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00 PM	28	2	0	30	0	0	0	25	86	0	111	0	199	0	199	340
3:15 PM	44	0	0	44	0	0	0	22	105	0	127	0	211	0	211	382
3:30 PM	50	0	0	50	0	0	0	30	114	0	144	0	218	0	218	412
3:45 PM	44	0	0	44	0	0	0	24	103	0	127	0	230	0	230	401
Hourly Total	166	2	0	168	0	0	0	101	408	0	509	0	858	0	858	1535
4:00 PM	44	0	0	44	0	0	0	29	127	0	156	0	221	0	221	421
4:15 PM	66	0	0	66	1	0	0	33	83	0	116	0	252	0	252	434
4:30 PM	57	0	0	57	1	0	0	13	107	0	120	0	265	0	265	442
4:45 PM	56	0	0	56	0	0	0	25	115	0	140	0	267	0	267	463
Hourly Total	223	0	0	223	2	0	0	100	432	0	532	0	1005	0	1005	1760
5:00 PM	67	0	0	67	0	0	0	25	92	0	117	0	273	0	273	457
5:15 PM	51	0	0	51	0	0	0	22	88	0	110	0	353	0	353	514
5:30 PM	72	0	0	72	0	0	0	26	107	0	133	0	242	0	242	447
5:45 PM	70	0	0	70	1	0	0	24	85	0	109	0	256	0	256	435
Hourly Total	260	0	0	260	1	0	0	97	372	0	469	0	1124	0	1124	1853
Grand Total	1218	7	0	1225	6	0	0	755	4051	0	4806	2	7135	0	7137	13168
Approach %	99.4	0.6	-	-	-	-	0.0	15.7	84.3	-	-	0.0	100.0	-	-	-
Total %	9.2	0.1	-	9.3	-	0.0	0.0	5.7	30.8	-	36.5	0.0	54.2	-	54.2	-
Car	1190	7	-	1197	-	0	0	719	3956	-	4675	2	6932	-	6934	12806
% Car	97.7	100.0	-	97.7	-	-	-	95.2	97.7	-	97.3	100.0	97.2	-	97.2	97.3
Truck	28	0	-	28	-	0	0	36	95	-	131	0	203	-	203	362
% Truck	2.3	0.0	-	2.3	-	-	-	4.8	2.3	-	2.7	0.0	2.8	-	2.8	2.7
Ped	-	-	0	-	6	-	-	-	-	0	-	-	-	0	-	-
% Ped	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-

Appendix B - Data Collection

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: I 95 at Donald Ross
West Ramps
Site Code:
Start Date: 04/23/2013
Page No: 1

Turning Movement Data

Start Time	Northbound Approach		I 95 SB Off Ramp					Donald Ross					Donald Ross					
	Northbound		Southbound					Eastbound					Westbound					
	Peds	App. Total	Left	Thru	Right	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	Int. Total
7:00 AM	0	0	94	0	0	0	94	0	110	0	0	110	0	197	25	0	222	426
7:15 AM	0	0	150	0	0	0	150	0	134	0	0	134	0	208	50	0	258	542
7:30 AM	0	0	180	0	0	0	180	0	82	1	0	83	0	264	54	0	318	581
7:45 AM	0	0	192	0	0	0	192	0	118	0	0	118	0	259	74	0	333	643
Hourly Total	0	0	616	0	0	0	616	0	444	1	0	445	0	928	203	0	1131	2192
8:00 AM	0	0	148	0	0	0	148	0	57	0	0	57	0	265	79	0	344	549
8:15 AM	0	0	129	0	0	0	129	0	80	0	0	80	0	222	69	0	291	500
8:30 AM	0	0	126	0	0	0	126	0	92	0	0	92	0	198	71	0	269	487
8:45 AM	0	0	130	0	0	0	130	0	78	0	0	78	0	223	74	0	297	505
Hourly Total	0	0	533	0	0	0	533	0	307	0	0	307	0	908	293	0	1201	2041
9:00 AM	0	0	98	0	0	0	98	0	103	0	0	103	0	174	80	0	254	455
9:15 AM	1	0	66	0	0	0	66	0	87	0	0	87	0	126	68	0	194	347
9:30 AM	0	0	47	0	0	0	47	0	62	0	0	62	0	139	69	0	208	317
9:45 AM	0	0	71	0	0	0	71	0	68	0	0	68	0	138	61	0	199	338
Hourly Total	1	0	282	0	0	0	282	0	320	0	0	320	0	577	278	0	855	1457
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM	0	0	57	0	0	0	57	0	59	0	0	59	0	102	58	0	160	276
11:15 AM	0	0	44	0	0	0	44	0	72	0	0	72	0	111	80	0	191	307
11:30 AM	0	0	39	0	0	0	39	0	58	0	0	58	0	117	72	0	189	286
11:45 AM	0	0	42	0	0	0	42	0	66	0	0	66	0	120	87	0	207	315
Hourly Total	0	0	182	0	0	0	182	0	255	0	0	255	0	450	297	0	747	1184
12:00 PM	0	0	50	0	0	0	50	0	69	0	0	69	0	106	73	0	179	298
12:15 PM	0	0	40	1	0	0	41	0	45	0	0	45	0	94	86	0	180	266
12:30 PM	0	0	47	0	0	0	47	0	73	0	0	73	0	104	76	0	180	300
12:45 PM	0	0	46	0	0	0	46	0	51	0	0	51	0	124	86	0	210	307
Hourly Total	0	0	183	1	0	0	184	0	238	0	0	238	0	428	321	0	749	1171
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00 PM	1	0	43	0	0	0	43	0	77	0	0	77	0	160	106	0	266	386
3:15 PM	0	0	55	0	0	0	55	0	84	0	0	84	0	123	127	0	250	389
3:30 PM	0	0	46	0	0	0	46	0	63	0	0	63	0	162	110	0	272	381
3:45 PM	0	0	62	0	0	1	62	0	102	0	0	102	0	115	111	0	226	390
Hourly Total	1	0	206	0	0	1	206	0	326	0	0	326	0	560	454	0	1014	1546
4:00 PM	0	0	51	0	0	0	51	0	89	1	0	90	0	156	111	0	267	408
4:15 PM	0	0	50	0	0	0	50	0	72	0	0	72	0	179	133	0	312	434
4:30 PM	0	0	48	0	0	0	48	0	74	0	0	74	0	164	130	0	294	416
4:45 PM	0	0	58	0	0	0	58	0	89	0	0	89	0	177	130	0	307	454
Hourly Total	0	0	207	0	0	0	207	0	324	1	0	325	0	676	504	0	1180	1712
5:00 PM	0	0	56	0	0	0	56	0	69	0	0	69	0	209	121	0	330	455
5:15 PM	0	0	73	0	0	0	73	0	93	0	0	93	0	203	154	0	357	523
5:30 PM	0	0	59	0	0	0	59	0	74	0	0	74	0	220	152	0	372	505
5:45 PM	0	0	71	0	0	0	71	0	100	0	0	100	0	151	127	0	278	449
Hourly Total	0	0	259	0	0	0	259	0	336	0	0	336	0	783	554	0	1337	1932
Grand Total	2	0	2468	1	0	1	2469	0	2550	2	0	2552	0	5310	2904	0	8214	13235
Approach %	-	-	100.0	0.0	0.0	-	-	0.0	99.9	0.1	-	-	0.0	64.6	35.4	-	-	-
Total %	-	0.0	18.6	0.0	0.0	-	18.7	0.0	19.3	0.0	-	19.3	0.0	40.1	21.9	-	62.1	-
Car	-	0	2388	1	0	-	2389	0	2466	2	-	2468	0	5169	2810	-	7979	12836
% Car	-	-	96.8	100.0	-	-	96.8	-	96.7	100.0	-	96.7	-	97.3	96.8	-	97.1	97.0
Truck	-	0	80	0	0	-	80	0	84	0	-	84	0	141	94	-	235	399
% Truck	-	-	3.2	0.0	-	-	3.2	-	3.3	0.0	-	3.3	-	2.7	3.2	-	2.9	3.0
Ped	2	-	-	-	-	1	-	-	-	-	0	-	-	-	-	0	-	-
% Ped	100.0	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-

Appendix B - Data Collection

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: I 95 at Donald Ross
West Ramps
Site Code:
Start Date: 04/24/2013
Page No: 1

Turning Movement Data

Start Time	Northbound Approach		I 95 SB Off Ramp					Donald Ross					Donald Ross					
	Northbound		Southbound					Eastbound					Westbound					
	Peds	App. Total	Left	Thru	Right	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	Int. Total
7:00 AM	0	0	107	0	0	0	107	0	94	0	0	94	0	174	20	0	194	395
7:15 AM	0	0	131	0	0	0	131	0	137	0	0	137	0	231	54	0	285	553
7:30 AM	0	0	171	0	0	0	171	0	86	0	0	86	0	264	51	0	315	572
7:45 AM	0	0	212	0	0	0	212	0	109	0	0	109	0	268	60	0	328	649
Hourly Total	0	0	621	0	0	0	621	0	426	0	0	426	0	937	185	0	1122	2169
8:00 AM	0	0	156	1	0	1	157	0	74	0	0	74	0	256	62	0	318	549
8:15 AM	0	0	151	0	0	1	151	0	104	0	0	104	0	193	86	0	279	534
8:30 AM	0	0	108	0	0	0	108	0	103	0	0	103	0	225	74	0	299	510
8:45 AM	1	0	135	0	0	0	135	0	105	0	0	105	0	218	66	0	284	524
Hourly Total	1	0	550	1	0	2	551	0	386	0	0	386	0	892	288	0	1180	2117
9:00 AM	0	0	103	1	0	0	104	0	100	0	0	100	0	178	76	0	254	458
9:15 AM	0	0	74	1	0	0	75	0	53	0	0	53	0	136	61	0	197	325
9:30 AM	0	0	55	0	0	0	55	0	58	0	0	58	0	119	64	0	183	296
9:45 AM	1	0	54	0	0	0	54	0	85	0	0	85	0	127	61	0	188	327
Hourly Total	1	0	286	2	0	0	288	0	296	0	0	296	0	560	262	0	822	1406
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM	0	0	61	0	0	2	61	0	55	0	0	55	0	114	81	0	195	311
11:15 AM	0	0	43	0	0	0	43	0	66	0	0	66	0	124	67	0	191	300
11:30 AM	0	0	56	0	0	0	56	0	65	1	0	66	0	114	38	0	152	274
11:45 AM	0	0	37	0	0	0	37	0	56	0	0	56	0	133	91	0	224	317
Hourly Total	0	0	197	0	0	2	197	0	242	1	0	243	0	485	277	0	762	1202
12:00 PM	1	0	30	0	0	0	30	0	54	0	0	54	0	115	83	0	198	282
12:15 PM	0	0	28	0	0	1	28	0	66	0	0	66	0	129	98	0	227	321
12:30 PM	0	0	40	1	0	0	41	0	59	0	0	59	0	108	85	0	193	293
12:45 PM	0	0	50	0	0	0	50	0	65	0	0	65	0	109	71	0	180	295
Hourly Total	1	0	148	1	0	1	149	0	244	0	0	244	0	461	337	0	798	1191
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00 PM	0	0	42	0	0	1	42	0	80	0	0	80	0	128	114	0	242	364
3:15 PM	1	0	63	2	0	0	65	0	80	0	0	80	0	136	109	0	245	390
3:30 PM	0	0	64	0	0	0	64	0	77	0	0	77	0	151	110	0	261	402
3:45 PM	0	0	62	1	0	0	63	0	87	0	0	87	0	115	104	0	219	369
Hourly Total	1	0	231	3	0	1	234	0	324	0	0	324	0	530	437	0	967	1525
4:00 PM	2	0	35	0	0	1	35	0	79	0	0	79	0	144	135	0	279	393
4:15 PM	0	0	54	1	0	0	55	0	80	0	0	80	0	182	131	0	313	448
4:30 PM	0	0	69	0	0	0	69	0	74	0	0	74	0	149	126	0	275	418
4:45 PM	0	0	54	0	0	0	54	0	62	0	0	62	0	184	132	0	316	432
Hourly Total	2	0	212	1	0	1	213	0	295	0	0	295	0	659	524	0	1183	1691
5:00 PM	0	0	66	0	0	0	66	0	85	0	0	85	0	199	142	0	341	492
5:15 PM	0	0	54	0	0	0	54	0	98	0	0	98	0	208	156	0	364	516
5:30 PM	0	0	65	0	0	0	65	0	82	0	0	82	0	205	143	0	348	495
5:45 PM	0	0	68	0	0	0	68	0	82	1	0	83	0	129	137	0	266	417
Hourly Total	0	0	253	0	0	0	253	0	347	1	0	348	0	741	578	0	1319	1920
Grand Total	6	0	2498	8	0	7	2506	0	2560	2	0	2562	0	5265	2888	0	8153	13221
Approach %	-	-	99.7	0.3	0.0	-	-	0.0	99.9	0.1	-	-	0.0	64.6	35.4	-	-	-
Total %	-	0.0	18.9	0.1	0.0	-	19.0	0.0	19.4	0.0	-	19.4	0.0	39.8	21.8	-	61.7	-
Car	-	0	2426	6	0	-	2432	0	2496	2	-	2498	0	5132	2809	-	7941	12871
% Car	-	-	97.1	75.0	-	-	97.0	-	97.5	100.0	-	97.5	-	97.5	97.3	-	97.4	97.4
Truck	-	0	72	2	0	-	74	0	64	0	-	64	0	133	79	-	212	350
% Truck	-	-	2.9	25.0	-	-	3.0	-	2.5	0.0	-	2.5	-	2.5	2.7	-	2.6	2.6
Ped	6	-	-	-	-	7	-	-	-	-	0	-	-	-	-	0	-	-
% Ped	100.0	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-

Appendix B - Data Collection

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: I 95 at Donald Ross
West Ramps
Site Code:
Start Date: 04/25/2013
Page No: 1

Turning Movement Data

Start Time	Northbound Approach		I 95 SB Off Ramp				Donald Ross				Donald Ross					
	Northbound		Southbound				Eastbound				Westbound					
	Peds	App. Total	Left	Thru	Peds	App. Total	U-Turn	Thru	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	Int. Total
7:00 AM	0	0	116	0	0	116	0	91	0	91	0	180	19	0	199	406
7:15 AM	0	0	141	0	0	141	0	137	0	137	0	217	61	0	278	556
7:30 AM	0	0	169	0	0	169	0	89	0	89	0	237	46	0	283	541
7:45 AM	0	0	197	0	0	197	0	111	0	111	0	246	64	0	310	618
Hourly Total	0	0	623	0	0	623	0	428	0	428	0	880	190	0	1070	2121
8:00 AM	0	0	149	1	1	150	0	83	0	83	0	260	68	0	328	561
8:15 AM	0	0	153	0	0	153	0	75	0	75	0	217	57	0	274	502
8:30 AM	0	0	111	0	1	111	0	91	0	91	0	165	68	0	233	435
8:45 AM	0	0	122	0	0	122	0	93	0	93	0	237	75	0	312	527
Hourly Total	0	0	535	1	2	536	0	342	0	342	0	879	268	0	1147	2025
9:00 AM	0	0	87	0	0	87	0	80	0	80	0	159	71	0	230	397
9:15 AM	0	0	81	0	0	81	0	68	0	68	0	157	76	0	233	382
9:30 AM	0	0	62	0	0	62	0	52	0	52	0	136	83	0	219	333
9:45 AM	0	0	68	0	0	68	0	90	0	90	0	143	68	0	211	369
Hourly Total	0	0	298	0	0	298	0	290	0	290	0	595	298	0	893	1481
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM	0	0	61	1	0	62	0	50	0	50	0	112	63	0	175	287
11:15 AM	0	0	52	2	0	54	0	71	0	71	0	103	84	0	187	312
11:30 AM	0	0	63	0	0	63	0	57	0	57	0	128	75	0	203	323
11:45 AM	0	0	55	0	1	55	0	61	0	61	0	128	82	0	210	326
Hourly Total	0	0	231	3	1	234	0	239	0	239	0	471	304	0	775	1248
12:00 PM	0	0	54	0	0	54	0	68	0	68	0	112	76	0	188	310
12:15 PM	0	0	54	0	0	54	0	58	0	58	0	139	80	0	219	331
12:30 PM	1	0	49	3	0	52	0	57	0	57	0	123	89	0	212	321
12:45 PM	0	0	60	0	1	60	0	59	0	59	0	127	69	0	196	315
Hourly Total	1	0	217	3	1	220	0	242	0	242	0	501	314	0	815	1277
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00 PM	0	0	49	0	0	49	0	66	0	66	0	152	95	0	247	362
3:15 PM	0	0	61	0	0	61	0	76	0	76	0	136	104	0	240	377
3:30 PM	0	0	64	0	0	64	0	71	0	71	0	191	100	0	291	426
3:45 PM	0	0	67	0	0	67	0	84	0	84	0	144	109	0	253	404
Hourly Total	0	0	241	0	0	241	0	297	0	297	0	623	408	0	1031	1569
4:00 PM	0	0	47	0	0	47	0	104	0	104	0	149	113	0	262	413
4:15 PM	0	0	46	0	1	46	0	72	0	72	0	191	147	0	338	456
4:30 PM	0	0	58	1	1	59	0	77	0	77	0	169	113	0	282	418
4:45 PM	0	0	60	1	0	61	0	69	0	69	0	207	133	0	340	470
Hourly Total	0	0	211	2	2	213	0	322	0	322	0	716	506	0	1222	1757
5:00 PM	0	0	61	0	0	61	0	71	0	71	0	197	117	0	314	446
5:15 PM	0	0	66	0	0	66	0	63	0	63	0	263	143	0	406	535
5:30 PM	0	0	60	1	0	61	0	69	0	69	0	195	155	0	350	480
5:45 PM	0	0	59	1	1	60	0	92	0	92	0	149	145	0	294	446
Hourly Total	0	0	246	2	1	248	0	295	0	295	0	804	560	0	1364	1907
Grand Total	1	0	2602	11	7	2613	0	2455	0	2455	0	5469	2848	0	8317	13385
Approach %	-	-	99.6	0.4	-	-	0.0	100.0	-	-	0.0	65.8	34.2	-	-	-
Total %	-	0.0	19.4	0.1	-	19.5	0.0	18.3	-	18.3	0.0	40.9	21.3	-	62.1	-
Car	-	0	2498	10	-	2508	0	2391	-	2391	0	5301	2773	-	8074	12973
% Car	-	-	96.0	90.9	-	96.0	-	97.4	-	97.4	-	96.9	97.4	-	97.1	96.9
Truck	-	0	104	1	-	105	0	64	-	64	0	168	75	-	243	412
% Truck	-	-	4.0	9.1	-	4.0	-	2.6	-	2.6	-	3.1	2.6	-	2.9	3.1
Ped	1	-	-	-	7	-	-	-	0	-	-	-	-	0	-	-
% Ped	100.0	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: Northlake Blvd at East Ramps
Site Code:
Start Date: 04/30/2013
Page No: 1

Turning Movement Data

Start Time	East Ramps Northbound					Southbound Approach Southbound		Northlake Blvd Eastbound					Northlake Blvd Westbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	
7:00 AM	82	0	147	0	229	1	0	3	84	221	0	308	0	221	79	1	300	837
7:15 AM	81	0	181	0	262	1	0	0	112	302	0	414	0	299	70	0	369	1045
7:30 AM	71	0	262	0	333	0	0	1	161	343	0	505	0	312	86	0	398	1236
7:45 AM	100	0	235	0	335	0	0	0	135	429	0	564	0	382	101	0	483	1382
Hourly Total	334	0	825	0	1159	2	0	4	492	1295	0	1791	0	1214	336	1	1550	4500
8:00 AM	131	3	250	0	384	2	0	2	125	327	0	454	0	440	75	0	515	1353
8:15 AM	119	1	239	0	359	8	0	4	136	364	0	504	0	349	82	0	431	1294
8:30 AM	117	0	238	0	355	2	0	1	123	347	0	471	0	305	84	0	389	1215
8:45 AM	123	0	243	0	366	1	0	4	130	344	0	478	0	351	100	0	451	1295
Hourly Total	490	4	970	0	1464	13	0	11	514	1382	0	1907	0	1445	341	0	1786	5157
9:00 AM	73	0	210	1	283	1	0	0	116	338	0	454	0	338	74	0	412	1149
9:15 AM	76	0	168	0	244	1	0	0	94	307	0	401	0	282	80	0	362	1007
9:30 AM	73	0	157	0	230	2	0	0	87	298	0	385	0	261	80	0	341	956
9:45 AM	96	1	186	1	283	4	0	0	80	365	0	445	0	351	74	0	425	1153
Hourly Total	318	1	721	2	1040	8	0	0	377	1308	0	1685	0	1232	308	0	1540	4265
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM	74	0	161	1	235	0	0	2	61	326	0	389	0	419	118	0	537	1161
11:15 AM	63	0	181	0	244	0	0	2	79	318	0	399	0	332	101	0	433	1076
11:30 AM	74	0	180	0	254	0	0	2	69	376	0	447	0	423	109	0	532	1233
11:45 AM	96	0	164	0	260	0	0	3	71	369	0	443	0	420	149	0	569	1272
Hourly Total	307	0	686	1	993	0	0	9	280	1389	0	1678	0	1594	477	0	2071	4742
12:00 PM	82	0	198	0	280	0	0	4	85	418	0	507	1	390	108	0	499	1286
12:15 PM	116	1	199	0	316	4	0	1	92	416	0	509	0	489	119	0	608	1433
12:30 PM	89	0	187	0	276	1	0	3	78	353	0	434	0	431	116	0	547	1257
12:45 PM	74	1	204	0	279	1	0	3	75	408	0	486	0	487	152	1	639	1404
Hourly Total	361	2	788	0	1151	6	0	11	330	1595	0	1936	1	1797	495	1	2293	5380
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00 PM	129	0	202	0	331	0	0	2	71	261	0	334	0	390	128	0	518	1183
3:15 PM	109	0	219	0	328	0	0	1	76	283	0	360	0	389	126	0	515	1203
3:30 PM	113	1	193	0	307	0	0	0	76	321	0	397	0	438	139	0	577	1281
3:45 PM	129	0	234	0	363	0	0	1	95	345	0	441	0	379	138	0	517	1321
Hourly Total	480	1	848	0	1329	0	0	4	318	1210	0	1532	0	1596	531	0	2127	4988
4:00 PM	121	0	231	0	352	0	0	5	62	306	0	373	0	410	153	0	563	1288
4:15 PM	157	0	229	0	386	0	0	6	75	324	0	405	0	471	140	0	611	1402
4:30 PM	138	0	244	1	382	0	0	2	101	348	0	451	0	468	157	0	625	1458
4:45 PM	152	0	220	1	372	0	0	1	101	338	0	440	0	395	154	0	549	1361
Hourly Total	568	0	924	2	1492	0	0	14	339	1316	0	1669	0	1744	604	0	2348	5509
5:00 PM	150	1	206	0	357	2	0	1	117	293	0	411	0	486	163	0	649	1417
5:15 PM	192	0	281	0	473	1	0	5	110	352	0	467	0	627	186	1	813	1753
5:30 PM	152	2	291	0	445	3	0	4	93	410	0	507	0	523	159	0	682	1634
5:45 PM	154	0	199	0	353	3	0	1	98	333	0	432	0	497	143	0	640	1425
Hourly Total	648	3	977	0	1628	9	0	11	418	1388	0	1817	0	2133	651	1	2784	6229
Grand Total	3506	11	6739	5	10256	38	0	64	3068	10883	0	14015	1	12755	3743	3	16499	40770
Approach %	34.2	0.1	65.7	-	-	-	-	0.5	21.9	77.7	-	-	0.0	77.3	22.7	-	-	-
Total %	8.6	0.0	16.5	-	25.2	-	0.0	0.2	7.5	26.7	-	34.4	0.0	31.3	9.2	-	40.5	-
Car	3413	10	6567	-	9990	-	0	59	2999	10649	-	13707	1	12432	3636	-	16069	39766
% Car	97.3	90.9	97.4	-	97.4	-	-	92.2	97.8	97.8	-	97.8	100.0	97.5	97.1	-	97.4	97.5
Truck	93	1	172	-	266	-	0	5	69	234	-	308	0	323	107	-	430	1004
% Truck	2.7	9.1	2.6	-	2.6	-	-	7.8	2.2	2.2	-	2.2	0.0	2.5	2.9	-	2.6	2.5
Ped	-	-	-	5	-	38	-	-	-	-	0	-	-	-	-	3	-	-
% Ped	-	-	-	100.0	-	100.0	-	-	-	-	-	-	-	-	-	100.0	-	-

Appendix B - Data Collection

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: Northlake Blvd at East Ramps
Site Code:
Start Date: 05/01/2013
Page No: 1

Turning Movement Data

Start Time	East Ramps Northbound					Southbound Approach Southbound		Northlake Blvd Eastbound					Northlake Blvd Westbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	
7:00 AM	84	0	130	0	214	3	0	3	95	221	0	319	0	230	69	0	299	832
7:15 AM	82	0	205	0	287	3	0	1	129	325	0	455	0	316	77	0	393	1135
7:30 AM	86	0	247	0	333	1	0	2	162	358	0	522	0	308	87	0	395	1250
7:45 AM	105	1	267	0	373	1	0	1	125	411	0	537	0	382	95	0	477	1387
Hourly Total	357	1	849	0	1207	8	0	7	511	1315	0	1833	0	1236	328	0	1564	4604
8:00 AM	103	0	208	0	311	2	0	0	134	367	0	501	0	468	84	0	552	1364
8:15 AM	96	0	195	0	291	6	0	1	128	365	0	494	0	336	91	0	427	1212
8:30 AM	92	0	203	0	295	2	0	0	99	314	0	413	0	321	82	0	403	1111
8:45 AM	136	0	199	0	335	0	0	0	125	344	0	469	0	292	97	0	389	1193
Hourly Total	427	0	805	0	1232	10	0	1	486	1390	0	1877	0	1417	354	0	1771	4880
9:00 AM	91	0	224	0	315	1	0	0	109	288	0	397	0	340	88	0	428	1140
9:15 AM	94	0	154	0	248	0	0	0	112	317	0	429	0	247	77	0	324	1001
9:30 AM	54	0	162	0	216	1	0	0	93	278	0	371	0	212	84	0	296	883
9:45 AM	71	0	183	0	254	1	0	0	65	359	0	424	0	265	62	0	327	1005
Hourly Total	310	0	723	0	1033	3	0	0	379	1242	0	1621	0	1064	311	0	1375	4029
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM	74	0	168	0	242	2	0	1	57	397	0	455	0	341	102	0	443	1140
11:15 AM	78	1	202	0	281	1	0	2	76	373	0	451	0	347	121	0	468	1200
11:30 AM	80	0	184	0	264	2	0	2	66	366	0	434	0	407	116	0	523	1221
11:45 AM	100	0	192	0	292	3	0	2	103	409	0	514	0	373	124	0	497	1303
Hourly Total	332	1	746	0	1079	8	0	7	302	1545	0	1854	0	1468	463	0	1931	4864
12:00 PM	93	0	202	0	295	1	0	3	73	394	0	470	0	373	152	0	525	1290
12:15 PM	70	0	193	0	263	1	0	4	74	411	0	489	0	468	146	1	614	1366
12:30 PM	80	1	184	0	265	3	0	3	80	429	0	512	0	378	125	0	503	1280
12:45 PM	102	0	209	0	311	6	0	0	59	350	0	409	0	448	154	0	602	1322
Hourly Total	345	1	788	0	1134	11	0	10	286	1584	0	1880	0	1667	577	1	2244	5258
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00 PM	116	0	208	0	324	3	0	4	70	322	0	396	0	448	152	0	600	1320
3:15 PM	112	0	217	0	329	6	0	1	84	368	0	453	0	459	157	0	616	1398
3:30 PM	98	1	235	0	334	6	0	0	74	389	0	463	0	590	167	0	757	1554
3:45 PM	136	1	259	0	396	0	0	1	112	333	0	446	0	429	185	0	614	1456
Hourly Total	462	2	919	0	1383	15	0	6	340	1412	0	1758	0	1926	661	0	2587	5728
4:00 PM	154	0	219	0	373	3	0	2	104	346	0	452	0	447	156	0	603	1428
4:15 PM	128	0	222	0	350	1	0	3	77	385	0	465	0	543	154	0	697	1512
4:30 PM	118	0	272	0	390	4	0	3	78	349	0	430	1	550	170	0	721	1541
4:45 PM	166	1	261	0	428	3	0	5	97	339	0	441	0	497	183	0	680	1549
Hourly Total	566	1	974	0	1541	11	0	13	356	1419	0	1788	1	2037	663	0	2701	6030
5:00 PM	127	1	185	1	313	3	0	5	138	342	0	485	0	495	202	0	697	1495
5:15 PM	143	0	225	0	368	0	0	2	70	298	0	370	0	567	139	0	706	1444
5:30 PM	164	0	277	0	441	0	0	2	58	265	0	325	1	521	167	0	689	1455
5:45 PM	146	1	194	0	341	0	0	4	83	325	0	412	0	435	124	0	559	1312
Hourly Total	580	2	881	1	1463	3	0	13	349	1230	0	1592	1	2018	632	0	2651	5706
Grand Total	3379	8	6685	1	10072	69	0	57	3009	11137	0	14203	2	12833	3989	1	16824	41099
Approach %	33.5	0.1	66.4	-	-	-	-	0.4	21.2	78.4	-	-	0.0	76.3	23.7	-	-	-
Total %	8.2	0.0	16.3	-	24.5	-	0.0	0.1	7.3	27.1	-	34.6	0.0	31.2	9.7	-	40.9	-
Car	3289	6	6529	-	9824	-	0	55	2930	10909	-	13894	2	12544	3893	-	16439	40157
% Car	97.3	75.0	97.7	-	97.5	-	-	96.5	97.4	98.0	-	97.8	100.0	97.7	97.6	-	97.7	97.7
Truck	90	2	156	-	248	-	0	2	79	228	-	309	0	289	96	-	385	942
% Truck	2.7	25.0	2.3	-	2.5	-	-	3.5	2.6	2.0	-	2.2	0.0	2.3	2.4	-	2.3	2.3
Ped	-	-	-	1	-	69	-	-	-	-	0	-	-	-	-	1	-	-
% Ped	-	-	-	100.0	-	100.0	-	-	-	-	-	-	-	-	-	100.0	-	-

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: Northlake Blvd at East Ramps
Site Code:
Start Date: 05/02/2013
Page No: 1

Turning Movement Data

Start Time	East Ramps Northbound					Southbound Approach Southbound		Northlake Blvd Eastbound					Northlake Blvd Westbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	
7:00 AM	88	0	124	3	212	5	0	3	83	212	0	298	0	221	67	0	288	798
7:15 AM	74	0	197	1	271	2	0	1	99	278	0	378	0	298	81	0	379	1028
7:30 AM	93	1	229	0	323	1	0	1	124	319	0	444	0	338	88	0	426	1193
7:45 AM	108	0	260	4	368	2	0	0	168	459	0	627	0	385	105	0	490	1485
Hourly Total	363	1	810	8	1174	10	0	5	474	1268	0	1747	0	1242	341	0	1583	4504
8:00 AM	70	0	200	0	270	2	0	0	107	418	0	525	0	419	90	0	509	1304
8:15 AM	122	1	228	0	351	8	0	4	139	319	0	462	0	345	77	0	422	1235
8:30 AM	97	0	202	0	299	2	0	1	156	339	0	496	0	336	86	0	422	1217
8:45 AM	105	0	206	0	311	2	0	0	157	380	0	537	0	371	110	0	481	1329
Hourly Total	394	1	836	0	1231	14	0	5	559	1456	0	2020	0	1471	363	0	1834	5085
9:00 AM	96	0	201	0	297	4	0	0	111	325	0	436	0	302	108	0	410	1143
9:15 AM	92	0	169	2	261	2	0	0	107	328	0	435	0	290	91	1	381	1077
9:30 AM	70	0	150	0	220	0	0	0	84	317	0	401	0	274	97	0	371	992
9:45 AM	77	0	195	1	272	3	0	0	70	344	0	414	0	347	88	0	435	1121
Hourly Total	335	0	715	3	1050	9	0	0	372	1314	0	1686	0	1213	384	1	1597	4333
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM	68	0	147	0	215	0	0	1	59	354	0	414	0	374	116	2	490	1119
11:15 AM	75	0	162	0	237	1	0	1	61	358	0	420	0	307	109	0	416	1073
11:30 AM	58	0	152	0	210	0	0	1	54	287	0	342	0	351	97	0	448	1000
11:45 AM	109	0	213	0	322	0	0	1	81	350	0	432	0	339	86	0	425	1179
Hourly Total	310	0	674	0	984	1	0	4	255	1349	0	1608	0	1371	408	2	1779	4371
12:00 PM	72	0	191	0	263	1	0	3	75	325	0	403	0	409	115	0	524	1190
12:15 PM	63	0	162	0	225	1	0	2	57	377	0	436	0	396	139	0	535	1196
12:30 PM	99	0	152	0	251	2	0	2	67	333	0	402	0	333	133	0	466	1119
12:45 PM	72	0	179	0	251	2	0	0	68	284	0	352	0	400	120	0	520	1123
Hourly Total	306	0	684	0	990	6	0	7	267	1319	0	1593	0	1538	507	0	2045	4628
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00 PM	98	0	191	0	289	0	0	5	73	287	0	365	1	358	110	0	469	1123
3:15 PM	88	1	168	0	257	1	0	3	75	329	0	407	1	336	106	0	443	1107
3:30 PM	97	0	168	0	265	0	0	0	64	300	0	364	0	468	108	0	576	1205
3:45 PM	123	0	247	0	370	0	0	5	74	283	0	362	0	380	128	0	508	1240
Hourly Total	406	1	774	0	1181	1	0	13	286	1199	0	1498	2	1542	452	0	1996	4675
4:00 PM	109	0	161	0	270	0	0	2	78	350	0	430	0	385	140	0	525	1225
4:15 PM	122	1	154	0	277	0	0	1	82	299	0	382	0	471	152	0	623	1282
4:30 PM	131	0	204	0	335	0	0	2	64	281	0	347	0	402	131	0	533	1215
4:45 PM	150	0	218	0	368	1	0	4	61	282	0	347	0	410	120	0	530	1245
Hourly Total	512	1	737	0	1250	1	0	9	285	1212	0	1506	0	1668	543	0	2211	4967
5:00 PM	143	0	199	0	342	0	0	6	93	298	0	397	0	443	163	0	606	1345
5:15 PM	152	1	224	0	377	0	0	2	100	289	0	391	0	531	168	0	699	1467
5:30 PM	146	0	228	0	374	0	0	2	73	303	0	378	0	452	146	0	598	1350
5:45 PM	128	0	168	0	296	0	0	3	116	318	0	437	0	414	122	0	536	1269
Hourly Total	569	1	819	0	1389	0	0	13	382	1208	0	1603	0	1840	599	0	2439	5431
Grand Total	3195	5	6049	11	9249	42	0	56	2880	10325	0	13261	2	11885	3597	3	15484	37994
Approach %	34.5	0.1	65.4	-	-	-	-	0.4	21.7	77.9	-	-	0.0	76.8	23.2	-	-	-
Total %	8.4	0.0	15.9	-	24.3	-	0.0	0.1	7.6	27.2	-	34.9	0.0	31.3	9.5	-	40.8	-
Car	3112	5	5906	-	9023	-	0	55	2810	10099	-	12964	2	11622	3468	-	15092	37079
% Car	97.4	100.0	97.6	-	97.6	-	-	98.2	97.6	97.8	-	97.8	100.0	97.8	96.4	-	97.5	97.6
Truck	83	0	143	-	226	-	0	1	70	226	-	297	0	263	129	-	392	915
% Truck	2.6	0.0	2.4	-	2.4	-	-	1.8	2.4	2.2	-	2.2	0.0	2.2	3.6	-	2.5	2.4
Ped	-	-	-	11	-	42	-	-	-	-	0	-	-	-	-	3	-	-
% Ped	-	-	-	100.0	-	100.0	-	-	-	-	-	-	-	-	-	100.0	-	-

Appendix B - Data Collection

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: NorthLake Blvd at West Ramps
Site Code:
Start Date: 04/30/2013
Page No: 1

Turning Movement Data

Start Time	Northbound Approach		West Ramps					Northlake Blvd					Northlake Blvd					
	Northbound		Southbound					Eastbound					Westbound					
	Peds	App. Total	Left	Thru	Right	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	Int. Total
7:00 AM	4	0	71	0	50	0	121	0	231	164	0	395	0	146	169	0	315	831
7:15 AM	2	0	95	0	50	0	145	0	285	173	0	458	0	197	179	0	376	979
7:30 AM	2	0	120	0	63	0	183	1	341	214	0	556	0	231	172	0	403	1142
7:45 AM	2	0	158	0	89	0	247	0	445	197	0	642	0	226	263	0	489	1378
Hourly Total	10	0	444	0	252	0	696	1	1302	748	0	2051	0	800	783	0	1583	4330
8:00 AM	3	0	148	0	97	0	245	0	312	186	0	498	1	244	261	0	506	1249
8:15 AM	0	0	114	1	91	0	206	0	331	174	0	505	0	259	257	0	516	1227
8:30 AM	0	0	124	0	82	1	206	0	386	168	0	554	0	184	265	0	449	1209
8:45 AM	3	0	137	0	102	0	239	0	358	112	0	470	1	155	267	0	423	1132
Hourly Total	6	0	523	1	372	1	896	0	1387	640	0	2027	2	842	1050	0	1894	4817
9:00 AM	2	0	92	1	79	0	172	0	244	122	0	366	0	184	266	0	450	988
9:15 AM	0	0	97	0	74	0	171	0	206	124	0	330	2	147	226	0	375	876
9:30 AM	2	0	98	0	56	0	154	0	178	103	0	281	1	126	208	0	335	770
9:45 AM	2	0	129	0	86	0	215	0	173	98	0	271	1	163	240	0	404	890
Hourly Total	6	0	416	1	295	0	712	0	801	447	0	1248	4	620	940	0	1564	3524
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM	2	0	97	0	77	4	174	1	310	93	0	404	0	166	289	0	455	1033
11:15 AM	0	0	91	0	65	0	156	0	324	93	0	417	1	156	287	0	444	1017
11:30 AM	2	0	112	0	73	0	185	0	280	87	0	367	1	172	315	0	488	1040
11:45 AM	1	0	104	0	70	0	174	0	397	103	0	500	2	143	323	0	468	1142
Hourly Total	5	0	404	0	285	4	689	1	1311	376	0	1688	4	637	1214	0	1855	4232
12:00 PM	0	0	104	0	89	4	193	0	363	92	0	455	1	193	350	0	544	1192
12:15 PM	0	0	133	0	78	0	211	0	347	118	0	465	6	186	382	0	574	1250
12:30 PM	2	0	96	2	80	0	178	0	369	101	0	470	2	167	377	0	546	1194
12:45 PM	0	0	102	0	70	1	172	0	339	112	0	451	12	169	388	0	569	1192
Hourly Total	2	0	435	2	317	5	754	0	1418	423	0	1841	21	715	1497	0	2233	4828
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00 PM	0	0	68	1	64	0	133	0	238	89	0	327	3	165	368	0	536	996
3:15 PM	0	0	92	0	67	0	159	0	315	89	0	404	1	181	332	0	514	1077
3:30 PM	0	0	86	0	79	0	165	0	309	114	0	423	2	187	323	0	512	1100
3:45 PM	0	0	87	0	65	0	152	0	296	82	0	378	1	177	368	0	546	1076
Hourly Total	0	0	333	1	275	0	609	0	1158	374	0	1532	7	710	1391	0	2108	4249
4:00 PM	1	0	76	0	84	0	160	2	314	89	0	405	1	174	400	0	575	1140
4:15 PM	1	0	130	0	108	0	238	0	296	109	0	405	0	204	370	0	574	1217
4:30 PM	3	0	89	0	73	0	162	0	290	95	0	385	3	218	431	0	652	1199
4:45 PM	8	0	90	0	95	0	185	0	336	113	0	449	0	174	401	0	575	1209
Hourly Total	13	0	385	0	360	0	745	2	1236	406	0	1644	4	770	1602	0	2376	4765
5:00 PM	0	0	99	0	103	1	202	0	361	155	0	516	1	204	412	0	617	1335
5:15 PM	5	0	128	0	110	0	238	0	335	113	0	448	2	272	507	0	781	1467
5:30 PM	2	0	110	1	102	2	213	0	369	103	0	472	0	235	484	0	719	1404
5:45 PM	3	0	106	0	118	0	224	0	380	117	0	497	2	224	443	0	669	1390
Hourly Total	10	0	443	1	433	3	877	0	1445	488	0	1933	5	935	1846	0	2786	5596
Grand Total	52	0	3383	6	2589	13	5978	4	10058	3902	0	13964	47	6029	10323	0	16399	36341
Approach %	-	-	56.6	0.1	43.3	-	-	0.0	72.0	27.9	-	-	0.3	36.8	62.9	-	-	-
Total %	-	0.0	9.3	0.0	7.1	-	16.4	0.0	27.7	10.7	-	38.4	0.1	16.6	28.4	-	45.1	-
Car	-	0	3303	5	2509	-	5817	4	9853	3807	-	13664	47	5859	10066	-	15972	35453
% Car	-	-	97.6	83.3	96.9	-	97.3	100.0	98.0	97.6	-	97.9	100.0	97.2	97.5	-	97.4	97.6
Truck	-	0	80	1	80	-	161	0	205	95	-	300	0	170	257	-	427	888
% Truck	-	-	2.4	16.7	3.1	-	2.7	0.0	2.0	2.4	-	2.1	0.0	2.8	2.5	-	2.6	2.4
Ped	52	-	-	-	-	13	-	-	-	-	0	-	-	-	-	0	-	-
% Ped	100.0	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-

Appendix B - Data Collection

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: NorthLake Blvd at West Ramps
Site Code:
Start Date: 05/01/2013
Page No: 1

Turning Movement Data

Start Time	Northbound Approach		West Ramps					North Lake Blvd					North Lake Blvd					
	Northbound		Southbound					Eastbound					Westbound					
	Peds	App. Total	Left	Thru	Right	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	Int. Total
7:00 AM	2	0	73	0	67	1	140	0	240	137	1	377	0	163	152	1	315	832
7:15 AM	0	0	116	0	63	0	179	0	276	180	0	456	0	179	185	0	364	999
7:30 AM	1	0	103	1	69	0	173	0	406	220	0	626	0	237	209	0	446	1245
7:45 AM	2	0	152	0	98	0	250	0	421	175	0	596	0	249	247	0	496	1342
Hourly Total	5	0	444	1	297	1	742	0	1343	712	1	2055	0	828	793	1	1621	4418
8:00 AM	1	0	155	0	85	3	240	0	350	191	0	541	0	250	275	0	525	1306
8:15 AM	0	0	121	0	93	8	214	0	320	156	0	476	0	230	238	0	468	1158
8:30 AM	1	0	87	0	90	2	177	0	362	156	0	518	0	177	254	0	431	1126
8:45 AM	1	0	144	0	107	0	251	0	348	114	0	462	0	144	246	0	390	1103
Hourly Total	3	0	507	0	375	13	882	0	1380	617	0	1997	0	801	1013	0	1814	4693
9:00 AM	1	0	107	0	57	1	164	0	228	93	0	321	0	187	271	0	458	943
9:15 AM	1	0	105	1	80	0	186	0	312	92	0	404	1	144	240	0	385	975
9:30 AM	2	0	95	0	63	0	158	0	271	99	0	370	2	141	209	0	352	880
9:45 AM	1	0	136	1	64	1	201	0	292	109	0	401	0	159	258	0	417	1019
Hourly Total	5	0	443	2	264	2	709	0	1103	393	0	1496	3	631	978	0	1612	3817
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM	1	0	118	0	78	1	196	0	313	98	1	411	4	122	266	0	392	999
11:15 AM	2	0	111	0	74	1	185	1	339	91	0	431	1	165	294	0	460	1076
11:30 AM	1	0	112	0	64	0	176	0	304	101	0	405	4	173	318	0	495	1076
11:45 AM	3	0	108	0	65	3	173	0	403	57	0	460	0	157	294	0	451	1084
Hourly Total	7	0	449	0	281	5	730	1	1359	347	1	1707	9	617	1172	0	1798	4235
12:00 PM	4	0	112	0	59	0	171	0	374	100	0	474	1	176	332	0	509	1154
12:15 PM	1	0	118	0	88	0	206	1	346	95	0	442	4	159	362	0	525	1173
12:30 PM	5	0	118	1	68	1	187	1	393	103	0	497	0	150	334	0	484	1168
12:45 PM	2	0	125	0	62	4	187	0	295	116	0	411	2	162	388	0	552	1150
Hourly Total	12	0	473	1	277	5	751	2	1408	414	0	1824	7	647	1416	0	2070	4645
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00 PM	3	0	94	0	101	1	195	0	290	116	0	406	2	186	385	0	573	1174
3:15 PM	2	0	101	0	91	3	192	0	352	108	0	460	0	213	368	0	581	1233
3:30 PM	3	0	134	1	101	2	236	0	318	109	0	427	1	243	394	0	638	1301
3:45 PM	3	0	100	1	89	1	190	0	347	113	0	460	2	202	403	0	607	1257
Hourly Total	11	0	429	2	382	7	813	0	1307	446	0	1753	5	844	1550	0	2399	4965
4:00 PM	1	0	100	0	103	0	203	1	370	112	0	483	1	187	418	0	606	1292
4:15 PM	3	0	128	0	127	0	255	0	318	123	0	441	1	201	414	0	616	1312
4:30 PM	4	0	61	0	128	1	189	0	307	110	1	417	1	259	441	0	701	1307
4:45 PM	6	0	102	0	91	0	193	0	355	145	0	500	1	198	484	0	683	1376
Hourly Total	14	0	391	0	449	1	840	1	1350	490	1	1841	4	845	1757	0	2606	5287
5:00 PM	4	0	90	0	113	2	203	0	356	156	0	512	0	216	409	0	625	1340
5:15 PM	0	0	89	0	91	0	180	0	269	102	0	371	1	243	439	0	683	1234
5:30 PM	1	0	78	0	86	0	164	1	244	121	0	366	1	257	464	0	722	1252
5:45 PM	2	0	66	0	77	0	143	0	341	121	0	462	2	206	391	0	599	1204
Hourly Total	7	0	323	0	367	2	690	1	1210	500	0	1711	4	922	1703	0	2629	5030
Grand Total	64	0	3459	6	2692	36	6157	5	10460	3919	3	14384	32	6135	10382	1	16549	37090
Approach %	-	-	56.2	0.1	43.7	-	-	0.0	72.7	27.2	-	-	0.2	37.1	62.7	-	-	-
Total %	-	0.0	9.3	0.0	7.3	-	16.6	0.0	28.2	10.6	-	38.8	0.1	16.5	28.0	-	44.6	-
Car	-	0	3367	5	2626	-	5998	5	10241	3836	-	14082	32	5977	10149	-	16158	36238
% Car	-	-	97.3	83.3	97.5	-	97.4	100.0	97.9	97.9	-	97.9	100.0	97.4	97.8	-	97.6	97.7
Truck	-	0	92	1	66	-	159	0	219	83	-	302	0	158	233	-	391	852
% Truck	-	-	2.7	16.7	2.5	-	2.6	0.0	2.1	2.1	-	2.1	0.0	2.6	2.2	-	2.4	2.3
Ped	64	-	-	-	-	36	-	-	-	-	3	-	-	-	-	1	-	-
% Ped	100.0	-	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	100.0	-	-

Appendix B - Data Collection

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: NorthLake Blvd at West Ramps
Site Code:
Start Date: 05/02/2013
Page No: 1

Turning Movement Data

Start Time	Northbound Approach		West Ramps					North Lake Blvd					North Lake Blvd					
	Northbound		Southbound					Eastbound					Westbound					
	Peds	App. Total	Left	Thru	Right	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	Int. Total
7:00 AM	0	0	78	0	54	0	132	0	221	154	0	375	0	153	168	0	321	828
7:15 AM	0	0	100	0	57	0	157	1	282	166	0	449	0	202	175	0	377	983
7:30 AM	0	0	116	0	59	0	175	0	340	216	0	556	0	236	197	0	433	1164
7:45 AM	1	0	152	0	110	0	262	0	484	182	0	666	0	227	279	0	506	1434
Hourly Total	1	0	446	0	280	0	726	1	1327	718	0	2046	0	818	819	0	1637	4409
8:00 AM	3	0	198	0	152	0	350	0	338	168	0	506	0	222	227	0	449	1305
8:15 AM	1	0	112	0	97	6	209	0	339	134	0	473	0	235	283	0	518	1200
8:30 AM	5	0	93	0	76	1	169	0	391	172	0	563	0	187	274	0	461	1193
8:45 AM	3	0	139	2	100	0	241	0	392	144	0	536	0	181	293	0	474	1251
Hourly Total	12	0	542	2	425	7	969	0	1460	618	0	2078	0	825	1077	0	1902	4949
9:00 AM	2	0	107	0	59	0	166	0	323	104	0	427	1	158	259	0	418	1011
9:15 AM	3	0	107	0	64	0	171	0	330	105	0	435	0	158	235	0	393	999
9:30 AM	1	0	96	0	72	0	168	0	307	101	0	408	0	125	234	0	359	935
9:45 AM	0	0	123	0	71	0	194	1	293	95	0	389	0	155	248	0	403	986
Hourly Total	6	0	433	0	266	0	699	1	1253	405	0	1659	1	596	976	0	1573	3931
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM	1	0	114	0	71	0	185	0	292	101	0	393	0	148	260	0	408	986
11:15 AM	1	0	104	0	78	1	182	0	321	106	0	427	0	161	261	0	422	1031
11:30 AM	0	0	101	0	67	0	168	0	230	75	0	305	0	157	258	0	415	888
11:45 AM	1	0	104	3	92	0	199	0	335	88	0	423	0	110	308	0	418	1040
Hourly Total	3	0	423	3	308	1	734	0	1178	370	0	1548	0	576	1087	0	1663	3945
12:00 PM	0	0	83	0	38	0	121	1	333	90	0	424	1	172	346	0	519	1064
12:15 PM	0	0	101	1	68	0	170	0	309	83	0	392	1	136	308	0	445	1007
12:30 PM	0	0	110	2	75	0	187	0	285	104	0	389	2	129	331	0	462	1038
12:45 PM	1	0	101	1	65	1	167	0	253	100	0	353	0	155	327	0	482	1002
Hourly Total	1	0	395	4	246	1	645	1	1180	377	0	1558	4	592	1312	0	1908	4111
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00 PM	0	0	77	0	67	0	144	0	270	102	0	372	0	119	329	0	448	964
3:15 PM	1	0	86	0	76	0	162	0	309	90	0	399	0	143	301	0	444	1005
3:30 PM	2	0	93	0	68	0	161	0	262	81	0	343	0	185	336	0	521	1025
3:45 PM	0	0	87	0	76	0	163	1	268	91	0	360	0	173	364	0	537	1060
Hourly Total	3	0	343	0	287	0	630	1	1109	364	0	1474	0	620	1330	0	1950	4054
4:00 PM	1	0	100	0	69	1	169	0	338	99	0	437	0	156	351	0	507	1113
4:15 PM	0	0	114	0	117	1	231	0	256	94	0	350	0	169	372	0	541	1122
4:30 PM	2	0	79	0	75	0	154	0	249	85	0	334	0	176	389	0	565	1053
4:45 PM	0	0	97	0	79	0	176	0	268	115	0	383	0	178	398	0	576	1135
Hourly Total	3	0	390	0	340	2	730	0	1111	393	0	1504	0	679	1510	0	2189	4423
5:00 PM	1	0	62	0	113	0	175	0	302	134	0	436	0	196	406	0	602	1213
5:15 PM	0	0	94	0	112	0	206	0	280	102	0	382	0	221	454	0	675	1263
5:30 PM	0	0	79	0	102	0	181	0	291	139	0	430	0	231	395	0	626	1237
5:45 PM	0	0	81	1	95	0	177	0	362	82	0	444	0	170	392	0	562	1183
Hourly Total	1	0	316	1	422	0	739	0	1235	457	0	1692	0	818	1647	0	2465	4896
Grand Total	30	0	3288	10	2574	11	5872	4	9853	3702	0	13559	5	5524	9758	0	15287	34718
Approach %	-	-	56.0	0.2	43.8	-	-	0.0	72.7	27.3	-	-	0.0	36.1	63.8	-	-	-
Total %	-	0.0	9.5	0.0	7.4	-	16.9	0.0	28.4	10.7	-	39.1	0.0	15.9	28.1	-	44.0	-
Car	-	0	3188	8	2492	-	5688	4	9643	3622	-	13269	5	5378	9550	-	14933	33890
% Car	-	-	97.0	80.0	96.8	-	96.9	100.0	97.9	97.8	-	97.9	100.0	97.4	97.9	-	97.7	97.6
Truck	-	0	100	2	82	-	184	0	210	80	-	290	0	146	208	-	354	828
% Truck	-	-	3.0	20.0	3.2	-	3.1	0.0	2.1	2.2	-	2.1	0.0	2.6	2.1	-	2.3	2.4
Ped	30	-	-	-	-	11	-	-	-	-	0	-	-	-	-	0	-	-
% Ped	100.0	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: I 95 NB Off Ramp at PGA Blvd
Site Code:
Start Date: 04/23/2013
Page No: 1

Turning Movement Data

Start Time	I 95 NB Off Ramp Northbound			PGA Blvd Eastbound			PGA Blvd Westbound			
	Right	Peds	App. Total	Thru	Peds	App. Total	Thru	Peds	App. Total	Int. Total
7:00 AM	267	0	267	227	0	227	205	0	205	699
7:15 AM	351	0	351	358	0	358	230	0	230	939
7:30 AM	480	0	480	454	0	454	268	0	268	1202
7:45 AM	623	0	623	599	0	599	321	0	321	1543
Hourly Total	1721	0	1721	1638	0	1638	1024	0	1024	4383
8:00 AM	526	0	526	532	0	532	298	0	298	1356
8:15 AM	556	0	556	481	0	481	297	0	297	1334
8:30 AM	476	1	476	534	0	534	244	0	244	1254
8:45 AM	568	0	568	503	0	503	289	0	289	1360
Hourly Total	2126	1	2126	2050	0	2050	1128	0	1128	5304
9:00 AM	408	0	408	441	0	441	243	0	243	1092
9:15 AM	429	0	429	457	0	457	233	0	233	1119
9:30 AM	319	0	319	330	0	330	201	0	201	850
9:45 AM	305	0	305	359	0	359	260	0	260	924
Hourly Total	1461	0	1461	1587	0	1587	937	0	937	3985
*** BREAK ***	-	-	-	-	-	-	-	-	-	-
11:00 AM	270	1	270	307	0	307	246	0	246	823
11:15 AM	248	4	248	381	0	381	270	0	270	899
11:30 AM	318	0	318	338	0	338	321	0	321	977
11:45 AM	359	1	359	363	0	363	345	0	345	1067
Hourly Total	1195	6	1195	1389	0	1389	1182	0	1182	3766
12:00 PM	335	0	335	345	0	345	352	0	352	1032
12:15 PM	332	0	332	366	0	366	313	0	313	1011
12:30 PM	340	0	340	328	0	328	332	0	332	1000
12:45 PM	361	0	361	415	0	415	323	0	323	1099
Hourly Total	1368	0	1368	1454	0	1454	1320	0	1320	4142
*** BREAK ***	-	-	-	-	-	-	-	-	-	-
3:00 PM	334	0	334	317	0	317	409	0	409	1060
3:15 PM	343	2	343	284	0	284	379	0	379	1006
3:30 PM	382	2	382	339	0	339	441	0	441	1162
3:45 PM	386	3	386	338	0	338	448	0	448	1172
Hourly Total	1445	7	1445	1278	0	1278	1677	0	1677	4400
4:00 PM	329	0	329	297	0	297	433	0	433	1059
4:15 PM	344	0	344	298	0	298	468	0	468	1110
4:30 PM	350	3	350	295	0	295	419	0	419	1064
4:45 PM	372	1	372	345	0	345	527	0	527	1244
Hourly Total	1395	4	1395	1235	0	1235	1847	0	1847	4477
5:00 PM	367	0	367	324	0	324	480	0	480	1171
5:15 PM	460	1	460	351	0	351	663	0	663	1474
5:30 PM	467	0	467	315	0	315	590	0	590	1372
5:45 PM	439	2	439	344	0	344	510	0	510	1293
Hourly Total	1733	3	1733	1334	0	1334	2243	0	2243	5310
Grand Total	12444	21	12444	11965	0	11965	11358	0	11358	35767
Approach %	100.0	-	-	100.0	-	-	100.0	-	-	-
Total %	34.8	-	34.8	33.5	-	33.5	31.8	-	31.8	-
Car	12221	-	12221	11793	-	11793	11089	-	11089	35103
% Car	98.2	-	98.2	98.6	-	98.6	97.6	-	97.6	98.1
Truck	223	-	223	172	-	172	269	-	269	664
% Truck	1.8	-	1.8	1.4	-	1.4	2.4	-	2.4	1.9
Ped	-	21	-	-	0	-	-	0	-	-
% Ped	-	100.0	-	-	-	-	-	-	-	-

Appendix B - Data Collection

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: I 95 NB off Ramp at PGA Blvd
Site Code:
Start Date: 04/24/2013

Turning Movement Data

Start Time	I 95 NB Off Ramp Northbound			PGA Blvd Eastbound			PGA Blvd Westbound			
	Right	Peds	App. Total	Thru	Peds	App. Total	Thru	Peds	App. Total	Int. Total
7:00 AM	263	1	263	245	0	245	183	0	183	691
7:15 AM	348	0	348	379	0	379	231	0	231	958
7:30 AM	487	1	487	428	0	428	269	0	269	1184
7:45 AM	603	4	603	611	0	611	339	0	339	1553
Hourly Total	1701	6	1701	1663	0	1663	1022	0	1022	4386
8:00 AM	549	0	549	438	0	438	302	0	302	1289
8:15 AM	575	0	575	432	0	432	281	0	281	1288
8:30 AM	519	0	519	471	0	471	278	0	278	1268
8:45 AM	573	0	573	486	0	486	252	0	252	1311
Hourly Total	2216	0	2216	1827	0	1827	1113	0	1113	5156
9:00 AM	462	1	462	425	0	425	244	0	244	1131
9:15 AM	389	0	389	448	0	448	249	0	249	1086
9:30 AM	343	0	343	351	0	351	205	0	205	899
9:45 AM	340	0	340	370	0	370	252	0	252	962
Hourly Total	1534	1	1534	1594	0	1594	950	0	950	4078
*** BREAK ***	-	-	-	-	-	-	-	-	-	-
11:00 AM	300	0	300	336	0	336	301	0	301	937
11:15 AM	305	3	305	362	0	362	356	0	356	1023
11:30 AM	306	0	306	322	0	322	283	0	283	911
11:45 AM	375	0	375	361	0	361	381	0	381	1117
Hourly Total	1286	3	1286	1381	0	1381	1321	0	1321	3988
12:00 PM	399	0	399	364	0	364	310	0	310	1073
12:15 PM	382	0	382	405	0	405	368	0	368	1155
12:30 PM	377	0	377	349	0	349	365	0	365	1091
12:45 PM	372	0	372	357	0	357	317	0	317	1046
Hourly Total	1530	0	1530	1475	0	1475	1360	0	1360	4365
*** BREAK ***	-	-	-	-	-	-	-	-	-	-
3:00 PM	327	1	327	313	0	313	420	0	420	1060
3:15 PM	314	1	314	361	0	361	426	0	426	1101
3:30 PM	347	2	347	333	0	333	405	0	405	1085
3:45 PM	380	0	380	351	0	351	468	0	468	1199
Hourly Total	1368	4	1368	1358	0	1358	1719	0	1719	4445
4:00 PM	369	1	369	308	0	308	430	0	430	1107
4:15 PM	390	0	390	318	0	318	442	0	442	1150
4:30 PM	382	1	382	310	0	310	459	0	459	1151
4:45 PM	353	2	353	397	0	397	517	0	517	1267
Hourly Total	1494	4	1494	1333	0	1333	1848	0	1848	4675
5:00 PM	394	3	394	342	0	342	502	0	502	1238
5:15 PM	501	1	501	398	0	398	622	0	622	1521
5:30 PM	520	1	520	321	0	321	610	0	610	1451
5:45 PM	418	0	418	322	0	322	531	0	531	1271
Hourly Total	1833	5	1833	1383	0	1383	2265	0	2265	5481
Grand Total	12962	23	12962	12014	0	12014	11598	0	11598	36574
Approach %	100.0	-	-	100.0	-	-	100.0	-	-	-
Total %	35.4	-	35.4	32.8	-	32.8	31.7	-	31.7	-
Car	12654	-	12654	11821	-	11821	11326	-	11326	35801
% Car	97.6	-	97.6	98.4	-	98.4	97.7	-	97.7	97.9
Truck	308	-	308	193	-	193	272	-	272	773
% Truck	2.4	-	2.4	1.6	-	1.6	2.3	-	2.3	2.1
Ped	-	23	-	-	0	-	-	0	-	-
% Ped	-	100.0	-	-	-	-	-	-	-	-

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: I-95 and PGA Blvd
NB Off Ramps
Site Code:
Start Date: 04/25/2013
Page No: 1

Turning Movement Data

Start Time	I 95 NB Off Ramp Northbound			PGA Blvd Eastbound			PGA Blvd Westbound			
	Right	Peds	App. Total	Thru	Peds	App. Total	Thru	Peds	App. Total	Int. Total
7:00 AM	211	1	211	230	0	230	168	0	168	609
7:15 AM	363	0	363	373	0	373	265	0	265	1001
7:30 AM	474	1	474	420	0	420	288	0	288	1182
7:45 AM	572	2	572	587	0	587	310	0	310	1469
Hourly Total	1620	4	1620	1610	0	1610	1031	0	1031	4261
8:00 AM	501	0	501	524	0	524	299	0	299	1324
8:15 AM	538	0	538	514	0	514	315	0	315	1367
8:30 AM	518	0	518	520	0	520	289	0	289	1327
8:45 AM	519	2	519	557	0	557	294	0	294	1370
Hourly Total	2076	2	2076	2115	0	2115	1197	0	1197	5388
9:00 AM	412	1	412	465	0	465	263	0	263	1140
9:15 AM	413	0	413	454	0	454	235	0	235	1102
9:30 AM	334	0	334	354	0	354	243	0	243	931
9:45 AM	350	0	350	369	0	369	225	0	225	944
Hourly Total	1509	1	1509	1642	0	1642	966	0	966	4117
*** BREAK ***	-	-	-	-	-	-	-	-	-	-
11:00 AM	299	2	299	321	0	321	279	0	279	899
11:15 AM	310	1	310	316	0	316	273	0	273	899
11:30 AM	335	1	335	393	0	393	306	0	306	1034
11:45 AM	341	2	341	358	2	358	357	0	357	1056
Hourly Total	1285	6	1285	1388	2	1388	1215	0	1215	3888
12:00 PM	343	0	343	350	0	350	309	0	309	1002
12:15 PM	358	0	358	357	0	357	367	0	367	1082
12:30 PM	334	0	334	404	0	404	370	0	370	1108
12:45 PM	372	0	372	371	0	371	352	0	352	1095
Hourly Total	1407	0	1407	1482	0	1482	1398	0	1398	4287
*** BREAK ***	-	-	-	-	-	-	-	-	-	-
3:00 PM	385	0	385	335	0	335	390	0	390	1110
3:15 PM	356	2	356	344	0	344	474	0	474	1174
3:30 PM	396	0	396	336	0	336	454	0	454	1186
3:45 PM	378	1	378	349	0	349	500	0	500	1227
Hourly Total	1515	3	1515	1364	0	1364	1818	0	1818	4697
4:00 PM	341	4	341	341	0	341	459	0	459	1141
4:15 PM	351	0	351	347	0	347	469	0	469	1167
4:30 PM	358	3	358	362	0	362	458	0	458	1178
4:45 PM	444	1	444	374	0	374	524	1	524	1342
Hourly Total	1494	8	1494	1424	0	1424	1910	1	1910	4828
5:00 PM	400	6	400	316	0	316	567	0	567	1283
5:15 PM	455	1	455	346	0	346	619	0	619	1420
5:30 PM	467	2	467	316	0	316	562	0	562	1345
5:45 PM	486	1	486	380	0	380	556	0	556	1422
Hourly Total	1808	10	1808	1358	0	1358	2304	0	2304	5470
Grand Total	12714	34	12714	12383	2	12383	11839	1	11839	36936
Approach %	100.0	-	-	100.0	-	-	100.0	-	-	-
Total %	34.4	-	34.4	33.5	-	33.5	32.1	-	32.1	-
Car	12432	-	12432	12188	-	12188	11575	-	11575	36195
% Car	97.8	-	97.8	98.4	-	98.4	97.8	-	97.8	98.0
Truck	282	-	282	195	-	195	264	-	264	741
% Truck	2.2	-	2.2	1.6	-	1.6	2.2	-	2.2	2.0
Ped	-	34	-	-	2	-	-	1	-	-
% Ped	-	100.0	-	-	100.0	-	-	100.0	-	-

Appendix B - Data Collection

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: I 95 NB On_Off Ramp at PGA Blvd
Site Code:
Start Date: 04/23/2013

Turning Movement Data

Start Time	I 95 NB Southbound			PGA Blvd Eastbound					PGA Blvd Westbound				
	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	Thru	Right	Peds	App. Total	Int. Total
7:00 AM	119	0	119	6	19	476	0	501	68	28	0	96	716
7:15 AM	173	0	173	3	11	682	0	696	68	29	0	97	966
7:30 AM	151	0	151	6	10	960	0	976	107	41	0	148	1275
7:45 AM	201	0	201	7	17	1219	0	1243	117	53	0	170	1614
Hourly Total	644	0	644	22	57	3337	0	3416	360	151	0	511	4571
8:00 AM	171	0	171	9	8	1036	0	1053	110	41	1	151	1375
8:15 AM	164	0	164	6	13	1073	2	1092	134	46	0	180	1436
8:30 AM	147	0	147	5	16	994	0	1015	90	22	0	112	1274
8:45 AM	159	0	159	6	7	1057	0	1070	113	33	0	146	1375
Hourly Total	641	0	641	26	44	4160	2	4230	447	142	1	589	5460
9:00 AM	117	0	117	9	14	840	0	863	123	30	0	153	1133
9:15 AM	115	0	115	10	13	851	0	874	93	36	0	129	1118
9:30 AM	118	0	118	5	14	619	0	638	98	25	0	123	879
9:45 AM	114	0	114	6	10	668	0	684	127	40	0	167	965
Hourly Total	464	0	464	30	51	2978	0	3059	441	131	0	572	4095
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM	100	0	100	6	12	561	0	579	142	62	0	204	883
11:15 AM	87	1	87	10	12	624	0	646	170	57	0	227	960
11:30 AM	120	0	120	8	10	646	0	664	205	40	0	245	1029
11:45 AM	153	0	153	9	13	709	0	731	192	49	0	241	1125
Hourly Total	460	1	460	33	47	2540	0	2620	709	208	0	917	3997
12:00 PM	124	0	124	5	14	658	0	677	207	70	0	277	1078
12:15 PM	119	0	119	5	11	698	0	714	203	60	0	263	1096
12:30 PM	113	0	113	6	13	653	0	672	200	56	0	256	1041
12:45 PM	125	0	125	5	21	753	0	779	204	49	0	253	1157
Hourly Total	481	0	481	21	59	2762	0	2842	814	235	0	1049	4372
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00 PM	177	0	177	5	15	651	0	671	228	83	0	311	1159
3:15 PM	162	0	162	9	9	615	0	633	218	103	0	321	1116
3:30 PM	168	0	168	9	23	703	0	735	274	111	0	385	1288
3:45 PM	190	0	190	10	19	687	0	716	227	96	0	323	1229
Hourly Total	697	0	697	33	66	2656	0	2755	947	393	0	1340	4792
4:00 PM	184	0	184	8	18	617	0	643	248	108	0	356	1183
4:15 PM	174	0	174	9	10	621	0	640	288	94	0	382	1196
4:30 PM	177	0	177	9	23	636	0	668	245	96	0	341	1186
4:45 PM	202	0	202	5	19	702	0	726	308	114	0	422	1350
Hourly Total	737	0	737	31	70	2576	0	2677	1089	412	0	1501	4915
5:00 PM	217	0	217	10	19	674	0	703	279	140	0	419	1339
5:15 PM	269	0	269	13	18	781	0	812	370	135	0	505	1586
5:30 PM	249	0	249	3	19	783	0	805	310	133	0	443	1497
5:45 PM	249	0	249	11	13	740	0	764	243	108	0	351	1364
Hourly Total	984	0	984	37	69	2978	0	3084	1202	516	0	1718	5786
Grand Total	5108	1	5108	233	463	23987	2	24683	6009	2188	1	8197	37988
Approach %	100.0	-	-	0.9	1.9	97.2	-	-	73.3	26.7	-	-	-
Total %	13.4	-	13.4	0.6	1.2	63.1	-	65.0	15.8	5.8	-	21.6	-
Car	4957	-	4957	232	445	23575	-	24252	5917	2166	-	8083	37292
% Car	97.0	-	97.0	99.6	96.1	98.3	-	98.3	98.5	99.0	-	98.6	98.2
Truck	151	-	151	1	18	412	-	431	92	22	-	114	696
% Truck	3.0	-	3.0	0.4	3.9	1.7	-	1.7	1.5	1.0	-	1.4	1.8
Ped	-	1	-	-	-	-	2	-	-	-	1	-	-
% Ped	-	100.0	-	-	-	-	100.0	-	-	-	100.0	-	-

Appendix B - Data Collection

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: I 95 NB On_Off Ramps at PGA Blvd
Site Code:
Start Date: 04/24/2013
Page No: 1

Turning Movement Data

Start Time	I 95 NB Southbound			PGA Blvd Eastbound					PGA Blvd Westbound				
	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	Thru	Right	Peds	App. Total	Int. Total
7:00 AM	102	0	102	3	13	491	0	507	75	23	0	98	707
7:15 AM	166	0	166	4	18	711	0	733	70	37	0	107	1006
7:30 AM	165	0	165	9	11	933	0	953	98	39	0	137	1255
7:45 AM	209	0	209	14	11	1231	0	1256	114	45	0	159	1624
Hourly Total	642	0	642	30	53	3366	0	3449	357	144	0	501	4592
8:00 AM	167	0	167	5	12	1107	0	1124	126	44	0	170	1461
8:15 AM	175	0	175	5	6	1099	0	1110	99	37	0	136	1421
8:30 AM	170	0	170	8	13	1057	0	1078	99	39	0	138	1386
8:45 AM	146	0	146	6	16	1119	0	1141	89	37	0	126	1413
Hourly Total	658	0	658	24	47	4382	0	4453	413	157	0	570	5681
9:00 AM	134	0	134	6	13	850	0	869	115	43	0	158	1161
9:15 AM	129	0	129	8	14	813	0	835	105	34	0	139	1103
9:30 AM	111	0	111	11	18	668	0	697	114	46	0	160	968
9:45 AM	120	0	120	7	16	668	0	691	100	35	0	135	946
Hourly Total	494	0	494	32	61	2999	0	3092	434	158	0	592	4178
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM	119	0	119	4	10	597	0	611	179	48	0	227	957
11:15 AM	126	0	126	11	17	652	0	680	209	46	0	255	1061
11:30 AM	117	0	117	3	23	627	0	653	178	52	0	230	1000
11:45 AM	160	0	160	7	26	695	0	728	202	51	0	253	1141
Hourly Total	522	0	522	25	76	2571	0	2672	768	197	0	965	4159
12:00 PM	106	0	106	6	14	735	0	755	216	62	0	278	1139
12:15 PM	135	0	135	8	8	748	1	764	222	81	0	303	1202
12:30 PM	142	0	142	3	16	709	0	728	186	75	0	261	1131
12:45 PM	144	0	144	8	8	699	0	715	196	62	0	258	1117
Hourly Total	527	0	527	25	46	2891	1	2962	820	280	0	1100	4589
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00 PM	154	0	154	8	13	618	0	639	246	89	0	335	1128
3:15 PM	150	0	150	7	12	660	0	679	257	98	0	355	1184
3:30 PM	177	0	177	2	19	683	0	704	242	110	0	352	1233
3:45 PM	195	0	195	9	23	705	0	737	237	97	0	334	1266
Hourly Total	676	0	676	26	67	2666	0	2759	982	394	0	1376	4811
4:00 PM	190	0	190	7	21	666	0	694	250	139	0	389	1273
4:15 PM	180	0	180	9	30	677	0	716	240	116	0	356	1252
4:30 PM	182	0	182	6	18	699	0	723	296	102	0	398	1303
4:45 PM	209	0	209	10	17	814	0	841	288	109	0	397	1447
Hourly Total	761	0	761	32	86	2856	0	2974	1074	466	0	1540	5275
5:00 PM	208	0	208	12	25	692	0	729	292	124	0	416	1353
5:15 PM	225	0	225	8	20	888	0	916	391	126	0	517	1658
5:30 PM	268	0	268	8	18	837	0	863	321	159	0	480	1611
5:45 PM	237	0	237	5	16	704	0	725	281	115	0	396	1358
Hourly Total	938	0	938	33	79	3121	0	3233	1285	524	0	1809	5980
Grand Total	5218	0	5218	227	515	24852	1	25594	6133	2320	0	8453	39265
Approach %	100.0	-	-	0.9	2.0	97.1	-	-	72.6	27.4	-	-	-
Total %	13.3	-	13.3	0.6	1.3	63.3	-	65.2	15.6	5.9	-	21.5	-
Car	5057	-	5057	221	492	24413	-	25126	6026	2303	-	8329	38512
% Car	96.9	-	96.9	97.4	95.5	98.2	-	98.2	98.3	99.3	-	98.5	98.1
Truck	161	-	161	6	23	439	-	468	107	17	-	124	753
% Truck	3.1	-	3.1	2.6	4.5	1.8	-	1.8	1.7	0.7	-	1.5	1.9
Ped	-	0	-	-	-	-	1	-	-	-	0	-	-
% Ped	-	-	-	-	-	-	100.0	-	-	-	-	-	-

Appendix B - Data Collection

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: I 95 Nb On_Off Ramps at PGA Blvd
Site Code:
Start Date: 04/25/2013

Turning Movement Data

Start Time	I 95 NB Southbound			PGA Blvd Eastbound					PGA Blvd Westbound					
	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	Int. Total
7:00 AM	104	0	104	2	14	442	0	458	0	56	34	0	90	652
7:15 AM	162	0	162	8	14	739	0	761	0	107	38	0	145	1068
7:30 AM	196	0	196	7	12	918	0	937	0	94	60	0	154	1287
7:45 AM	195	0	195	10	14	1153	0	1177	0	100	41	0	141	1513
Hourly Total	657	0	657	27	54	3252	0	3333	0	357	173	0	530	4520
8:00 AM	160	0	160	11	18	985	0	1014	0	127	45	0	172	1346
8:15 AM	188	0	188	13	16	1077	0	1106	0	133	35	0	168	1462
8:30 AM	175	0	175	9	15	1027	0	1051	0	112	43	0	155	1381
8:45 AM	174	0	174	6	7	1057	0	1070	0	133	30	0	163	1407
Hourly Total	697	0	697	39	56	4146	0	4241	0	505	153	0	658	5596
9:00 AM	128	0	128	9	13	860	0	882	0	120	33	0	153	1163
9:15 AM	111	0	111	6	14	842	0	862	0	113	41	0	154	1127
9:30 AM	134	0	134	4	14	641	0	659	0	106	36	0	142	935
9:45 AM	102	0	102	10	6	715	0	731	0	111	46	0	157	990
Hourly Total	475	0	475	29	47	3058	0	3134	0	450	156	0	606	4215
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM	96	0	96	7	17	592	0	616	0	157	64	0	221	933
11:15 AM	106	0	106	8	13	615	0	636	0	147	47	0	194	936
11:30 AM	116	0	116	7	9	722	0	738	0	189	52	0	241	1095
11:45 AM	119	0	119	6	12	676	0	694	0	215	49	0	264	1077
Hourly Total	437	0	437	28	51	2605	0	2684	0	708	212	0	920	4041
12:00 PM	109	0	109	10	26	667	0	703	0	192	61	0	253	1065
12:15 PM	130	1	130	12	12	692	0	716	0	236	71	0	307	1153
12:30 PM	131	0	131	7	18	744	0	769	0	218	67	0	285	1185
12:45 PM	120	3	120	8	11	739	0	758	0	246	56	0	302	1180
Hourly Total	490	4	490	37	67	2842	0	2946	0	892	255	0	1147	4583
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00 PM	148	0	148	4	24	692	0	720	0	228	94	0	322	1190
3:15 PM	159	0	159	11	20	687	0	718	0	288	113	0	401	1278
3:30 PM	180	0	180	9	20	715	0	744	0	284	97	0	381	1305
3:45 PM	214	0	214	12	18	656	0	686	0	259	99	0	358	1258
Hourly Total	701	0	701	36	82	2750	0	2868	0	1059	403	0	1462	5031
4:00 PM	187	0	187	10	21	692	0	723	0	288	118	0	406	1316
4:15 PM	161	0	161	9	19	641	0	669	0	288	112	0	400	1230
4:30 PM	198	0	198	6	22	688	0	716	0	257	101	0	358	1272
4:45 PM	217	0	217	6	18	792	0	816	0	298	118	0	416	1449
Hourly Total	763	0	763	31	80	2813	0	2924	0	1131	449	0	1580	5267
5:00 PM	228	0	228	10	15	693	0	718	0	325	144	0	469	1415
5:15 PM	256	0	256	7	14	790	0	811	0	360	151	0	511	1578
5:30 PM	232	0	232	18	19	758	0	795	0	306	143	0	449	1476
5:45 PM	217	0	217	14	18	856	0	888	0	302	112	0	414	1519
Hourly Total	933	0	933	49	66	3097	0	3212	0	1293	550	0	1843	5988
Grand Total	5153	4	5153	276	503	24563	0	25342	0	6395	2351	0	8746	39241
Approach %	100.0	-	-	1.1	2.0	96.9	-	-	0.0	73.1	26.9	-	-	-
Total %	13.1	-	13.1	0.7	1.3	62.6	-	64.6	0.0	16.3	6.0	-	22.3	-
Car	5000	-	5000	268	482	24145	-	24895	0	6294	2320	-	8614	38509
% Car	97.0	-	97.0	97.1	95.8	98.3	-	98.2	-	98.4	98.7	-	98.5	98.1
Truck	153	-	153	8	21	418	-	447	0	101	31	-	132	732
% Truck	3.0	-	3.0	2.9	4.2	1.7	-	1.8	-	1.6	1.3	-	1.5	1.9
Ped	-	4	-	-	-	-	0	-	-	-	-	0	-	-
% Ped	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-

Appendix B - Data Collection

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: I 95 at PGA Blvd
West Ramps
Site Code:
Start Date: 04/23/2013

Turning Movement Data

Start Time	I 95 SB Off Ramp Southbound				PGA Blvd Eastbound				PGA Blvd Westbound				
	Left	Right	Peds	App. Total	U-Turn	Thru	Peds	App. Total	U-Turn	Thru	Peds	App. Total	Int. Total
7:00 AM	91	6	0	97	0	139	0	139	0	194	0	194	430
7:15 AM	133	5	0	138	0	227	0	227	0	235	0	235	600
7:30 AM	193	4	0	197	0	277	0	277	0	239	0	239	713
7:45 AM	244	11	0	255	0	356	0	356	0	320	0	320	931
Hourly Total	661	26	0	687	0	999	0	999	0	988	0	988	2674
8:00 AM	183	11	0	194	0	343	0	343	0	307	0	307	844
8:15 AM	173	13	0	186	0	337	0	337	0	269	0	269	792
8:30 AM	171	12	0	183	0	360	0	360	0	245	0	245	788
8:45 AM	187	10	0	197	0	327	0	327	0	277	0	277	801
Hourly Total	714	46	0	760	0	1367	0	1367	0	1098	0	1098	3225
9:00 AM	146	6	0	152	0	316	0	316	0	243	0	243	711
9:15 AM	135	2	0	137	0	310	0	310	0	227	0	227	674
9:30 AM	80	9	0	89	1	263	0	264	0	206	0	206	559
9:45 AM	86	7	0	93	0	282	0	282	0	260	0	260	635
Hourly Total	447	24	0	471	1	1171	0	1172	0	936	0	936	2579
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM	91	6	1	97	0	227	0	227	0	241	0	241	565
11:15 AM	90	15	0	105	1	288	0	289	0	249	0	249	643
11:30 AM	75	8	0	83	0	264	0	264	0	341	0	341	688
11:45 AM	92	16	0	108	0	284	0	284	0	340	0	340	732
Hourly Total	348	45	1	393	1	1063	0	1064	0	1171	0	1171	2628
12:00 PM	78	10	0	88	0	271	0	271	0	334	0	334	693
12:15 PM	73	9	0	82	0	289	0	289	0	307	0	307	678
12:30 PM	66	7	0	73	0	260	0	260	0	327	0	327	660
12:45 PM	83	9	0	92	0	341	0	341	0	326	0	326	759
Hourly Total	300	35	0	335	0	1161	0	1161	0	1294	0	1294	2790
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00 PM	85	9	0	94	0	240	0	240	0	412	0	412	746
3:15 PM	55	10	0	65	0	225	0	225	0	357	0	357	647
3:30 PM	59	12	0	71	0	283	0	283	0	468	0	468	822
3:45 PM	72	12	0	84	0	274	0	274	0	439	0	439	797
Hourly Total	271	43	0	314	0	1022	0	1022	0	1676	0	1676	3012
4:00 PM	65	15	0	80	0	236	0	236	0	412	0	412	728
4:15 PM	66	9	0	75	1	240	0	241	0	462	0	462	778
4:30 PM	62	12	0	74	0	237	0	237	0	426	0	426	737
4:45 PM	84	10	0	94	0	267	0	267	0	501	0	501	862
Hourly Total	277	46	0	323	1	980	0	981	0	1801	0	1801	3105
5:00 PM	73	9	0	82	0	259	0	259	0	491	0	491	832
5:15 PM	72	17	0	89	0	278	0	278	0	643	0	643	1010
5:30 PM	78	8	0	86	0	240	0	240	0	587	0	587	913
5:45 PM	78	14	0	92	0	258	0	258	0	507	0	507	857
Hourly Total	301	48	0	349	0	1035	0	1035	0	2228	0	2228	3612
Grand Total	3319	313	1	3632	3	8798	0	8801	0	11192	0	11192	23625
Approach %	91.4	8.6	-	-	0.0	100.0	-	-	0.0	100.0	-	-	-
Total %	14.0	1.3	-	15.4	0.0	37.2	-	37.3	0.0	47.4	-	47.4	-
Car	3281	304	-	3585	3	8656	-	8659	0	10940	-	10940	23184
% Car	98.9	97.1	-	98.7	100.0	98.4	-	98.4	-	97.7	-	97.7	98.1
Truck	38	9	-	47	0	142	-	142	0	252	-	252	441
% Truck	1.1	2.9	-	1.3	0.0	1.6	-	1.6	-	2.3	-	2.3	1.9
Ped	-	-	1	-	-	-	0	-	-	-	0	-	-
% Ped	-	-	100.0	-	-	-	-	-	-	-	-	-	-

Appendix B - Data Collection

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: I 95 at PGA Blvd
West Ramps
Site Code:
Start Date: 04/24/2013

Turning Movement Data

Start Time	I 95 SB Off Ramp Southbound				PGA Blvd Eastbound				PGA Blvd Westbound				
	Left	Right	Peds	App. Total	U-Turn	Thru	Peds	App. Total	U-Turn	Thru	Peds	App. Total	Int. Total
7:00 AM	106	9	1	115	0	149	0	149	0	171	0	171	435
7:15 AM	139	7	0	146	0	233	0	233	0	236	0	236	615
7:30 AM	196	13	0	209	0	244	0	244	0	236	0	236	689
7:45 AM	240	14	0	254	0	391	0	391	0	343	0	343	988
Hourly Total	681	43	1	724	0	1017	0	1017	0	986	0	986	2727
8:00 AM	201	18	0	219	0	392	0	392	0	308	0	308	919
8:15 AM	212	14	0	226	0	380	0	380	1	267	0	268	874
8:30 AM	155	7	0	162	0	362	0	362	0	281	2	281	805
8:45 AM	198	11	0	209	1	384	0	385	0	245	0	245	839
Hourly Total	766	50	0	816	1	1518	0	1519	1	1101	2	1102	3437
9:00 AM	145	11	0	156	0	297	0	297	0	255	0	255	708
9:15 AM	131	16	0	147	0	297	0	297	0	241	0	241	685
9:30 AM	102	13	0	115	0	246	0	246	0	227	0	227	588
9:45 AM	112	9	0	121	0	261	0	261	0	257	0	257	639
Hourly Total	490	49	0	539	0	1101	0	1101	0	980	0	980	2620
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM	93	13	0	106	0	248	0	248	0	300	0	300	654
11:15 AM	78	12	0	90	0	278	0	278	0	341	1	341	709
11:30 AM	71	7	0	78	0	264	0	264	0	286	0	286	628
11:45 AM	103	8	0	111	0	267	0	267	0	371	0	371	749
Hourly Total	345	40	0	385	0	1057	0	1057	0	1298	1	1298	2740
12:00 PM	114	8	0	122	0	260	0	260	0	312	0	312	694
12:15 PM	97	13	1	110	0	299	0	299	0	359	0	359	768
12:30 PM	66	7	0	73	0	272	0	272	0	359	0	359	704
12:45 PM	81	12	0	93	0	293	0	293	0	306	0	306	692
Hourly Total	358	40	1	398	0	1124	0	1124	0	1336	0	1336	2858
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00 PM	80	18	0	98	0	234	0	234	0	401	0	401	733
3:15 PM	69	10	0	79	0	272	0	272	0	402	0	402	753
3:30 PM	60	16	0	76	0	275	0	275	0	409	0	409	760
3:45 PM	75	14	0	89	0	297	0	297	0	437	0	437	823
Hourly Total	284	58	0	342	0	1078	0	1078	0	1649	0	1649	3069
4:00 PM	51	11	0	62	0	276	0	276	0	412	0	412	750
4:15 PM	73	13	0	86	0	258	0	258	0	435	0	435	779
4:30 PM	76	5	0	81	0	246	0	246	0	438	0	438	765
4:45 PM	93	11	0	104	0	327	0	327	0	497	0	497	928
Hourly Total	293	40	0	333	0	1107	0	1107	0	1782	0	1782	3222
5:00 PM	79	10	1	89	1	272	0	273	0	497	1	497	859
5:15 PM	78	9	0	87	0	318	0	318	0	589	0	589	994
5:30 PM	70	20	0	90	0	269	0	269	0	602	0	602	961
5:45 PM	83	15	0	98	0	243	0	243	0	534	0	534	875
Hourly Total	310	54	1	364	1	1102	0	1103	0	2222	1	2222	3689
Grand Total	3527	374	3	3901	2	9104	0	9106	1	11354	4	11355	24362
Approach %	90.4	9.6	-	-	0.0	100.0	-	-	0.0	100.0	-	-	-
Total %	14.5	1.5	-	16.0	0.0	37.4	-	37.4	0.0	46.6	-	46.6	-
Car	3491	359	-	3850	2	8959	-	8961	1	11086	-	11087	23898
% Car	99.0	96.0	-	98.7	100.0	98.4	-	98.4	100.0	97.6	-	97.6	98.1
Truck	36	15	-	51	0	145	-	145	0	268	-	268	464
% Truck	1.0	4.0	-	1.3	0.0	1.6	-	1.6	0.0	2.4	-	2.4	1.9
Ped	-	-	3	-	-	-	0	-	-	-	4	-	-
% Ped	-	-	100.0	-	-	-	-	-	-	-	100.0	-	-

Appendix B - Data Collection

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: I 95 at PGA Blvd
West Ramps
Site Code:
Start Date: 04/25/2013

Turning Movement Data

Start Time	I 95 SB Off Ramp Southbound				PGA Blvd Eastbound				PGA Blvd Westbound				
	Left	Right	Peds	App. Total	U-Turn	Thru	Peds	App. Total	U-Turn	Thru	Peds	App. Total	Int. Total
7:00 AM	92	6	0	98	0	134	0	134	0	159	0	159	391
7:15 AM	139	9	0	148	0	240	0	240	0	270	0	270	658
7:30 AM	167	18	0	185	0	249	0	249	0	261	0	261	695
7:45 AM	252	9	0	261	0	349	0	349	0	320	1	320	930
Hourly Total	650	42	0	692	0	972	0	972	0	1010	1	1010	2674
8:00 AM	190	17	0	207	0	320	0	320	0	303	0	303	830
8:15 AM	191	16	0	207	0	351	0	351	0	309	0	309	867
8:30 AM	151	17	0	168	0	352	0	352	0	310	0	310	830
8:45 AM	201	12	0	213	0	358	0	358	0	307	0	307	878
Hourly Total	733	62	0	795	0	1381	0	1381	0	1229	0	1229	3405
9:00 AM	157	6	0	163	0	326	0	326	0	251	0	251	740
9:15 AM	150	5	0	155	0	284	0	284	0	227	0	227	666
9:30 AM	104	13	0	117	0	249	0	249	0	258	0	258	624
9:45 AM	106	10	0	116	0	265	0	265	1	217	0	218	599
Hourly Total	517	34	0	551	0	1124	0	1124	1	953	0	954	2629
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM	86	8	0	94	0	239	0	239	0	260	0	260	593
11:15 AM	74	8	0	82	0	233	0	233	0	255	0	255	570
11:30 AM	82	4	0	86	0	319	0	319	0	314	0	314	719
11:45 AM	95	9	0	104	0	277	0	277	0	338	0	338	719
Hourly Total	337	29	0	366	0	1068	0	1068	0	1167	0	1167	2601
12:00 PM	69	8	1	77	0	282	0	282	0	293	0	293	652
12:15 PM	69	12	0	81	0	295	0	295	0	375	0	375	751
12:30 PM	83	14	0	97	0	319	0	319	0	356	0	356	772
12:45 PM	72	10	1	82	0	311	0	311	0	362	0	362	755
Hourly Total	293	44	2	337	0	1207	0	1207	0	1386	0	1386	2930
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00 PM	75	8	0	83	0	261	0	261	0	367	0	367	711
3:15 PM	76	23	0	99	0	255	0	255	0	433	0	433	787
3:30 PM	72	13	0	85	0	259	0	259	1	463	0	464	808
3:45 PM	67	11	0	78	0	278	0	278	0	476	0	476	832
Hourly Total	290	55	0	345	0	1053	0	1053	1	1739	0	1740	3138
4:00 PM	82	16	0	98	0	265	0	265	0	448	0	448	811
4:15 PM	73	15	0	88	1	278	0	279	0	457	0	457	824
4:30 PM	81	18	0	99	0	283	0	283	1	448	0	449	831
4:45 PM	89	14	0	103	0	305	0	305	0	498	0	498	906
Hourly Total	325	63	0	388	1	1131	0	1132	1	1851	0	1852	3372
5:00 PM	62	9	0	71	0	251	0	251	0	560	0	560	882
5:15 PM	78	18	0	96	0	273	0	273	0	647	0	647	1016
5:30 PM	64	8	0	72	0	263	0	263	0	622	0	622	957
5:45 PM	96	17	0	113	0	294	0	294	0	589	0	589	996
Hourly Total	300	52	0	352	0	1081	0	1081	0	2418	0	2418	3851
Grand Total	3445	381	2	3826	1	9017	0	9018	3	11753	1	11756	24600
Approach %	90.0	10.0	-	-	0.0	100.0	-	-	0.0	100.0	-	-	-
Total %	14.0	1.5	-	15.6	0.0	36.7	-	36.7	0.0	47.8	-	47.8	-
Car	3404	361	-	3765	1	8869	-	8870	3	11484	-	11487	24122
% Car	98.8	94.8	-	98.4	100.0	98.4	-	98.4	100.0	97.7	-	97.7	98.1
Truck	41	20	-	61	0	148	-	148	0	269	-	269	478
% Truck	1.2	5.2	-	1.6	0.0	1.6	-	1.6	0.0	2.3	-	2.3	1.9
Ped	-	-	2	-	-	-	0	-	-	-	1	-	-
% Ped	-	-	100.0	-	-	-	-	-	-	-	100.0	-	-

Appendix B - Data Collection

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: I 95 NB at Military Trail
Site Code:
Start Date: 04/23/2013
Page No: 1

Turning Movement Data

Start Time	I 95 NB Northbound						Southbound Approach Southbound		N Military Trail Eastbound						N Military Trail Westbound						
	U-Turn	Left	Thru	Right	Peds	App. Total	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	Int. Total
7:00 AM	0	10	7	8	0	25	0	0	0	26	193	10	0	229	0	19	203	0	0	222	476
7:15 AM	0	9	3	14	1	26	0	0	0	18	221	20	0	259	0	26	242	0	0	268	553
7:30 AM	0	26	9	5	1	40	0	0	0	25	184	34	0	243	2	44	286	0	0	332	615
7:45 AM	0	40	6	14	1	60	0	0	0	36	231	39	0	306	1	63	243	0	0	307	673
Hourly Total	0	85	25	41	3	151	0	0	0	105	829	103	0	1037	3	152	974	0	0	1129	2317
8:00 AM	0	26	9	12	0	47	0	0	0	31	231	31	0	293	0	54	297	0	0	351	691
8:15 AM	0	24	8	22	0	54	0	0	0	23	199	25	0	247	0	45	234	0	0	279	580
8:30 AM	0	32	8	10	0	50	0	0	0	51	223	26	0	300	2	41	194	0	0	237	587
8:45 AM	0	16	3	12	0	31	0	0	0	25	238	25	0	288	0	48	253	0	0	301	620
Hourly Total	0	98	28	56	0	182	0	0	0	130	891	107	0	1128	2	188	978	0	0	1168	2478
9:00 AM	0	15	1	11	2	27	0	0	0	21	203	35	0	259	2	35	207	0	0	244	530
9:15 AM	0	25	2	12	1	39	0	0	0	32	188	37	0	257	2	37	193	0	0	232	528
9:30 AM	0	28	2	19	0	49	0	0	1	22	163	12	0	198	2	21	183	0	0	206	453
9:45 AM	0	18	7	11	0	36	0	0	0	19	176	22	0	217	1	28	199	0	0	228	481
Hourly Total	0	86	12	53	3	151	0	0	1	94	730	106	0	931	7	121	782	0	0	910	1992
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM	0	20	2	14	1	36	0	0	0	20	161	21	0	202	0	26	145	0	0	171	409
11:15 AM	0	19	8	17	0	44	0	0	1	21	143	27	0	192	2	16	200	0	0	218	454
11:30 AM	0	23	6	15	1	44	0	0	1	23	143	40	0	207	1	21	181	0	0	203	454
11:45 AM	0	31	6	20	1	57	0	0	0	21	197	33	0	251	2	23	213	0	0	238	546
Hourly Total	0	93	22	66	3	181	0	0	2	85	644	121	0	852	5	86	739	0	0	830	1863
12:00 PM	0	40	8	34	0	82	0	0	2	36	188	39	0	265	3	22	203	0	0	228	575
12:15 PM	0	36	11	31	1	78	1	0	0	28	176	36	0	240	1	24	203	0	0	228	546
12:30 PM	0	36	8	35	0	79	0	0	1	30	220	32	0	283	1	28	200	0	0	229	591
12:45 PM	0	50	7	21	2	78	0	0	0	24	186	46	0	256	2	27	193	0	0	222	556
Hourly Total	0	162	34	121	3	317	1	0	3	118	770	153	0	1044	7	101	799	0	0	907	2268
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00 PM	0	14	5	21	1	40	0	0	0	41	224	29	0	294	0	8	284	0	0	292	626
3:15 PM	1	45	20	26	2	92	0	0	0	33	213	28	0	274	2	22	245	0	0	269	635
3:30 PM	0	36	30	45	1	111	0	0	0	46	205	29	0	280	1	22	242	0	0	265	656
3:45 PM	0	42	12	31	0	85	0	0	0	46	251	32	0	329	2	23	254	0	0	279	693
Hourly Total	1	137	67	123	4	328	0	0	0	166	893	118	0	1177	5	75	1025	0	0	1105	2610
4:00 PM	0	36	14	34	2	84	0	0	0	51	211	30	0	292	0	16	227	0	0	243	619
4:15 PM	0	54	13	31	0	98	0	0	1	60	222	30	0	313	4	36	245	0	0	285	696
4:30 PM	0	35	24	33	0	92	0	0	2	53	192	27	0	274	2	35	253	0	0	290	656
4:45 PM	0	56	29	47	0	132	0	0	0	74	274	49	0	397	2	32	252	0	0	286	815
Hourly Total	0	181	80	145	2	406	0	0	3	238	899	136	0	1276	8	119	977	0	0	1104	2786
5:00 PM	0	52	52	72	0	176	0	0	1	81	265	46	0	393	1	25	273	0	0	299	868
5:15 PM	0	55	34	72	1	161	0	0	0	80	292	50	0	422	1	27	245	0	0	273	856
5:30 PM	0	63	54	59	0	176	0	0	0	76	284	45	0	405	0	23	268	0	0	291	872
5:45 PM	0	66	38	48	0	152	0	0	0	67	254	39	0	360	0	22	269	0	0	291	803
Hourly Total	0	236	178	251	1	665	0	0	1	304	1095	180	0	1580	2	97	1055	0	0	1154	3399
Grand Total	1	1078	446	856	19	2381	1	0	10	1240	6751	1024	0	9025	39	939	7329	0	0	8307	19713
Approach %	0.0	45.3	18.7	36.0	-	-	-	-	0.1	13.7	74.8	11.3	-	-	0.5	11.3	88.2	0.0	-	-	-
Total %	0.0	5.5	2.3	4.3	-	12.1	-	0.0	0.1	6.3	34.2	5.2	-	45.8	0.2	4.8	37.2	0.0	-	42.1	-
Car	1	1069	442	845	-	2357	-	0	10	1219	6588	1015	-	8832	38	933	7190	0	-	8161	19350
% Car	100.0	99.2	99.1	98.7	-	99.0	-	-	100.0	98.3	97.6	99.1	-	97.9	97.4	99.4	98.1	-	-	98.2	98.2
Truck	0	9	4	11	-	24	-	0	0	21	163	9	-	193	1	6	139	0	-	146	363
% Truck	0.0	0.8	0.9	1.3	-	1.0	-	-	0.0	1.7	2.4	0.9	-	2.1	2.6	0.6	1.9	-	-	1.8	1.8
Ped	-	-	-	-	19	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Ped	-	-	-	-	100.0	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: I 95 NB at Military Trail
Site Code:
Start Date: 04/24/2013
Page No: 1

Turning Movement Data

Start Time	I 95 NB Northbound						Southbound Approach Southbound		N Military Trail Eastbound						N Military Trail Westbound						
	U-Turn	Left	Thru	Right	Peds	App. Total	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	Int. Total
7:00 AM	0	13	6	4	0	23	1	0	0	28	192	9	0	229	0	16	185	0	0	201	453
7:15 AM	0	7	4	10	1	21	0	0	0	30	237	20	0	287	1	24	217	0	0	242	550
7:30 AM	0	23	5	13	2	41	0	0	0	31	201	34	0	266	2	46	297	0	0	345	652
7:45 AM	0	21	4	6	2	31	0	0	1	32	235	45	0	313	0	70	251	0	0	321	665
Hourly Total	0	64	19	33	5	116	1	0	1	121	865	108	0	1095	3	156	950	0	0	1109	2320
8:00 AM	0	30	6	16	0	52	0	0	0	27	228	30	0	285	1	42	268	0	0	311	648
8:15 AM	0	19	8	10	0	37	0	0	0	28	210	31	0	269	1	51	236	0	0	288	594
8:30 AM	0	29	4	11	1	44	0	0	0	33	225	36	0	294	0	44	221	0	0	265	603
8:45 AM	0	19	2	7	5	28	0	0	0	26	233	28	0	287	0	50	250	0	0	300	615
Hourly Total	0	97	20	44	6	161	0	0	0	114	896	125	0	1135	2	187	975	0	0	1164	2460
9:00 AM	0	16	8	15	2	39	0	0	0	23	186	32	0	241	0	17	198	0	0	215	495
9:15 AM	0	27	4	13	0	44	0	0	0	22	176	25	0	223	2	33	218	0	0	253	520
9:30 AM	0	25	4	16	1	45	0	0	3	23	150	27	0	203	2	36	159	0	0	197	445
9:45 AM	0	23	5	17	0	45	0	0	0	22	174	27	0	223	1	21	199	0	0	221	489
Hourly Total	0	91	21	61	3	173	0	0	3	90	686	111	0	890	5	107	774	0	0	886	1949
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM	0	17	7	10	0	34	0	0	0	21	132	25	0	178	4	23	173	0	0	200	412
11:15 AM	0	26	10	18	1	54	0	0	0	21	167	30	0	218	0	24	211	0	0	235	507
11:30 AM	0	28	6	21	0	55	0	0	0	35	174	39	0	248	0	18	178	0	0	196	499
11:45 AM	0	30	3	28	2	61	0	0	0	35	175	44	0	254	1	25	272	0	0	298	613
Hourly Total	0	101	26	77	3	204	0	0	0	112	648	138	0	898	5	90	834	0	0	929	2031
12:00 PM	0	47	8	30	0	85	0	0	0	44	166	33	0	243	1	15	205	0	0	221	549
12:15 PM	0	51	9	35	1	95	0	0	0	24	217	31	0	272	0	26	204	0	0	230	597
12:30 PM	0	33	6	26	2	65	0	0	1	26	206	39	0	272	1	24	211	0	0	236	573
12:45 PM	0	47	8	25	1	80	0	0	0	27	191	44	0	262	3	30	177	0	0	210	552
Hourly Total	0	178	31	116	4	325	0	0	1	121	780	147	0	1049	5	95	797	0	0	897	2271
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00 PM	0	34	5	26	1	65	0	0	0	34	212	33	0	279	2	22	236	0	0	260	604
3:15 PM	0	42	21	31	2	94	0	0	1	43	201	33	0	278	2	32	229	0	0	263	635
3:30 PM	0	28	16	29	2	73	0	0	1	55	210	32	0	298	0	33	266	0	0	299	670
3:45 PM	0	32	12	28	1	72	0	0	0	34	270	40	0	344	1	33	254	0	0	288	704
Hourly Total	0	136	54	114	6	304	0	0	2	166	893	138	0	1199	5	120	985	0	0	1110	2613
4:00 PM	0	43	14	31	0	88	0	0	1	68	215	26	0	310	2	21	228	0	0	251	649
4:15 PM	0	43	19	34	0	96	0	0	1	54	220	33	0	308	0	26	263	0	0	289	693
4:30 PM	0	39	17	46	0	102	0	0	0	69	220	34	0	323	0	30	248	0	0	278	703
4:45 PM	0	41	28	35	0	104	0	0	0	73	267	37	0	377	1	29	234	0	0	264	745
Hourly Total	0	166	78	146	0	390	0	0	2	264	922	130	0	1318	3	106	973	0	0	1082	2790
5:00 PM	0	74	39	60	1	173	0	0	0	65	265	51	0	381	1	26	289	0	0	316	870
5:15 PM	0	78	52	77	0	207	0	0	0	75	295	40	0	410	5	36	277	0	0	318	935
5:30 PM	0	60	39	63	1	162	0	0	0	85	249	45	0	379	2	25	279	0	0	306	847
5:45 PM	0	68	49	64	0	181	0	0	0	56	258	47	0	361	3	31	253	0	0	287	829
Hourly Total	0	280	179	264	2	723	0	0	0	281	1067	183	0	1531	11	118	1098	0	0	1227	3481
Grand Total	0	1113	428	855	29	2396	1	0	9	1269	6757	1080	0	9115	39	979	7386	0	0	8404	19915
Approach %	0.0	46.5	17.9	35.7	-	-	-	-	0.1	13.9	74.1	11.8	-	-	0.5	11.6	87.9	0.0	-	-	-
Total %	0.0	5.6	2.1	4.3	-	12.0	-	0.0	0.0	6.4	33.9	5.4	-	45.8	0.2	4.9	37.1	0.0	-	42.2	-
Car	0	1105	425	846	-	2376	-	0	8	1241	6593	1075	-	8917	37	974	7221	0	-	8232	19525
% Car	-	99.3	99.3	98.9	-	99.2	-	-	88.9	97.8	97.6	99.5	-	97.8	94.9	99.5	97.8	-	-	98.0	98.0
Truck	0	8	3	9	-	20	-	0	1	28	164	5	-	198	2	5	165	0	-	172	390
% Truck	-	0.7	0.7	1.1	-	0.8	-	-	11.1	2.2	2.4	0.5	-	2.2	5.1	0.5	2.2	-	-	2.0	2.0
Ped	-	-	-	-	29	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Ped	-	-	-	-	100.0	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Appendix B - Data Collection

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: I 95 NB at Military Trail
Site Code:
Start Date: 04/25/2013
Page No: 1

Turning Movement Data

Start Time	I 95 NB Northbound						Southbound Approach Southbound		N Military Trail Eastbound						N Military Trail Westbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
7:00 AM	0	7	2	8	1	17	0	0	0	29	176	13	0	218	0	17	225	0	0	242	477
7:15 AM	0	19	4	5	1	28	0	0	0	34	229	19	0	282	0	19	182	0	0	201	511
7:30 AM	0	22	3	5	0	30	0	0	1	25	214	32	0	272	1	39	291	0	0	331	633
7:45 AM	0	37	9	16	0	62	0	0	0	28	249	43	0	320	1	75	265	0	0	341	723
Hourly Total	0	85	18	34	2	137	0	0	1	116	868	107	0	1092	2	150	963	0	0	1115	2344
8:00 AM	0	20	3	23	0	46	0	0	0	29	274	39	0	342	1	50	268	0	0	319	707
8:15 AM	0	24	8	20	0	52	0	0	0	28	232	30	0	290	0	45	248	0	0	293	635
8:30 AM	0	34	8	13	0	55	0	0	1	29	239	30	0	299	0	35	187	0	0	222	576
8:45 AM	0	14	7	14	0	35	0	0	1	35	231	45	0	312	0	40	222	0	0	262	609
Hourly Total	0	92	26	70	0	188	0	0	2	121	976	144	0	1243	1	170	925	0	0	1096	2527
9:00 AM	0	15	5	7	0	27	0	0	0	29	221	29	0	279	2	30	193	0	0	225	531
9:15 AM	0	20	2	13	1	35	0	0	0	25	181	27	0	233	1	41	205	0	0	247	515
9:30 AM	0	17	5	18	0	40	0	0	0	29	140	23	0	192	0	27	192	0	0	219	451
9:45 AM	0	13	3	16	0	32	0	0	2	23	165	30	0	220	0	28	210	0	0	238	490
Hourly Total	0	65	15	54	1	134	0	0	2	106	707	109	0	924	3	126	800	0	0	929	1987
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM	0	17	6	15	0	38	0	0	2	23	174	16	0	215	0	14	169	0	0	183	436
11:15 AM	0	34	6	8	1	48	0	0	1	20	182	17	0	220	1	27	200	0	0	228	496
11:30 AM	0	20	11	18	1	49	0	0	0	27	166	27	0	220	0	19	197	0	0	216	485
11:45 AM	0	41	10	37	1	88	0	0	0	17	179	31	0	227	0	27	271	0	0	298	613
Hourly Total	0	112	33	78	3	223	0	0	3	87	701	91	0	882	1	87	837	0	0	925	2030
12:00 PM	0	41	3	31	0	75	0	0	1	32	158	25	0	216	1	32	240	0	0	273	564
12:15 PM	0	43	7	29	0	79	0	0	0	24	182	36	0	242	2	27	206	0	0	235	556
12:30 PM	0	32	4	25	0	61	0	0	0	33	218	33	0	284	2	32	219	0	0	253	598
12:45 PM	0	40	8	22	0	70	0	0	0	35	186	44	0	265	3	24	211	0	0	238	573
Hourly Total	0	156	22	107	0	285	0	0	1	124	744	138	0	1007	8	115	876	0	0	999	2291
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00 PM	0	34	5	29	0	68	0	0	0	34	210	32	0	276	0	28	284	0	0	312	656
3:15 PM	0	51	17	32	0	100	0	0	2	51	211	24	0	288	1	20	248	0	0	269	657
3:30 PM	0	45	19	34	0	98	0	0	0	61	210	31	0	302	0	25	255	0	0	280	680
3:45 PM	0	51	12	38	0	101	0	0	0	44	261	37	0	342	1	16	236	0	0	253	696
Hourly Total	0	181	53	133	0	367	0	0	2	190	892	124	0	1208	2	89	1023	0	0	1114	2689
4:00 PM	0	49	13	28	0	90	0	0	1	63	238	22	0	324	0	14	212	0	0	226	640
4:15 PM	0	56	25	42	0	123	0	0	0	45	249	27	0	321	0	25	273	0	0	298	742
4:30 PM	0	40	19	40	0	99	0	0	0	60	254	33	0	347	2	32	236	0	0	270	716
4:45 PM	0	51	18	30	0	99	0	0	0	58	280	33	0	371	0	30	242	0	0	272	742
Hourly Total	0	196	75	140	0	411	0	0	1	226	1021	115	0	1363	2	101	963	0	0	1066	2840
5:00 PM	0	69	48	52	0	169	0	0	1	74	264	31	0	370	2	22	289	0	0	313	852
5:15 PM	0	67	30	62	0	159	0	0	0	77	283	33	0	393	0	29	290	0	0	319	871
5:30 PM	0	59	42	66	2	167	0	0	1	74	279	54	0	408	1	24	256	0	0	281	856
5:45 PM	0	66	40	60	0	166	0	0	0	71	243	52	0	366	2	28	286	0	0	316	848
Hourly Total	0	261	160	240	2	661	0	0	2	296	1069	170	0	1537	5	103	1121	0	0	1229	3427
Grand Total	0	1148	402	856	8	2406	0	0	14	1266	6978	998	0	9256	24	941	7508	0	0	8473	20135
Approach %	0.0	47.7	16.7	35.6	-	-	-	-	0.2	13.7	75.4	10.8	-	-	0.3	11.1	88.6	0.0	-	-	-
Total %	0.0	5.7	2.0	4.3	-	11.9	-	0.0	0.1	6.3	34.7	5.0	-	46.0	0.1	4.7	37.3	0.0	-	42.1	-
Car	0	1141	398	847	-	2386	-	0	14	1238	6808	991	-	9051	23	937	7340	0	-	8300	19737
% Car	-	99.4	99.0	98.9	-	99.2	-	-	100.0	97.8	97.6	99.3	-	97.8	95.8	99.6	97.8	-	-	98.0	98.0
Truck	0	7	4	9	-	20	-	0	0	28	170	7	-	205	1	4	168	0	-	173	398
% Truck	-	0.6	1.0	1.1	-	0.8	-	-	0.0	2.2	2.4	0.7	-	2.2	4.2	0.4	2.2	-	-	2.0	2.0
Ped	-	-	-	-	8	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Ped	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Appendix B - Data Collection

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: Northlake Blvd at Roan Ln
Site Code:
Start Date: 04/30/2013
Page No: 1

Turning Movement Data

Start Time	Roan Ln Southbound					Northlake Blvd Eastbound					Northlake Blvd Westbound					Int. Total
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	
7:00 AM	0	0	23	1	23	0	14	346	0	360	0	305	10	0	315	698
7:15 AM	0	0	45	1	45	0	21	462	0	483	0	280	10	0	290	818
7:30 AM	0	0	44	0	44	0	28	543	0	571	0	389	19	0	408	1023
7:45 AM	0	0	67	0	67	0	61	625	0	686	0	421	28	0	449	1202
Hourly Total	0	0	179	2	179	0	124	1976	0	2100	0	1395	67	0	1462	3741
8:00 AM	0	1	31	0	32	0	14	582	0	596	0	431	11	0	442	1070
8:15 AM	0	0	28	2	28	1	9	565	0	575	0	361	16	1	377	980
8:30 AM	0	0	29	0	29	0	9	588	0	597	0	376	16	1	392	1018
8:45 AM	0	0	22	0	22	3	7	603	0	613	0	404	19	1	423	1058
Hourly Total	0	1	110	2	111	4	39	2338	0	2381	0	1572	62	3	1634	4126
9:00 AM	0	0	19	1	19	3	15	501	0	519	0	377	16	0	393	931
9:15 AM	0	0	25	0	25	5	13	443	0	461	0	333	9	0	342	828
9:30 AM	0	0	14	1	14	4	4	459	0	467	0	332	20	2	352	833
9:45 AM	0	0	14	0	14	1	14	527	0	542	1	357	17	0	375	931
Hourly Total	0	0	72	2	72	13	46	1930	0	1989	1	1399	62	2	1462	3523
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM	0	0	23	0	23	1	10	488	0	499	0	497	12	0	509	1031
11:15 AM	0	0	8	0	8	3	18	503	0	524	0	428	24	0	452	984
11:30 AM	0	0	16	1	16	3	9	518	0	530	0	451	10	0	461	1007
11:45 AM	0	0	16	0	16	2	12	567	0	581	0	517	19	1	536	1133
Hourly Total	0	0	63	1	63	9	49	2076	0	2134	0	1893	65	1	1958	4155
12:00 PM	0	0	20	1	20	2	11	580	1	593	0	471	19	0	490	1103
12:15 PM	0	0	19	1	19	3	16	582	0	601	0	517	18	0	535	1155
12:30 PM	0	0	16	2	16	3	16	552	0	571	0	565	20	0	585	1172
12:45 PM	0	0	23	0	23	1	17	572	0	590	0	530	24	0	554	1167
Hourly Total	0	0	78	4	78	9	60	2286	1	2355	0	2083	81	0	2164	4597
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00 PM	0	0	51	0	51	0	37	421	0	458	0	479	33	0	512	1021
3:15 PM	0	0	33	0	33	2	22	507	0	531	1	511	20	0	532	1096
3:30 PM	0	0	19	1	19	2	26	528	0	556	0	497	28	0	525	1100
3:45 PM	0	0	26	1	26	0	25	521	0	546	0	483	22	1	505	1077
Hourly Total	0	0	129	2	129	4	110	1977	0	2091	1	1970	103	1	2074	4294
4:00 PM	0	0	34	0	34	2	21	540	0	563	0	544	32	1	576	1173
4:15 PM	0	0	25	0	25	2	27	560	2	589	0	563	16	1	579	1193
4:30 PM	0	0	21	0	21	1	36	522	1	559	0	548	16	0	564	1144
4:45 PM	0	0	22	0	22	1	32	529	0	562	0	555	23	0	578	1162
Hourly Total	0	0	102	0	102	6	116	2151	3	2273	0	2210	87	2	2297	4672
5:00 PM	0	0	31	1	31	2	26	511	0	539	1	638	21	0	660	1230
5:15 PM	0	0	28	1	28	2	20	598	0	620	0	670	23	0	693	1341
5:30 PM	0	0	26	0	26	1	38	634	0	673	0	618	26	0	644	1343
5:45 PM	0	0	18	1	18	0	21	547	0	568	0	628	26	0	654	1240
Hourly Total	0	0	103	3	103	5	105	2290	0	2400	1	2554	96	0	2651	5154
Grand Total	0	1	836	16	837	50	649	17024	4	17723	3	15076	623	9	15702	34262
Approach %	0.0	0.1	99.9	-	-	0.3	3.7	96.1	-	-	0.0	96.0	4.0	-	-	-
Total %	0.0	0.0	2.4	-	2.4	0.1	1.9	49.7	-	51.7	0.0	44.0	1.8	-	45.8	-
Car	0	1	820	-	821	49	633	16637	-	17319	3	14720	606	-	15329	33469
% Car	-	100.0	98.1	-	98.1	98.0	97.5	97.7	-	97.7	100.0	97.6	97.3	-	97.6	97.7
Truck	0	0	16	-	16	1	16	387	-	404	0	356	17	-	373	793
% Truck	-	0.0	1.9	-	1.9	2.0	2.5	2.3	-	2.3	0.0	2.4	2.7	-	2.4	2.3
Ped	-	-	-	16	-	-	-	-	4	-	-	-	-	9	-	-
% Ped	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	100.0	-	-

Appendix B - Data Collection

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: Northlake Blvd at Roan Ln
Site Code:
Start Date: 05/01/2013
Page No: 1

Turning Movement Data

Start Time	Roan Ln Southbound				Northlake Blvd Eastbound					Northlake Blvd Westbound					
	U-Turn	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	Int. Total
7:00 AM	0	25	1	25	0	13	332	0	345	0	288	6	0	294	664
7:15 AM	0	40	1	40	3	21	502	0	526	0	294	12	0	306	872
7:30 AM	0	50	0	50	1	38	576	0	615	0	390	19	1	409	1074
7:45 AM	0	63	0	63	0	57	628	0	685	0	449	38	0	487	1235
Hourly Total	0	178	2	178	4	129	2038	0	2171	0	1421	75	1	1496	3845
8:00 AM	0	44	2	44	2	24	577	0	603	0	450	20	0	470	1117
8:15 AM	0	20	3	20	1	6	536	0	543	0	403	8	0	411	974
8:30 AM	0	29	0	29	1	10	517	0	528	0	371	9	0	380	937
8:45 AM	0	24	0	24	1	14	576	0	591	0	371	8	0	379	994
Hourly Total	0	117	5	117	5	54	2206	0	2265	0	1595	45	0	1640	4022
9:00 AM	0	18	1	18	3	10	510	0	523	0	364	16	0	380	921
9:15 AM	0	19	2	19	2	13	442	0	457	0	350	13	0	363	839
9:30 AM	0	21	1	21	2	10	453	0	465	0	341	20	0	361	847
9:45 AM	0	13	2	13	0	14	535	0	549	0	381	6	0	387	949
Hourly Total	0	71	6	71	7	47	1940	0	1994	0	1436	55	0	1491	3556
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM	0	19	0	19	1	20	542	0	563	0	387	15	0	402	984
11:15 AM	0	23	2	23	1	19	546	0	566	0	452	8	0	460	1049
11:30 AM	0	22	1	22	3	15	539	0	557	0	457	16	0	473	1052
11:45 AM	0	17	2	17	2	18	575	0	595	0	502	20	0	522	1134
Hourly Total	0	81	5	81	7	72	2202	0	2281	0	1798	59	0	1857	4219
12:00 PM	0	19	1	19	3	17	594	0	614	0	506	15	1	521	1154
12:15 PM	0	18	0	18	4	13	562	0	579	0	533	13	0	546	1143
12:30 PM	0	13	4	13	2	12	611	0	625	0	557	21	0	578	1216
12:45 PM	0	24	2	24	0	20	548	0	568	0	540	25	0	565	1157
Hourly Total	0	74	7	74	9	62	2315	0	2386	0	2136	74	1	2210	4670
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00 PM	0	35	1	35	1	36	493	0	530	0	543	31	0	574	1139
3:15 PM	0	31	2	31	3	26	531	0	560	0	622	27	0	649	1240
3:30 PM	0	31	5	31	3	18	607	0	628	0	621	33	0	654	1313
3:45 PM	0	23	1	23	0	35	565	0	600	0	601	22	0	623	1246
Hourly Total	0	120	9	120	7	115	2196	0	2318	0	2387	113	0	2500	4938
4:00 PM	1	17	3	18	2	23	550	0	575	0	585	20	0	605	1198
4:15 PM	0	30	0	30	3	32	563	0	598	0	610	23	0	633	1261
4:30 PM	0	34	3	34	2	33	578	0	613	0	601	16	0	617	1264
4:45 PM	0	30	1	30	2	27	589	0	618	1	604	24	0	629	1277
Hourly Total	1	111	7	112	9	115	2280	0	2404	1	2400	83	0	2484	5000
5:00 PM	0	31	0	31	7	25	477	0	509	0	670	26	0	696	1236
5:15 PM	0	24	0	24	1	29	490	0	520	0	584	20	0	604	1148
5:30 PM	0	22	0	22	5	30	524	0	559	0	669	27	0	696	1277
5:45 PM	0	22	0	22	3	26	466	0	495	0	583	17	0	600	1117
Hourly Total	0	99	0	99	16	110	1957	0	2083	0	2506	90	0	2596	4778
Grand Total	1	851	41	852	64	704	17134	0	17902	1	15679	594	2	16274	35028
Approach %	0.1	99.9	-	-	0.4	3.9	95.7	-	-	0.0	96.3	3.6	-	-	-
Total %	0.0	2.4	-	2.4	0.2	2.0	48.9	-	51.1	0.0	44.8	1.7	-	46.5	-
Car	1	843	-	844	63	691	16766	-	17520	1	15336	581	-	15918	34282
% Car	100.0	99.1	-	99.1	98.4	98.2	97.9	-	97.9	100.0	97.8	97.8	-	97.8	97.9
Truck	0	8	-	8	1	13	368	-	382	0	343	13	-	356	746
% Truck	0.0	0.9	-	0.9	1.6	1.8	2.1	-	2.1	0.0	2.2	2.2	-	2.2	2.1
Ped	-	-	41	-	-	-	-	0	-	-	-	-	2	-	-
% Ped	-	-	100.0	-	-	-	-	-	-	-	-	-	100.0	-	-

Appendix B - Data Collection

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: Northlake Blvd at Roan Ln
Site Code:
Start Date: 05/02/2013
Page No: 1

Turning Movement Data

Start Time	Roan Ln Southbound					Northlake Blvd Eastbound					Northlake Blvd Westbound					
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	Int. Total
7:00 AM	0	0	31	2	31	0	14	322	0	336	0	269	7	0	276	643
7:15 AM	0	0	39	1	39	1	18	496	0	515	0	289	14	0	303	857
7:30 AM	0	0	43	1	43	1	36	546	0	583	0	387	22	0	409	1035
7:45 AM	0	0	75	0	75	1	45	670	0	716	0	414	33	1	447	1238
Hourly Total	0	0	188	4	188	3	113	2034	0	2150	0	1359	76	1	1435	3773
8:00 AM	0	0	38	0	38	1	19	613	0	633	0	422	14	0	436	1107
8:15 AM	0	0	24	3	24	0	9	541	0	550	0	413	11	0	424	998
8:30 AM	0	0	26	2	26	1	6	515	0	522	0	410	10	0	420	968
8:45 AM	0	0	23	0	23	3	8	576	0	587	0	426	12	2	438	1048
Hourly Total	0	0	111	5	111	5	42	2245	0	2292	0	1671	47	2	1718	4121
9:00 AM	0	0	16	0	16	1	16	542	0	559	0	380	18	0	398	973
9:15 AM	0	0	18	1	18	1	10	473	0	484	0	367	23	0	390	892
9:30 AM	0	0	20	0	20	1	13	457	0	471	0	364	16	0	380	871
9:45 AM	0	0	19	1	19	1	12	543	0	556	0	380	19	0	399	974
Hourly Total	0	0	73	2	73	4	51	2015	0	2070	0	1491	76	0	1567	3710
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM	0	0	19	0	19	1	11	479	0	491	0	453	9	0	462	972
11:15 AM	0	0	19	0	19	0	19	504	0	523	0	431	13	0	444	986
11:30 AM	0	0	18	0	18	4	14	420	0	438	0	364	12	0	376	832
11:45 AM	0	0	12	0	12	7	12	550	0	569	0	412	15	0	427	1008
Hourly Total	0	0	68	0	68	12	56	1953	0	2021	0	1660	49	0	1709	3798
12:00 PM	0	0	15	0	15	7	22	520	0	549	1	452	18	0	471	1035
12:15 PM	0	0	13	1	13	0	13	475	0	488	0	437	18	0	455	956
12:30 PM	0	0	14	1	14	0	17	484	0	501	0	484	13	0	497	1012
12:45 PM	0	0	8	0	8	1	14	455	0	470	0	420	12	0	432	910
Hourly Total	0	0	50	2	50	8	66	1934	0	2008	1	1793	61	0	1855	3913
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00 PM	0	0	39	0	39	1	34	451	0	486	0	445	31	0	476	1001
3:15 PM	0	0	26	0	26	4	22	433	0	459	0	440	18	0	458	943
3:30 PM	0	0	22	0	22	2	23	449	0	474	0	508	22	0	530	1026
3:45 PM	0	0	21	1	21	2	41	501	0	544	2	474	21	0	497	1062
Hourly Total	0	0	108	1	108	9	120	1834	0	1963	2	1867	92	0	1961	4032
4:00 PM	0	0	28	0	28	2	30	481	0	513	0	505	30	0	535	1076
4:15 PM	0	0	22	0	22	2	24	440	0	466	0	537	28	0	565	1053
4:30 PM	0	0	27	1	27	1	41	453	0	495	0	463	26	0	489	1011
4:45 PM	0	0	23	0	23	6	27	509	0	542	0	504	17	0	521	1086
Hourly Total	0	0	100	1	100	11	122	1883	0	2016	0	2009	101	0	2110	4226
5:00 PM	0	0	17	0	17	3	26	445	0	474	0	586	20	0	606	1097
5:15 PM	0	0	31	0	31	2	33	485	0	520	0	573	20	0	593	1144
5:30 PM	0	0	23	0	23	1	35	509	0	545	0	556	27	0	583	1151
5:45 PM	0	0	32	0	32	1	20	461	0	482	0	520	20	0	540	1054
Hourly Total	0	0	103	0	103	7	114	1900	0	2021	0	2235	87	0	2322	4446
Grand Total	0	0	801	15	801	59	684	15798	0	16541	3	14085	589	3	14677	32019
Approach %	0.0	0.0	100.0	-	-	0.4	4.1	95.5	-	-	0.0	96.0	4.0	-	-	-
Total %	0.0	0.0	2.5	-	2.5	0.2	2.1	49.3	-	51.7	0.0	44.0	1.8	-	45.8	-
Car	0	0	786	-	786	57	669	15455	-	16181	3	13774	576	-	14353	31320
% Car	-	-	98.1	-	98.1	96.6	97.8	97.8	-	97.8	100.0	97.8	97.8	-	97.8	97.8
Truck	0	0	15	-	15	2	15	343	-	360	0	311	13	-	324	699
% Truck	-	-	1.9	-	1.9	3.4	2.2	2.2	-	2.2	0.0	2.2	2.2	-	2.2	2.2
Ped	-	-	-	15	-	-	-	-	0	-	-	-	-	3	-	-
% Ped	-	-	-	100.0	-	-	-	-	-	-	-	-	-	100.0	-	-

Appendix B - Data Collection

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: N Military Trail at PGA Blvd
Site Code:
Start Date: 04/23/2013

Turning Movement Data

Start Time	N Military Trail Northbound						N Military Trail Southbound						PGA Blvd Eastbound						PGA Blvd Westbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
7:00 AM	0	86	159	50	0	295	1	99	156	22	0	278	0	25	160	71	0	256	8	17	102	59	0	186	1015
7:15 AM	0	100	130	83	0	313	1	110	174	38	0	323	0	20	248	88	0	356	11	23	145	75	0	254	1246
7:30 AM	4	172	133	76	0	385	1	175	198	49	0	423	0	34	342	108	0	484	12	24	175	47	1	258	1550
7:45 AM	2	151	185	109	0	447	1	190	200	48	0	439	0	33	390	150	0	573	14	28	178	90	2	310	1769
Hourly Total	6	509	607	318	0	1440	4	574	728	157	0	1463	0	112	1140	417	0	1669	45	92	600	271	3	1008	5580
8:00 AM	0	107	169	90	1	366	4	165	197	46	1	412	1	40	356	141	0	538	17	30	194	65	0	306	1622
8:15 AM	4	108	138	117	0	367	0	146	186	27	0	359	1	38	348	96	2	483	20	30	213	64	0	327	1536
8:30 AM	6	138	178	78	2	400	2	152	164	40	0	358	0	31	326	89	2	446	19	17	160	56	0	252	1456
8:45 AM	1	124	169	97	0	391	3	144	207	38	0	392	3	34	312	118	1	467	17	34	173	67	1	291	1541
Hourly Total	11	477	654	382	3	1524	9	607	754	151	1	1521	5	143	1342	444	5	1934	73	111	740	252	1	1176	6155
9:00 AM	0	126	148	68	0	342	1	105	146	39	0	291	0	50	304	80	0	434	19	37	168	59	0	283	1350
9:15 AM	3	98	159	94	0	354	3	116	134	43	0	296	2	57	290	91	0	440	13	32	124	40	3	209	1299
9:30 AM	1	78	102	59	0	240	5	92	134	26	0	257	1	37	229	67	0	334	14	24	145	49	1	232	1063
9:45 AM	2	80	129	69	0	280	0	99	146	35	1	280	0	42	252	85	0	379	11	26	166	58	0	261	1200
Hourly Total	6	382	538	290	0	1216	9	412	560	143	1	1124	3	186	1075	323	0	1587	57	119	603	206	4	985	4912
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM	0	67	104	71	0	242	1	67	104	37	1	209	1	31	182	65	0	279	10	38	173	51	0	272	1002
11:15 AM	0	88	120	95	3	303	0	107	129	52	0	288	0	42	173	59	2	274	11	41	142	46	1	240	1105
11:30 AM	0	87	110	62	5	259	0	104	112	35	0	251	1	42	211	71	4	325	14	50	214	66	1	344	1179
11:45 AM	0	66	148	79	2	293	0	102	163	44	2	309	0	37	244	88	0	369	15	34	224	86	4	359	1330
Hourly Total	0	308	482	307	10	1097	1	380	508	168	3	1057	2	152	810	283	6	1247	50	163	753	249	6	1215	4616
12:00 PM	0	115	147	101	0	363	0	88	124	34	0	246	3	37	204	80	0	324	9	57	213	80	4	359	1292
12:15 PM	0	108	145	72	0	325	2	99	145	41	0	287	3	40	258	74	0	375	20	52	195	56	1	323	1310
12:30 PM	2	105	173	70	0	350	5	110	194	42	6	351	2	46	228	86	2	362	15	42	170	68	7	295	1358
12:45 PM	0	86	153	95	0	334	3	119	151	52	3	325	1	43	249	85	0	378	20	45	231	64	2	360	1397
Hourly Total	2	414	618	338	0	1372	10	416	614	169	9	1209	9	166	939	325	2	1439	64	196	809	268	14	1337	5357
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00 PM	0	88	158	105	1	351	0	120	199	35	2	354	0	46	233	109	1	388	18	68	286	93	0	465	1558
3:15 PM	0	93	218	77	1	388	1	143	200	46	3	390	0	29	182	90	2	301	17	56	213	86	3	372	1451
3:30 PM	3	146	243	90	0	482	0	135	180	39	3	354	2	54	260	83	0	399	11	73	400	89	0	573	1808
3:45 PM	1	125	243	70	1	439	2	100	202	56	4	360	1	41	240	86	3	368	21	72	307	77	4	477	1644
Hourly Total	4	452	862	342	3	1660	3	498	781	176	12	1458	3	170	915	368	6	1456	67	269	1206	345	7	1887	6461
4:00 PM	0	125	141	100	1	366	0	113	197	56	8	366	0	39	196	117	2	352	15	78	243	80	7	416	1500
4:15 PM	0	138	168	78	0	384	1	99	213	49	3	362	2	55	231	139	3	427	18	53	319	75	2	465	1638
4:30 PM	0	137	192	99	0	428	1	116	198	59	2	374	2	46	185	112	1	345	22	58	261	78	3	419	1566
4:45 PM	0	122	190	86	1	398	0	102	211	57	5	370	0	58	264	114	1	436	18	61	324	113	5	516	1720
Hourly Total	0	522	691	363	2	1576	2	430	819	221	18	1472	4	198	876	482	7	1560	73	250	1147	346	17	1816	6424
5:00 PM	0	176	249	131	3	556	0	106	228	58	4	392	2	54	222	121	3	399	20	65	306	102	4	493	1840
5:15 PM	0	174	226	97	1	497	2	124	239	53	2	418	2	68	275	173	0	518	27	71	373	135	3	606	2039
5:30 PM	0	162	225	97	0	484	3	105	227	64	1	399	2	73	248	103	1	426	21	71	386	131	3	609	1918
5:45 PM	0	149	183	88	1	420	1	106	169	57	12	333	0	67	255	145	1	467	28	66	335	126	12	555	1775
Hourly Total	0	661	883	413	5	1957	6	441	863	232	19	1542	6	262	1000	542	5	1810	96	273	1400	494	22	2263	7572
Grand Total	29	3725	5335	2753	23	11842	44	3758	5627	1417	63	10846	32	1389	8097	3184	31	12702	525	1473	7258	2431	74	11687	47077
Approach %	0.2	31.5	45.1	23.2	-	-	0.4	34.6	51.9	13.1	-	-	0.3	10.9	63.7	25.1	-	-	4.5	12.6	62.1	20.8	-	-	-
Total %	0.1	7.9	11.3	5.8	-	25.2	0.1	8.0	12.0	3.0	-	23.0	0.1	3.0	17.2	6.8	-	27.0	1.1	3.1	15.4	5.2	-	24.8	-
Car	29	3646	5213	2716	-	11604	44	3685	5491	1376	-	10596	32	1351	7905	3123	-	12411	513	1446	7086	2373	-	11418	46029
% Car	100.0	97.9	97.7	98.7	-	98.0	100.0	98.1	97.6	97.1	-	97.7	100.0	97.3	97.6	98.1	-	97.7	97.7	98.2	97.6	97.6	-	97.7	97.8
Truck	0	79	122	37	-	238	0	73	136	41	-	250	0	38	192	61	-	291	12	27	172	58	-	269	1048
% Truck	0.0	2.1	2.3	1.3	-	2.0	0.0	1.9	2.4	2.9	-	2.3	0.0	2.7	2.4	1.9	-	2.3	2.3	1.8	2.4	2.4	-	2.3	2.2
Ped	-	-	-	-	23	-	-	-	-	-	63	-	-	-	-	-	31	-	-	-	-	-	74	-	-
% Ped	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

Appendix B - Data Collection

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: Military Trail at PGA Blvd
Site Code:
Start Date: 04/24/2013
Page No: 1

Turning Movement Data

Start Time	N Military Trail Northbound					N Military Trail Southbound						PGA Blvd Eastbound					PGA Blvd Westbound					
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	Int. Total
7:00 AM	1	80	55	0	136	1	96	167	35	1	299	0	170	80	0	250	11	20	95	0	126	811
7:15 AM	0	121	71	0	192	0	107	134	34	0	275	0	243	84	0	327	6	28	146	1	180	974
7:30 AM	1	149	88	0	238	0	171	204	45	0	420	0	291	119	1	410	15	24	149	0	188	1256
7:45 AM	0	138	104	0	242	3	196	214	45	0	458	0	374	131	1	505	21	29	215	3	265	1470
Hourly Total	2	488	318	0	808	4	570	719	159	1	1452	0	1078	414	2	1492	53	101	605	4	759	4511
8:00 AM	2	102	99	0	203	1	138	168	47	0	354	0	408	153	0	561	9	27	195	0	231	1349
8:15 AM	0	116	95	0	211	0	145	176	44	2	365	0	323	118	0	441	20	27	215	0	262	1279
8:30 AM	0	128	102	0	230	2	185	191	53	0	431	0	324	73	0	397	15	17	178	3	210	1268
8:45 AM	1	117	84	0	202	0	120	162	39	0	321	5	377	132	2	514	12	30	168	3	210	1247
Hourly Total	3	463	380	0	846	3	588	697	183	2	1471	5	1432	476	2	1913	56	101	756	6	913	5143
9:00 AM	2	117	59	0	178	1	98	184	33	0	316	1	279	87	2	367	24	28	189	1	241	1102
9:15 AM	2	97	89	0	188	1	116	147	53	0	317	1	287	94	0	382	13	26	154	0	193	1080
9:30 AM	2	68	79	3	149	0	87	134	35	0	256	0	221	62	3	283	13	30	145	1	188	876
9:45 AM	1	94	65	0	160	0	88	143	41	0	272	0	256	74	0	330	10	26	174	0	210	972
Hourly Total	7	376	292	3	675	2	389	608	162	0	1161	2	1043	317	5	1362	60	110	662	2	832	4030
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM	2	49	65	3	116	0	74	84	40	0	198	1	197	56	2	254	11	54	205	0	270	838
11:15 AM	1	74	75	1	150	0	111	153	55	0	319	0	230	61	0	291	10	50	183	1	243	1003
11:30 AM	3	84	77	1	164	0	98	126	29	1	253	1	201	62	0	264	18	42	201	0	261	942
11:45 AM	0	99	67	1	166	0	86	200	69	1	355	0	265	108	1	373	12	53	238	6	303	1197
Hourly Total	6	306	284	6	596	0	369	563	193	2	1125	2	893	287	3	1182	51	199	827	7	1077	3980
12:00 PM	2	134	76	1	212	0	105	163	64	1	332	4	224	84	1	312	17	68	186	2	271	1127
12:15 PM	5	116	65	0	186	0	92	113	53	1	258	2	276	75	0	353	17	39	245	0	301	1098
12:30 PM	3	127	68	2	198	0	116	170	61	3	347	1	238	74	1	313	11	36	208	5	255	1113
12:45 PM	5	110	75	3	190	0	108	165	47	1	320	1	212	91	2	304	17	53	202	1	272	1086
Hourly Total	15	487	284	6	786	0	421	611	225	6	1257	8	950	324	4	1282	62	196	841	8	1099	4424
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00 PM	0	87	72	0	159	2	100	184	26	8	312	0	244	103	2	347	17	71	267	8	355	1173
3:15 PM	0	116	89	1	205	2	121	219	36	2	378	0	219	108	0	327	16	78	228	0	322	1232
3:30 PM	0	139	82	1	221	2	139	154	34	0	329	0	239	95	2	334	14	55	267	0	336	1220
3:45 PM	0	137	81	2	218	2	106	219	41	2	368	0	253	109	0	362	17	67	274	2	358	1306
Hourly Total	0	479	324	4	803	8	466	776	137	12	1387	0	955	415	4	1370	64	271	1036	10	1371	4931
4:00 PM	1	141	102	0	244	0	108	192	63	2	363	0	188	99	2	287	17	63	251	4	331	1225
4:15 PM	0	123	90	0	213	0	128	217	55	0	400	0	189	148	6	337	13	54	288	3	355	1305
4:30 PM	2	126	89	2	217	0	120	177	54	0	351	0	183	85	1	268	13	68	272	1	353	1189
4:45 PM	0	141	108	0	249	0	105	210	64	3	379	0	211	120	1	331	14	71	321	4	406	1365
Hourly Total	3	531	389	2	923	0	461	796	236	5	1493	0	771	452	10	1223	57	256	1132	12	1445	5084
5:00 PM	0	158	110	4	268	0	98	223	70	2	391	0	269	105	2	374	25	61	302	1	388	1421
5:15 PM	0	168	99	4	267	2	117	244	64	1	427	2	304	133	3	439	29	90	340	1	459	1592
5:30 PM	0	131	111	1	242	0	114	238	61	3	413	1	271	150	1	422	28	91	369	3	488	1565
5:45 PM	0	155	88	2	243	5	99	254	56	2	414	1	243	125	1	369	22	89	343	1	454	1480
Hourly Total	0	612	408	11	1020	7	428	959	251	8	1645	4	1087	513	7	1604	104	331	1354	6	1789	6058
Grand Total	36	3742	2679	32	6457	24	3692	5729	1546	36	10991	21	8209	3198	37	11428	507	1565	7213	55	9285	38161
Approach %	0.6	58.0	41.5	-	-	0.2	33.6	52.1	14.1	-	-	0.2	71.8	28.0	-	-	5.5	16.9	77.7	-	-	-
Total %	0.1	9.8	7.0	-	16.9	0.1	9.7	15.0	4.1	-	28.8	0.1	21.5	8.4	-	29.9	1.3	4.1	18.9	-	24.3	-
Car	35	3665	2641	-	6341	24	3625	5608	1491	-	10748	21	8015	3131	-	11167	489	1540	7014	-	9043	37299
% Car	97.2	97.9	98.6	-	98.2	100.0	98.2	97.9	96.4	-	97.8	100.0	97.6	97.9	-	97.7	96.4	98.4	97.2	-	97.4	97.7
Truck	1	77	38	-	116	0	67	121	55	-	243	0	194	67	-	261	18	25	199	-	242	862
% Truck	2.8	2.1	1.4	-	1.8	0.0	1.8	2.1	3.6	-	2.2	0.0	2.4	2.1	-	2.3	3.6	1.6	2.8	-	2.6	2.3
Ped	-	-	-	32	-	-	-	-	-	36	-	-	-	-	37	-	-	-	-	55	-	-
% Ped	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	100.0	-	-

Appendix B - Data Collection

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: N Military Trail at PGA Blvd
Site Code:
Start Date: 04/25/2013

Turning Movement Data

Start Time	N Military Trail Northbound						N Military Trail Southbound						PGA Blvd Eastbound						PGA Blvd Westbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
7:00 AM	1	89	143	58	0	291	0	115	143	24	0	282	0	29	147	68	0	244	7	18	90	51	0	166	983
7:15 AM	0	118	167	77	0	362	0	109	140	26	1	275	0	40	247	66	0	353	8	28	160	71	0	267	1257
7:30 AM	1	145	162	79	0	387	0	161	186	37	1	384	0	37	294	103	2	434	9	24	174	55	0	262	1467
7:45 AM	0	111	175	76	2	362	0	179	206	44	0	429	0	46	359	151	4	556	11	20	194	88	4	313	1660
Hourly Total	2	463	647	290	2	1402	0	564	675	131	2	1370	0	152	1047	388	6	1587	35	90	618	265	4	1008	5367
8:00 AM	0	105	172	81	0	358	0	144	182	39	2	365	0	54	370	112	0	536	14	35	173	73	1	295	1554
8:15 AM	1	101	161	95	0	358	0	130	200	30	0	360	0	41	352	116	0	509	18	47	239	77	0	381	1608
8:30 AM	3	126	168	94	0	391	0	163	178	47	0	388	0	39	310	75	0	424	20	30	187	63	0	300	1503
8:45 AM	2	124	199	91	5	416	0	144	173	37	1	354	0	42	341	117	0	500	7	43	203	65	1	318	1588
Hourly Total	6	456	700	361	5	1523	0	581	733	153	3	1467	0	176	1373	420	0	1969	59	155	802	278	2	1294	6253
9:00 AM	1	112	152	80	1	345	0	117	169	41	0	327	0	39	314	84	0	437	19	29	199	56	0	303	1412
9:15 AM	4	87	152	78	0	321	0	127	141	45	0	313	2	38	289	91	0	420	10	23	139	48	1	220	1274
9:30 AM	5	96	106	77	0	284	0	108	123	36	0	267	0	31	225	60	2	316	15	46	168	45	2	274	1141
9:45 AM	1	70	137	66	0	274	0	84	168	47	0	299	0	40	237	79	0	356	9	37	141	54	0	241	1170
Hourly Total	11	365	547	301	1	1224	0	436	601	169	0	1206	2	148	1065	314	2	1529	53	135	647	203	3	1038	4997
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM	0	83	96	76	1	255	0	84	129	25	0	238	0	45	244	67	0	356	13	42	183	46	0	284	1133
11:15 AM	2	100	140	60	1	302	0	117	147	40	6	304	0	32	209	53	1	294	15	30	134	50	7	229	1129
11:30 AM	0	98	120	75	0	293	0	115	132	20	1	267	0	41	245	89	1	375	20	34	198	75	2	327	1262
11:45 AM	0	135	136	72	1	343	0	96	176	47	0	319	0	43	244	87	1	374	14	63	230	52	1	359	1395
Hourly Total	2	416	492	283	3	1193	0	412	584	132	7	1128	0	161	942	296	3	1399	62	169	745	223	10	1199	4919
12:00 PM	0	95	163	79	1	337	0	132	193	61	0	386	2	45	238	86	3	371	15	38	202	45	0	300	1394
12:15 PM	1	118	123	83	2	325	0	100	147	45	0	292	1	49	262	66	4	378	19	71	268	57	0	415	1410
12:30 PM	0	106	149	65	1	320	2	110	157	60	0	329	1	51	285	87	3	424	17	38	194	77	0	326	1399
12:45 PM	5	116	115	90	0	326	0	120	161	38	0	319	0	45	229	93	5	367	17	71	251	68	0	407	1419
Hourly Total	6	435	550	317	4	1308	2	462	658	204	0	1326	4	190	1014	332	15	1540	68	218	915	247	0	1448	5622
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00 PM	1	91	162	89	2	343	0	102	190	39	0	331	1	43	267	102	2	413	12	47	281	67	2	407	1494
3:15 PM	1	101	184	77	3	363	0	137	234	58	0	429	0	37	214	114	3	365	10	58	244	70	1	382	1539
3:30 PM	2	159	157	83	2	401	0	148	184	47	0	379	0	42	226	91	2	359	15	76	296	85	3	472	1611
3:45 PM	2	118	223	92	0	435	1	100	198	64	0	363	1	54	276	86	1	417	20	66	302	102	5	490	1705
Hourly Total	6	469	726	341	7	1542	1	487	806	208	0	1502	2	176	983	393	8	1554	57	247	1123	324	11	1751	6349
4:00 PM	1	137	216	87	1	441	2	111	186	55	0	354	1	40	204	100	1	345	17	65	288	88	0	458	1598
4:15 PM	1	129	185	80	1	395	0	109	207	40	1	356	0	53	220	109	0	382	20	58	286	109	1	473	1606
4:30 PM	0	139	193	90	0	422	3	127	183	31	1	344	0	57	241	92	1	390	19	64	276	110	4	469	1625
4:45 PM	0	148	206	81	0	435	2	113	197	31	0	343	0	45	236	54	1	335	9	83	317	112	2	521	1634
Hourly Total	2	553	800	338	2	1693	7	460	773	157	2	1397	1	195	901	355	3	1452	65	270	1167	419	7	1921	6463
5:00 PM	0	121	225	118	1	464	4	107	226	65	1	402	2	59	237	121	5	419	24	78	331	119	2	552	1837
5:15 PM	0	172	248	108	2	528	2	117	221	66	6	406	2	63	282	116	3	463	27	74	355	138	6	594	1991
5:30 PM	0	144	217	110	0	471	0	119	203	74	1	396	0	61	292	100	0	453	24	83	353	131	0	591	1911
5:45 PM	0	129	198	103	0	430	0	104	222	60	4	386	4	66	289	121	2	480	17	69	344	110	7	540	1836
Hourly Total	0	566	888	439	3	1893	6	447	872	265	12	1590	8	249	1100	458	10	1815	92	304	1383	498	15	2277	7575
Grand Total	35	3723	5350	2670	27	11778	16	3849	5702	1419	26	10986	17	1447	8425	2956	47	12845	491	1588	7400	2457	52	11936	47545
Approach %	0.3	31.6	45.4	22.7	-	-	0.1	35.0	51.9	12.9	-	-	0.1	11.3	65.6	23.0	-	-	4.1	13.3	62.0	20.6	-	-	-
Total %	0.1	7.8	11.3	5.6	-	24.8	0.0	8.1	12.0	3.0	-	23.1	0.0	3.0	17.7	6.2	-	27.0	1.0	3.3	15.6	5.2	-	25.1	-
Car	34	3655	5230	2616	-	11535	16	3776	5584	1383	-	10759	17	1412	8203	2879	-	12511	481	1557	7208	2417	-	11663	46468
% Car	97.1	98.2	97.8	98.0	-	97.9	100.0	98.1	97.9	97.5	-	97.9	100.0	97.6	97.4	97.4	-	97.4	98.0	98.0	97.4	98.4	-	97.7	97.7
Truck	1	68	120	54	-	243	0	73	118	36	-	227	0	35	222	77	-	334	10	31	192	40	-	273	1077
% Truck	2.9	1.8	2.2	2.0	-	2.1	0.0	1.9	2.1	2.5	-	2.1	0.0	2.4	2.6	2.6	-	2.6	2.0	2.0	2.6	1.6	-	2.3	2.3
Ped	-	-	-	-	27	-	-	-	-	-	26	-	-	-	-	-	47	-	-	-	-	-	52	-	-
% Ped	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

1 DAY TURNING MOVEMENT COUNT REPORTS

Appendix B - Data Collection

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: Central Blvd at 117 Ct
Site Code:
Start Date: 04/18/2013
Page No: 1

Turning Movement Data

Start Time	Central Blvd Northbound					Central Blvd Southbound					117th Ct N Westbound					
	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Left	Right	Peds	App. Total	Int. Total
7:00 AM	1	66	17	0	84	0	12	55	0	67	0	2	3	0	5	156
7:15 AM	0	93	94	0	187	0	46	100	0	146	0	34	15	0	49	382
7:30 AM	0	97	199	0	296	0	68	116	0	184	0	131	48	0	179	659
7:45 AM	0	117	160	0	277	0	71	123	0	194	0	158	48	0	206	677
Hourly Total	1	373	470	0	844	0	197	394	0	591	0	325	114	0	439	1874
8:00 AM	0	106	27	0	133	1	16	120	0	137	0	71	26	1	97	367
8:15 AM	0	106	25	0	131	0	24	119	0	143	0	22	7	4	29	303
8:30 AM	0	138	52	0	190	0	24	98	0	122	0	35	5	3	40	352
8:45 AM	1	88	77	0	166	0	46	92	0	138	0	53	21	2	74	378
Hourly Total	1	438	181	0	620	1	110	429	0	540	0	181	59	10	240	1400
9:00 AM	0	92	113	0	205	1	72	68	0	141	0	98	44	1	142	488
9:15 AM	0	98	40	0	138	0	31	98	0	129	0	94	44	3	138	405
9:30 AM	0	87	14	0	101	0	7	80	0	87	0	13	2	0	15	203
9:45 AM	0	84	11	0	95	0	0	79	0	79	0	8	8	0	16	190
Hourly Total	0	361	178	0	539	1	110	325	0	436	0	213	98	4	311	1286
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM	0	80	4	0	84	0	3	63	0	66	0	8	3	0	11	161
11:15 AM	0	66	5	0	71	0	1	71	0	72	0	8	2	1	10	153
11:30 AM	0	68	3	0	71	0	3	73	0	76	0	7	3	0	10	157
11:45 AM	0	73	6	0	79	0	4	82	0	86	0	6	7	0	13	178
Hourly Total	0	287	18	0	305	0	11	289	0	300	0	29	15	1	44	649
12:00 PM	0	68	4	0	72	0	1	79	0	80	0	6	3	0	9	161
12:15 PM	0	78	5	0	83	0	3	69	0	72	0	14	6	0	20	175
12:30 PM	0	80	6	0	86	0	4	86	0	90	0	6	7	1	13	189
12:45 PM	0	75	15	0	90	1	2	74	0	77	0	10	4	2	14	181
Hourly Total	0	301	30	0	331	1	10	308	0	319	0	36	20	3	56	706
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00 PM	1	80	16	0	97	0	5	92	0	97	0	20	12	3	32	226
3:15 PM	0	66	31	0	97	0	12	96	0	108	0	19	12	0	31	236
3:30 PM	0	65	45	0	110	0	29	93	0	122	0	23	18	2	41	273
3:45 PM	0	100	94	0	194	0	38	85	0	123	0	28	17	2	45	362
Hourly Total	1	311	186	0	498	0	84	366	0	450	0	90	59	7	149	1097
4:00 PM	1	93	64	0	158	0	22	105	0	127	0	145	87	2	232	517
4:15 PM	0	83	56	0	139	0	13	112	0	125	0	112	49	0	161	425
4:30 PM	0	99	22	0	121	0	9	116	0	125	0	38	12	0	50	296
4:45 PM	0	78	15	0	93	0	6	85	0	91	0	21	8	0	29	213
Hourly Total	1	353	157	0	511	0	50	418	0	468	0	316	156	2	472	1451
5:00 PM	0	113	23	0	136	0	8	116	0	124	0	19	10	0	29	289
5:15 PM	0	106	30	0	136	0	11	149	0	160	0	44	12	1	56	352
5:30 PM	0	99	27	0	126	0	11	139	0	150	0	24	14	2	38	314
5:45 PM	0	108	17	0	125	0	8	116	0	124	0	28	8	2	36	285
Hourly Total	0	426	97	0	523	0	38	520	0	558	0	115	44	5	159	1240
Grand Total	4	2850	1317	0	4171	3	610	3049	0	3662	0	1305	565	32	1870	9703
Approach %	0.1	68.3	31.6	-	-	0.1	16.7	83.3	-	-	0.0	69.8	30.2	-	-	-
Total %	0.0	29.4	13.6	-	43.0	0.0	6.3	31.4	-	37.7	0.0	13.4	5.8	-	19.3	-
Car	4	2740	1274	-	4018	3	586	2936	-	3525	0	1256	549	-	1805	9348
% Car	100.0	96.1	96.7	-	96.3	100.0	96.1	96.3	-	96.3	-	96.2	97.2	-	96.5	96.3
Truck	0	110	43	-	153	0	24	113	-	137	0	49	16	-	65	355
% Truck	0.0	3.9	3.3	-	3.7	0.0	3.9	3.7	-	3.7	-	3.8	2.8	-	3.5	3.7
Ped	-	-	-	0	-	-	-	-	0	-	-	-	-	32	-	-
% Ped	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

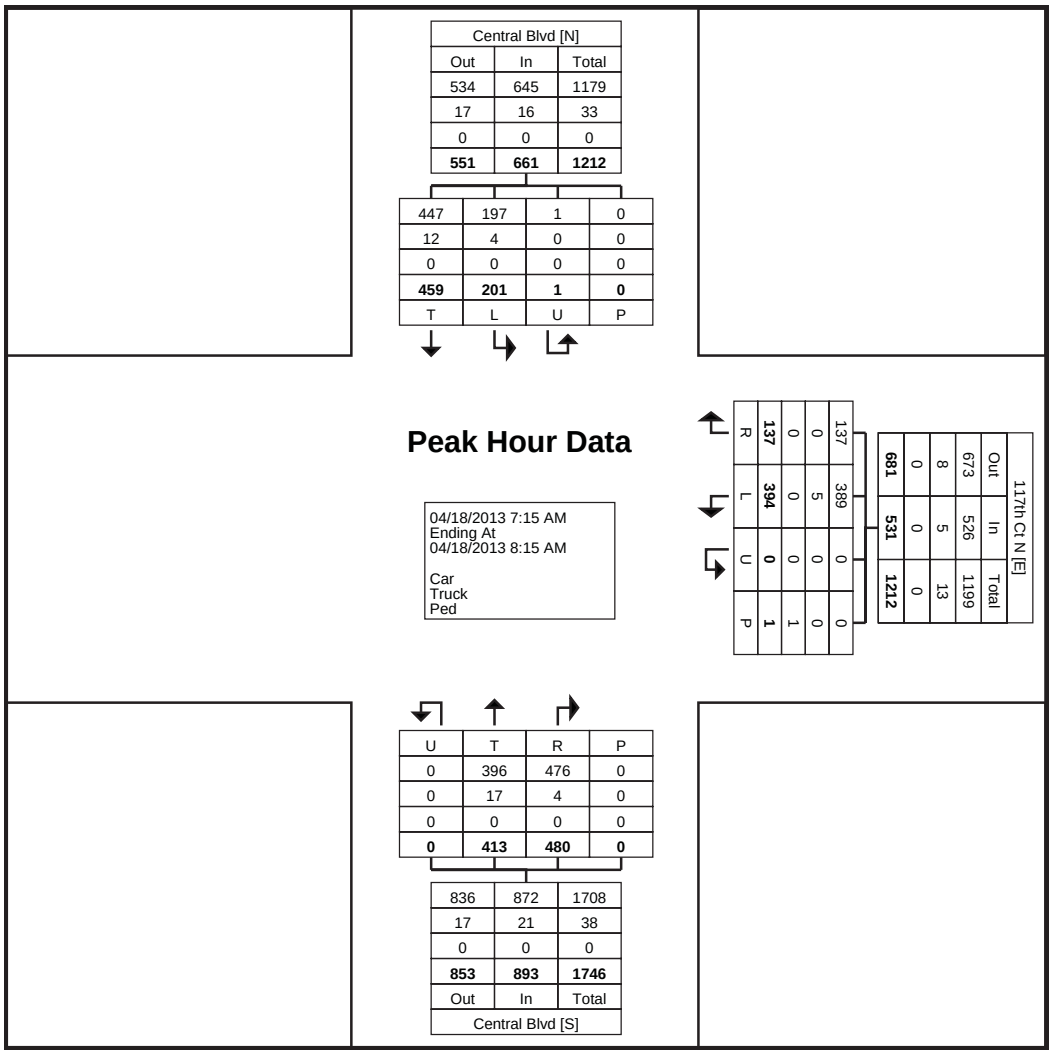
Count Name: Central Blvd at 117 Ct
Site Code:
Start Date: 04/18/2013
Page No: 3

Turning Movement Peak Hour Data (7:15 AM)

Start Time	Central Blvd Northbound					Central Blvd Southbound					117th Ct N Westbound					Int. Total
	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Left	Right	Peds	App. Total	
7:15 AM	0	93	94	0	187	0	46	100	0	146	0	34	15	0	49	382
7:30 AM	0	97	199	0	296	0	68	116	0	184	0	131	48	0	179	659
7:45 AM	0	117	160	0	277	0	71	123	0	194	0	158	48	0	206	677
8:00 AM	0	106	27	0	133	1	16	120	0	137	0	71	26	1	97	367
Total	0	413	480	0	893	1	201	459	0	661	0	394	137	1	531	2085
Approach %	0.0	46.2	53.8	-	-	0.2	30.4	69.4	-	-	0.0	74.2	25.8	-	-	-
Total %	0.0	19.8	23.0	-	42.8	0.0	9.6	22.0	-	31.7	0.0	18.9	6.6	-	25.5	-
PHF	0.000	0.882	0.603	-	0.754	0.250	0.708	0.933	-	0.852	0.000	0.623	0.714	-	0.644	0.770
Car	0	396	476	-	872	1	197	447	-	645	0	389	137	-	526	2043
% Car	-	95.9	99.2	-	97.6	100.0	98.0	97.4	-	97.6	-	98.7	100.0	-	99.1	98.0
Truck	0	17	4	-	21	0	4	12	-	16	0	5	0	-	5	42
% Truck	-	4.1	0.8	-	2.4	0.0	2.0	2.6	-	2.4	-	1.3	0.0	-	0.9	2.0
Ped	-	-	-	0	-	-	-	-	0	-	-	-	-	1	-	-
% Ped	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: Central Blvd at 117 Ct
Site Code:
Start Date: 04/18/2013



Turning Movement Peak Hour Data Plot (7:15 AM)

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

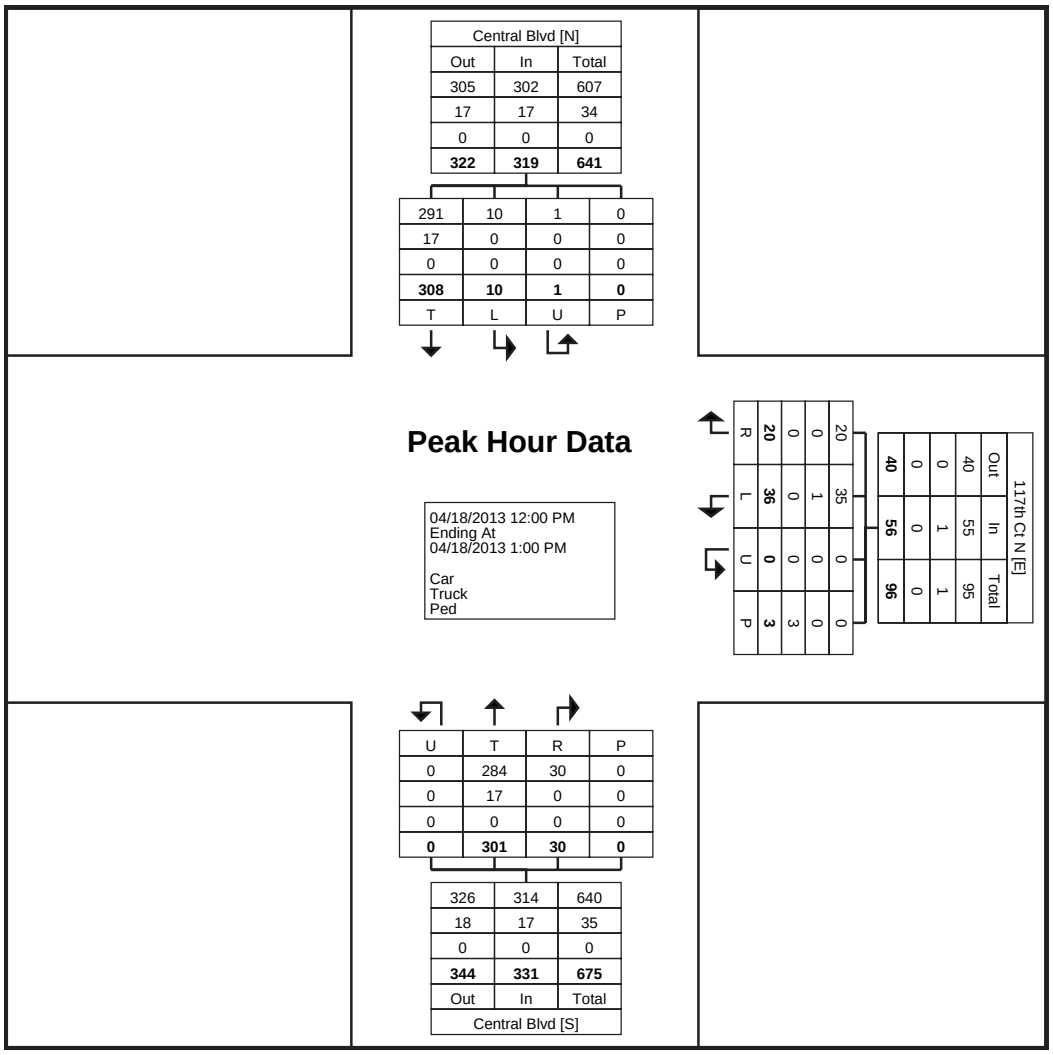
Count Name: Central Blvd at 117 Ct
Site Code:
Start Date: 04/18/2013
Page No: 5

Turning Movement Peak Hour Data (12:00 PM)

Start Time	Central Blvd Northbound					Central Blvd Southbound					117th Ct N Westbound					Int. Total
	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Left	Right	Peds	App. Total	
12:00 PM	0	68	4	0	72	0	1	79	0	80	0	6	3	0	9	161
12:15 PM	0	78	5	0	83	0	3	69	0	72	0	14	6	0	20	175
12:30 PM	0	80	6	0	86	0	4	86	0	90	0	6	7	1	13	189
12:45 PM	0	75	15	0	90	1	2	74	0	77	0	10	4	2	14	181
Total	0	301	30	0	331	1	10	308	0	319	0	36	20	3	56	706
Approach %	0.0	90.9	9.1	-	-	0.3	3.1	96.6	-	-	0.0	64.3	35.7	-	-	-
Total %	0.0	42.6	4.2	-	46.9	0.1	1.4	43.6	-	45.2	0.0	5.1	2.8	-	7.9	-
PHF	0.000	0.941	0.500	-	0.919	0.250	0.625	0.895	-	0.886	0.000	0.643	0.714	-	0.700	0.934
Car	0	284	30	-	314	1	10	291	-	302	0	35	20	-	55	671
% Car	-	94.4	100.0	-	94.9	100.0	100.0	94.5	-	94.7	-	97.2	100.0	-	98.2	95.0
Truck	0	17	0	-	17	0	0	17	-	17	0	1	0	-	1	35
% Truck	-	5.6	0.0	-	5.1	0.0	0.0	5.5	-	5.3	-	2.8	0.0	-	1.8	5.0
Ped	-	-	-	0	-	-	-	-	0	-	-	-	-	3	-	-
% Ped	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: Central Blvd at 117 Ct
Site Code:
Start Date: 04/18/2013



Turning Movement Peak Hour Data Plot (12:00 PM)

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

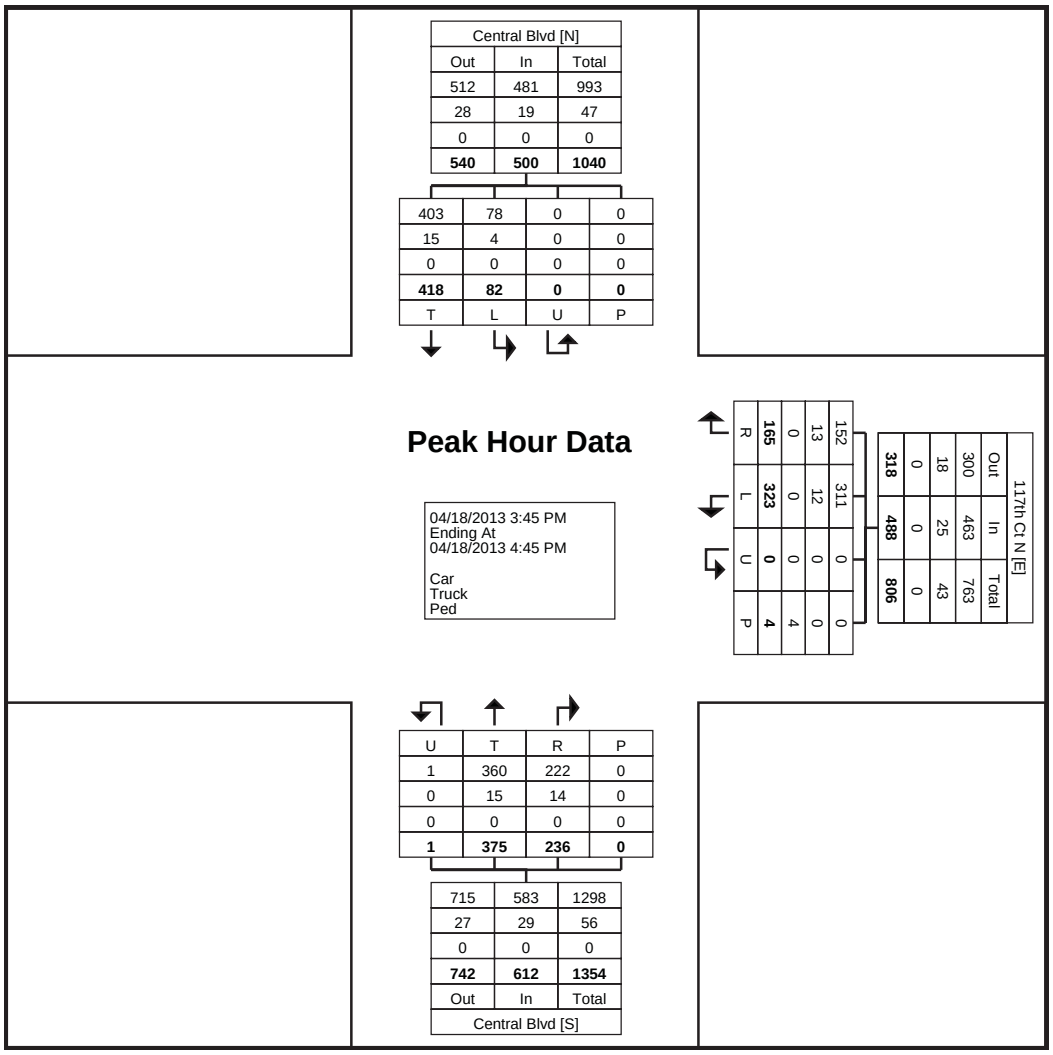
Count Name: Central Blvd at 117 Ct
Site Code:
Start Date: 04/18/2013
Page No: 7

Turning Movement Peak Hour Data (3:45 PM)

Start Time	Central Blvd Northbound					Central Blvd Southbound					117th Ct N Westbound					
	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Left	Right	Peds	App. Total	Int. Total
3:45 PM	0	100	94	0	194	0	38	85	0	123	0	28	17	2	45	362
4:00 PM	1	93	64	0	158	0	22	105	0	127	0	145	87	2	232	517
4:15 PM	0	83	56	0	139	0	13	112	0	125	0	112	49	0	161	425
4:30 PM	0	99	22	0	121	0	9	116	0	125	0	38	12	0	50	296
Total	1	375	236	0	612	0	82	418	0	500	0	323	165	4	488	1600
Approach %	0.2	61.3	38.6	-	-	0.0	16.4	83.6	-	-	0.0	66.2	33.8	-	-	-
Total %	0.1	23.4	14.8	-	38.3	0.0	5.1	26.1	-	31.3	0.0	20.2	10.3	-	30.5	-
PHF	0.250	0.938	0.628	-	0.789	0.000	0.539	0.901	-	0.984	0.000	0.557	0.474	-	0.526	0.774
Car	1	360	222	-	583	0	78	403	-	481	0	311	152	-	463	1527
% Car	100.0	96.0	94.1	-	95.3	-	95.1	96.4	-	96.2	-	96.3	92.1	-	94.9	95.4
Truck	0	15	14	-	29	0	4	15	-	19	0	12	13	-	25	73
% Truck	0.0	4.0	5.9	-	4.7	-	4.9	3.6	-	3.8	-	3.7	7.9	-	5.1	4.6
Ped	-	-	-	0	-	-	-	-	0	-	-	-	-	4	-	-
% Ped	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: Central Blvd at 117 Ct
Site Code:
Start Date: 04/18/2013



Turning Movement Peak Hour Data Plot (3:45 PM)

Appendix B - Data Collection

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: Central Blvd at Hood Rd
Site Code:
Start Date: 04/18/2013

Turning Movement Data

Start Time	Central Blvd Northbound						Central Blvd Southbound						Hood Rd Eastbound						Hood Rd Westbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
7:00 AM	0	21	39	20	1	80	0	20	51	10	0	81	0	8	63	9	0	80	1	14	27	6	0	48	289
7:15 AM	0	14	60	22	0	96	0	19	93	17	0	129	0	19	66	15	0	100	0	44	49	14	0	107	432
7:30 AM	0	10	101	24	0	135	0	32	102	19	1	153	0	27	86	33	1	146	1	43	78	22	2	144	578
7:45 AM	0	19	106	24	0	149	0	59	115	17	0	191	0	28	110	14	1	152	1	34	37	22	0	94	586
Hourly Total	0	64	306	90	1	460	0	130	361	63	1	554	0	82	325	71	2	478	3	135	191	64	2	393	1885
8:00 AM	0	20	87	18	1	125	0	35	98	18	0	151	0	21	77	13	0	111	2	26	36	12	1	76	463
8:15 AM	0	20	96	9	0	125	0	24	113	11	0	148	0	25	70	11	0	106	1	26	37	11	2	75	454
8:30 AM	1	19	91	23	1	134	0	26	77	17	0	120	0	25	64	13	0	102	2	27	34	5	0	68	424
8:45 AM	0	12	90	17	1	119	0	41	85	10	0	136	0	30	76	19	0	125	6	31	33	11	1	81	461
Hourly Total	1	71	364	67	3	503	0	126	373	56	0	555	0	101	287	56	0	444	11	110	140	39	4	300	1802
9:00 AM	0	16	93	29	0	138	0	18	89	15	0	122	0	18	63	26	0	107	7	30	31	10	1	78	445
9:15 AM	1	15	81	38	0	135	0	17	77	8	0	102	0	18	52	12	0	82	7	17	40	21	0	85	404
9:30 AM	1	21	62	9	0	93	1	21	44	19	0	85	0	22	49	11	0	82	2	22	35	13	1	72	332
9:45 AM	0	13	65	15	1	93	0	23	56	16	0	95	0	16	49	11	0	76	1	9	34	9	0	53	317
Hourly Total	2	65	301	91	1	459	1	79	266	58	0	404	0	74	213	60	0	347	17	78	140	53	2	288	1498
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM	0	12	61	12	1	85	1	15	48	13	0	77	0	17	47	8	0	72	1	10	35	8	0	54	288
11:15 AM	0	7	46	15	0	68	0	19	53	14	0	86	0	10	39	12	0	61	2	14	41	23	0	80	295
11:30 AM	0	10	50	12	0	72	0	12	54	13	1	79	0	17	40	9	0	66	1	15	41	12	0	69	286
11:45 AM	0	12	56	19	0	87	0	16	64	14	0	94	1	22	58	7	0	88	6	13	55	14	0	88	357
Hourly Total	0	41	213	58	1	312	1	62	219	54	1	336	1	66	184	36	0	287	10	52	172	57	0	291	1226
12:00 PM	0	17	50	10	0	77	0	13	45	14	0	72	0	13	48	14	0	75	1	9	35	10	0	55	279
12:15 PM	0	10	60	13	1	83	1	14	55	28	0	98	0	11	50	3	0	64	0	15	50	13	0	78	323
12:30 PM	0	6	63	16	0	85	0	12	52	15	1	79	0	24	52	14	0	90	1	15	38	9	0	63	317
12:45 PM	0	6	60	11	0	77	0	15	63	13	1	91	0	16	54	8	0	78	0	19	54	9	0	82	328
Hourly Total	0	39	233	50	1	322	1	54	215	70	2	340	0	64	204	39	0	307	2	58	177	41	0	278	1247
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00 PM	0	7	83	13	0	103	0	31	69	11	0	111	0	17	59	6	0	82	1	12	63	18	1	94	390
3:15 PM	0	18	51	12	0	81	0	27	63	16	0	106	0	16	56	20	0	92	1	27	35	22	1	85	364
3:30 PM	0	9	65	16	0	90	0	26	67	14	0	107	0	13	64	22	0	99	1	21	49	27	1	98	394
3:45 PM	0	15	77	28	1	120	0	28	74	13	2	115	0	17	45	11	0	73	4	27	63	25	1	119	427
Hourly Total	0	49	276	69	1	394	0	112	273	54	2	439	0	63	224	59	0	346	7	87	210	92	4	396	1575
4:00 PM	0	22	126	24	0	172	0	24	88	17	0	129	0	18	53	20	0	91	2	21	59	15	1	97	489
4:15 PM	0	16	96	25	0	137	0	21	88	16	0	125	0	14	46	16	0	76	0	19	68	23	0	110	448
4:30 PM	0	19	78	11	0	108	0	24	80	9	0	113	1	12	53	10	0	76	2	21	54	17	0	94	391
4:45 PM	0	12	79	9	0	100	0	20	69	18	0	107	0	13	48	13	0	74	0	14	66	31	1	111	392
Hourly Total	0	69	379	69	0	517	0	89	325	60	0	474	1	57	200	59	0	317	4	75	247	86	2	412	1720
5:00 PM	0	12	95	14	0	121	0	41	104	25	0	170	0	16	46	13	0	75	0	28	59	22	0	109	475
5:15 PM	1	16	85	18	0	120	0	31	114	20	0	165	0	20	53	9	0	82	0	29	80	28	0	137	504
5:30 PM	0	12	89	16	0	117	0	26	96	22	0	144	0	21	72	12	0	105	0	25	70	22	0	117	483
5:45 PM	0	14	99	16	0	129	0	36	92	27	0	155	0	18	49	11	0	78	0	18	62	25	0	105	467
Hourly Total	1	54	368	64	0	487	0	134	406	94	0	634	0	75	220	45	0	340	0	100	271	97	0	468	1929
Grand Total	4	452	2440	558	8	3454	3	786	2438	509	6	3736	2	582	1857	425	2	2866	54	695	1548	529	14	2826	12882
Approach %	0.1	13.1	70.6	16.2	-	-	0.1	21.0	65.3	13.6	-	-	0.1	20.3	64.8	14.8	-	-	1.9	24.6	54.8	18.7	-	-	-
Total %	0.0	3.5	18.9	4.3	-	26.8	0.0	6.1	18.9	4.0	-	29.0	0.0	4.5	14.4	3.3	-	22.2	0.4	5.4	12.0	4.1	-	21.9	-
Car	4	414	2380	521	-	3319	3	774	2348	485	-	3610	2	564	1822	396	-	2784	54	672	1516	519	-	2761	12474
% Car	100.0	91.6	97.5	93.4	-	96.1	100.0	98.5	96.3	95.3	-	96.6	100.0	96.9	98.1	93.2	-	97.1	100.0	96.7	97.9	98.1	-	97.7	96.8
Truck	0	38	60	37	-	135	0	12	90	24	-	126	0	18	35	29	-	82	0	23	32	10	-	65	408
% Truck	0.0	8.4	2.5	6.6	-	3.9	0.0	1.5	3.7	4.7	-	3.4	0.0	3.1	1.9	6.8	-	2.9	0.0	3.3	2.1	1.9	-	2.3	3.2
Ped	-	-	-	-	8	-	-	-	-	-	6	-	-	-	-	-	2	-	-	-	-	-	14	-	-
% Ped	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

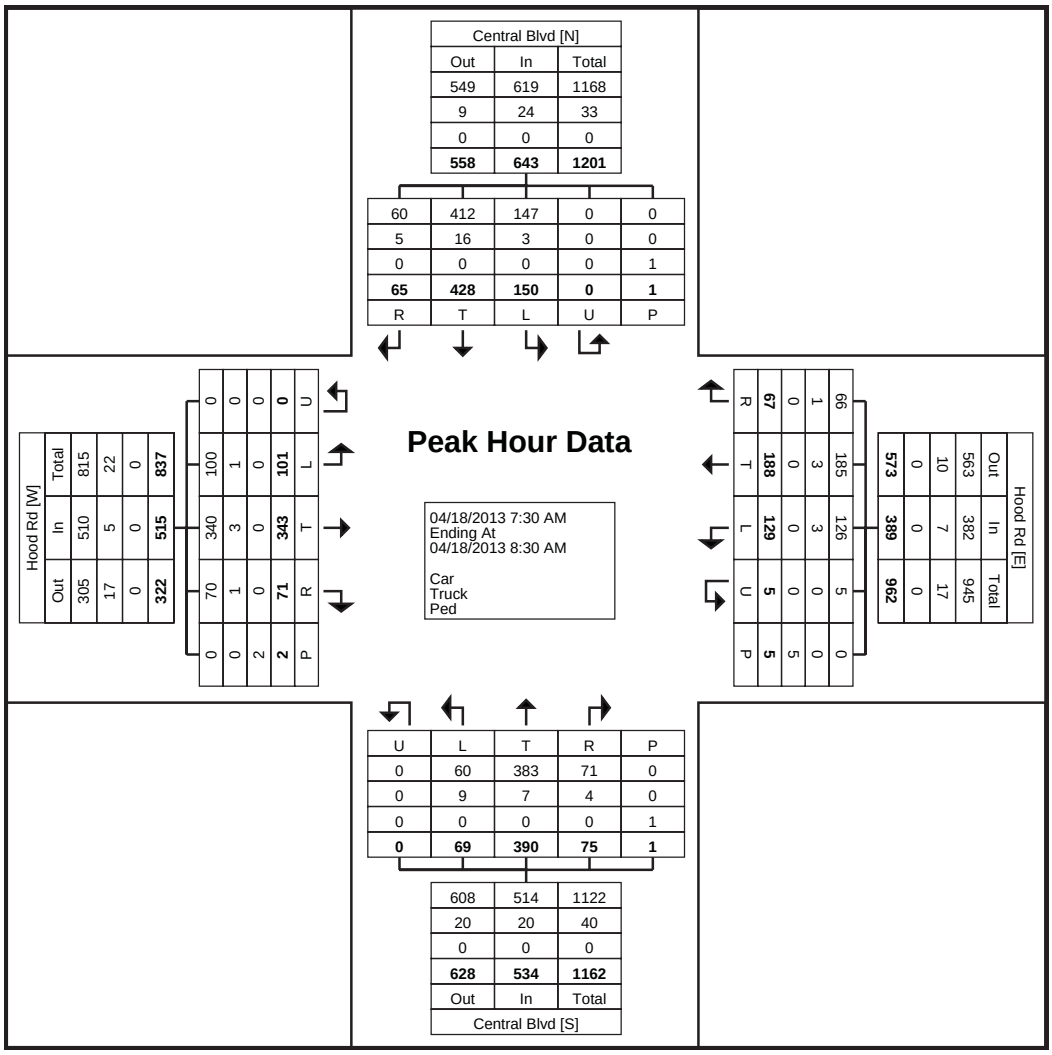
Count Name: Central Blvd at Hood Rd
Site Code:
Start Date: 04/18/2013
Page No: 3

Turning Movement Peak Hour Data (7:30 AM)

Start Time	Central Blvd Northbound						Central Blvd Southbound						Hood Rd Eastbound						Hood Rd Westbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
7:30 AM	0	10	101	24	0	135	0	32	102	19	1	153	0	27	86	33	1	146	1	43	78	22	2	144	578
7:45 AM	0	19	106	24	0	149	0	59	115	17	0	191	0	28	110	14	1	152	1	34	37	22	0	94	586
8:00 AM	0	20	87	18	1	125	0	35	98	18	0	151	0	21	77	13	0	111	2	26	36	12	1	76	463
8:15 AM	0	20	96	9	0	125	0	24	113	11	0	148	0	25	70	11	0	106	1	26	37	11	2	75	454
Total	0	69	390	75	1	534	0	150	428	65	1	643	0	101	343	71	2	515	5	129	188	67	5	389	2081
Approach %	0.0	12.9	73.0	14.0	-	-	0.0	23.3	66.6	10.1	-	-	0.0	19.6	66.6	13.8	-	-	1.3	33.2	48.3	17.2	-	-	-
Total %	0.0	3.3	18.7	3.6	-	25.7	0.0	7.2	20.6	3.1	-	30.9	0.0	4.9	16.5	3.4	-	24.7	0.2	6.2	9.0	3.2	-	18.7	-
PHF	0.000	0.863	0.920	0.781	-	0.896	0.000	0.636	0.930	0.855	-	0.842	0.000	0.902	0.780	0.538	-	0.847	0.625	0.750	0.603	0.761	-	0.675	0.888
Car	0	60	383	71	-	514	0	147	412	60	-	619	0	100	340	70	-	510	5	126	185	66	-	382	2025
% Car	-	87.0	98.2	94.7	-	96.3	-	98.0	96.3	92.3	-	96.3	-	99.0	99.1	98.6	-	99.0	100.0	97.7	98.4	98.5	-	98.2	97.3
Truck	0	9	7	4	-	20	0	3	16	5	-	24	0	1	3	1	-	5	0	3	3	1	-	7	56
% Truck	-	13.0	1.8	5.3	-	3.7	-	2.0	3.7	7.7	-	3.7	-	1.0	0.9	1.4	-	1.0	0.0	2.3	1.6	1.5	-	1.8	2.7
Ped	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	2	-	-	-	-	-	5	-	-
% Ped	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: Central Blvd at Hood Rd
Site Code:
Start Date: 04/18/2013
Page No: 4



Turning Movement Peak Hour Data Plot (7:30 AM)

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

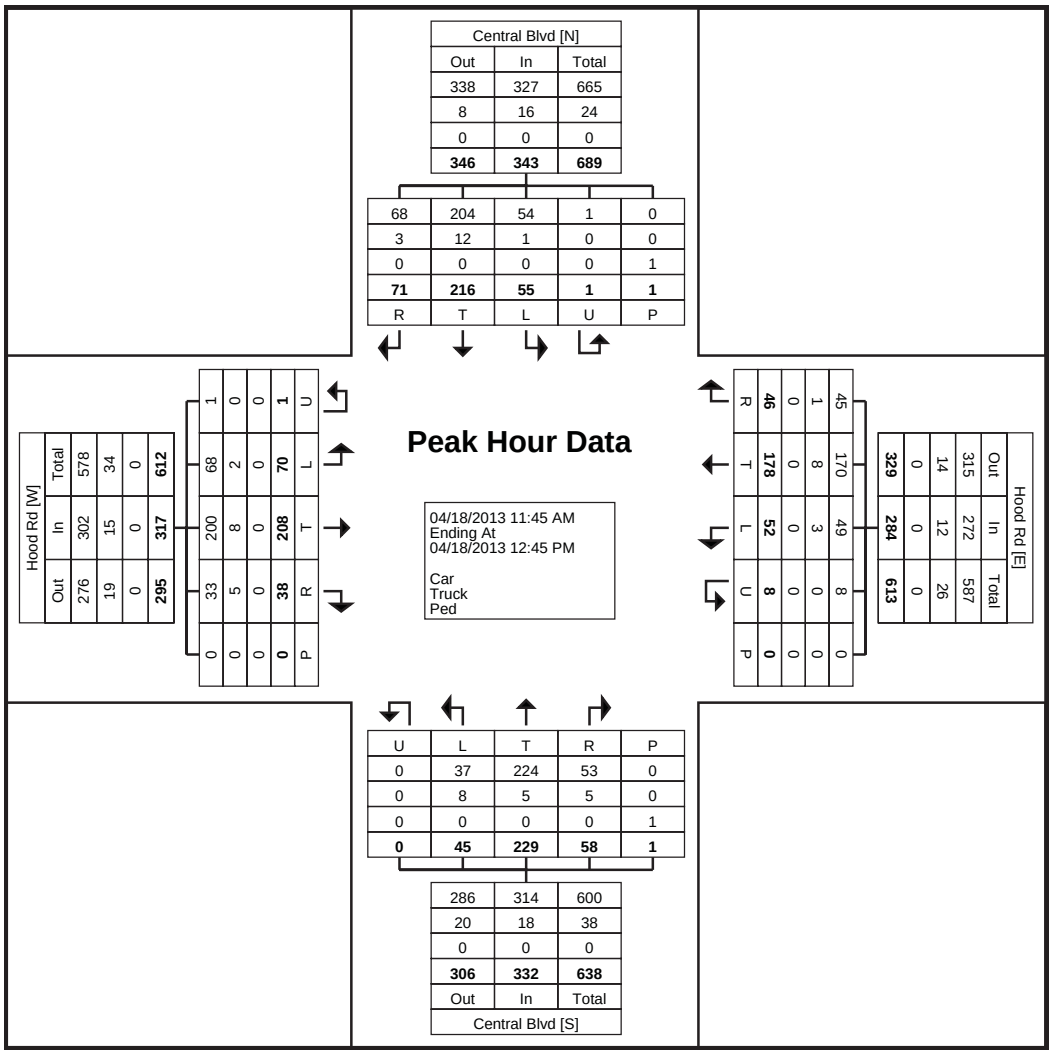
Count Name: Central Blvd at Hood Rd
Site Code:
Start Date: 04/18/2013
Page No: 5

Turning Movement Peak Hour Data (11:45 AM)

Start Time	Central Blvd Northbound						Central Blvd Southbound						Hood Rd Eastbound						Hood Rd Westbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
11:45 AM	0	12	56	19	0	87	0	16	64	14	0	94	1	22	58	7	0	88	6	13	55	14	0	88	357
12:00 PM	0	17	50	10	0	77	0	13	45	14	0	72	0	13	48	14	0	75	1	9	35	10	0	55	279
12:15 PM	0	10	60	13	1	83	1	14	55	28	0	98	0	11	50	3	0	64	0	15	50	13	0	78	323
12:30 PM	0	6	63	16	0	85	0	12	52	15	1	79	0	24	52	14	0	90	1	15	38	9	0	63	317
Total	0	45	229	58	1	332	1	55	216	71	1	343	1	70	208	38	0	317	8	52	178	46	0	284	1276
Approach %	0.0	13.6	69.0	17.5	-	-	0.3	16.0	63.0	20.7	-	-	0.3	22.1	65.6	12.0	-	-	2.8	18.3	62.7	16.2	-	-	-
Total %	0.0	3.5	17.9	4.5	-	26.0	0.1	4.3	16.9	5.6	-	26.9	0.1	5.5	16.3	3.0	-	24.8	0.6	4.1	13.9	3.6	-	22.3	-
PHF	0.000	0.662	0.909	0.763	-	0.954	0.250	0.859	0.844	0.634	-	0.875	0.250	0.729	0.897	0.679	-	0.881	0.333	0.867	0.809	0.821	-	0.807	0.894
Car	0	37	224	53	-	314	1	54	204	68	-	327	1	68	200	33	-	302	8	49	170	45	-	272	1215
% Car	-	82.2	97.8	91.4	-	94.6	100.0	98.2	94.4	95.8	-	95.3	100.0	97.1	96.2	86.8	-	95.3	100.0	94.2	95.5	97.8	-	95.8	95.2
Truck	0	8	5	5	-	18	0	1	12	3	-	16	0	2	8	5	-	15	0	3	8	1	-	12	61
% Truck	-	17.8	2.2	8.6	-	5.4	0.0	1.8	5.6	4.2	-	4.7	0.0	2.9	3.8	13.2	-	4.7	0.0	5.8	4.5	2.2	-	4.2	4.8
Ped	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Ped	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: Central Blvd at Hood Rd
Site Code:
Start Date: 04/18/2013



Turning Movement Peak Hour Data Plot (11:45 AM)

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

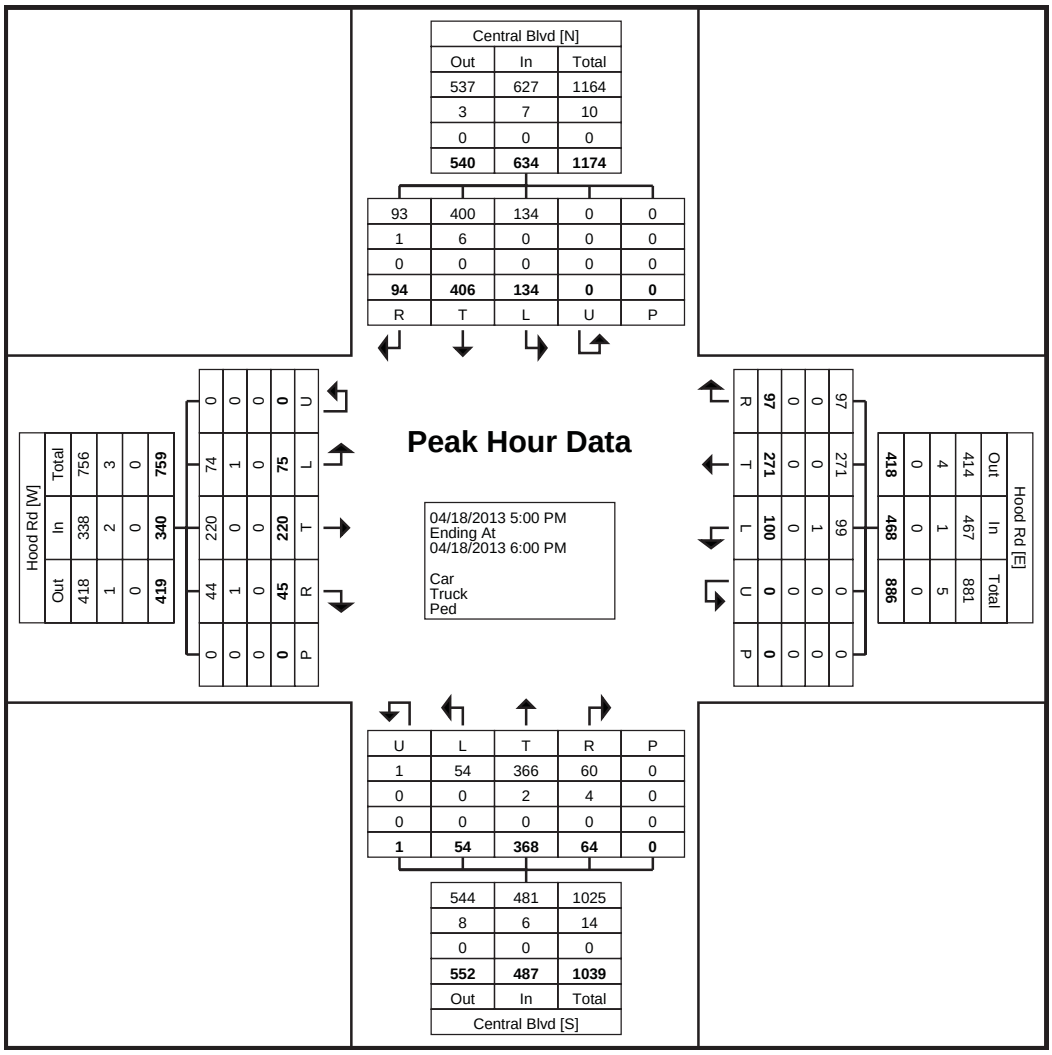
Count Name: Central Blvd at Hood Rd
Site Code:
Start Date: 04/18/2013
Page No: 7

Turning Movement Peak Hour Data (5:00 PM)

Start Time	Central Blvd Northbound						Central Blvd Southbound						Hood Rd Eastbound						Hood Rd Westbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
5:00 PM	0	12	95	14	0	121	0	41	104	25	0	170	0	16	46	13	0	75	0	28	59	22	0	109	475
5:15 PM	1	16	85	18	0	120	0	31	114	20	0	165	0	20	53	9	0	82	0	29	80	28	0	137	504
5:30 PM	0	12	89	16	0	117	0	26	96	22	0	144	0	21	72	12	0	105	0	25	70	22	0	117	483
5:45 PM	0	14	99	16	0	129	0	36	92	27	0	155	0	18	49	11	0	78	0	18	62	25	0	105	467
Total	1	54	368	64	0	487	0	134	406	94	0	634	0	75	220	45	0	340	0	100	271	97	0	468	1929
Approach %	0.2	11.1	75.6	13.1	-	-	0.0	21.1	64.0	14.8	-	-	0.0	22.1	64.7	13.2	-	-	0.0	21.4	57.9	20.7	-	-	-
Total %	0.1	2.8	19.1	3.3	-	25.2	0.0	6.9	21.0	4.9	-	32.9	0.0	3.9	11.4	2.3	-	17.6	0.0	5.2	14.0	5.0	-	24.3	-
PHF	0.250	0.844	0.929	0.889	-	0.944	0.000	0.817	0.890	0.870	-	0.932	0.000	0.893	0.764	0.865	-	0.810	0.000	0.862	0.847	0.866	-	0.854	0.957
Car	1	54	366	60	-	481	0	134	400	93	-	627	0	74	220	44	-	338	0	99	271	97	-	467	1913
% Car	100.0	100.0	99.5	93.8	-	98.8	-	100.0	98.5	98.9	-	98.9	-	98.7	100.0	97.8	-	99.4	-	99.0	100.0	100.0	-	99.8	99.2
Truck	0	0	2	4	-	6	0	0	6	1	-	7	0	1	0	1	-	2	0	1	0	0	-	1	16
% Truck	0.0	0.0	0.5	6.3	-	1.2	-	0.0	1.5	1.1	-	1.1	-	1.3	0.0	2.2	-	0.6	-	1.0	0.0	0.0	-	0.2	0.8
Ped	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Ped	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: Central Blvd at Hood Rd
Site Code:
Start Date: 04/18/2013
Page No: 8



Turning Movement Peak Hour Data Plot (5:00 PM)

Appendix B - Data Collection

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: Central Blvd at Victoria Falls
Site Code:
Start Date: 04/18/2013
Page No: 1

Turning Movement Data

Start Time	Central Blvd Northbound						Central Blvd Southbound						Victoria Falls Blvd Eastbound						Victoria Falls Blvd Westbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
7:00 AM	0	2	69	0	0	71	0	5	68	0	0	73	0	2	0	1	0	3	0	4	0	3	0	7	154
7:15 AM	0	3	93	8	0	104	1	2	140	0	0	143	0	0	0	0	2	0	0	12	0	4	0	16	263
7:30 AM	0	4	131	13	0	148	0	4	176	0	0	180	0	0	0	0	1	0	0	27	0	5	1	32	360
7:45 AM	0	0	144	13	0	157	0	8	159	0	0	167	0	0	0	0	0	0	0	25	0	5	1	30	354
Hourly Total	0	9	437	34	0	480	1	19	543	0	0	563	0	2	0	1	3	3	0	68	0	17	2	85	1131
8:00 AM	0	1	118	12	0	131	1	3	139	1	0	144	0	0	0	0	0	0	0	3	0	3	1	6	281
8:15 AM	0	0	115	1	0	116	0	5	136	2	0	143	0	0	0	1	0	1	0	5	0	8	2	13	273
8:30 AM	0	0	130	3	0	133	0	5	116	0	0	121	0	0	0	0	0	0	0	3	0	7	1	10	264
8:45 AM	0	2	105	1	0	108	1	6	134	0	0	141	0	1	0	1	0	2	0	9	0	6	1	15	266
Hourly Total	0	3	468	17	0	488	2	19	525	3	0	549	0	1	0	2	0	3	0	20	0	24	5	44	1084
9:00 AM	0	1	130	5	0	136	0	3	144	1	0	148	0	1	0	0	1	1	0	14	0	1	2	15	300
9:15 AM	0	0	134	9	0	143	0	4	105	1	0	110	0	1	0	1	1	2	0	4	0	2	2	6	261
9:30 AM	0	0	87	2	0	89	1	3	90	0	0	94	0	1	0	0	3	1	0	4	0	4	1	8	192
9:45 AM	0	0	84	6	0	90	0	4	68	0	0	72	0	0	0	0	1	0	0	5	0	3	0	8	170
Hourly Total	0	1	435	22	0	458	1	14	407	2	0	424	0	3	0	1	6	4	0	27	0	10	5	37	923
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM	0	0	82	4	0	86	0	1	68	1	0	70	0	0	1	1	0	2	0	2	0	4	0	6	164
11:15 AM	0	0	65	6	0	71	0	0	75	0	0	75	1	0	0	1	0	2	1	2	0	3	0	6	154
11:30 AM	0	0	73	1	0	74	1	2	70	0	0	73	0	0	0	0	0	0	0	2	0	3	1	5	152
11:45 AM	0	0	80	5	0	85	0	2	79	1	0	82	0	0	0	1	0	1	1	1	0	2	0	4	172
Hourly Total	0	0	300	16	0	316	1	5	292	2	0	300	1	0	1	3	0	5	2	7	0	12	1	21	642
12:00 PM	0	0	71	1	0	72	0	1	66	1	0	68	0	0	0	1	0	1	0	1	1	5	1	7	148
12:15 PM	0	0	75	4	0	79	0	0	75	0	0	75	0	0	0	1	0	1	0	3	0	7	0	10	165
12:30 PM	0	1	80	7	0	88	0	6	78	0	0	84	0	0	0	0	0	0	1	4	0	5	0	10	182
12:45 PM	1	0	74	3	0	78	0	3	82	2	0	87	0	1	0	0	0	1	0	1	0	4	0	5	171
Hourly Total	1	1	300	15	0	317	0	10	301	3	0	314	0	1	0	2	0	3	1	9	1	21	1	32	666
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00 PM	0	0	95	6	0	101	2	2	89	0	0	93	0	1	0	1	0	2	0	4	0	4	2	8	204
3:15 PM	0	0	85	2	0	87	0	1	102	0	0	103	0	0	2	0	0	2	0	4	0	3	0	7	199
3:30 PM	0	0	75	3	0	78	2	3	115	1	0	121	0	1	0	2	0	3	0	9	0	4	2	13	215
3:45 PM	0	0	112	4	0	116	0	2	106	0	0	108	0	1	1	1	0	3	0	9	0	11	0	20	247
Hourly Total	0	0	367	15	0	382	4	8	412	1	0	425	0	3	3	4	0	10	0	26	0	22	4	48	865
4:00 PM	0	0	162	17	0	179	0	5	121	0	0	126	0	1	0	2	0	3	0	8	1	7	1	16	324
4:15 PM	0	0	128	10	0	138	0	4	130	0	0	134	1	0	0	2	0	3	0	6	0	7	0	13	288
4:30 PM	0	0	100	7	1	107	0	2	98	0	0	100	0	0	0	0	1	0	1	2	0	5	1	8	215
4:45 PM	0	0	91	0	2	91	0	5	86	0	0	91	0	0	0	0	0	0	0	3	0	5	3	8	190
Hourly Total	0	0	481	34	3	515	0	16	435	0	0	451	1	1	0	4	1	6	1	19	1	24	5	45	1017
5:00 PM	0	0	118	7	0	125	0	4	141	0	0	145	0	0	0	1	0	1	0	3	0	5	2	8	279
5:15 PM	0	0	111	7	0	118	1	1	149	0	0	151	0	0	0	0	0	0	0	3	0	6	0	9	278
5:30 PM	0	0	111	4	0	115	0	4	129	0	0	133	0	1	2	1	0	4	0	5	0	11	0	16	268
5:45 PM	0	0	115	5	0	120	0	4	114	0	0	118	0	0	0	4	1	4	0	3	0	6	0	9	251
Hourly Total	0	0	455	23	0	478	1	13	533	0	0	547	0	1	2	6	1	9	0	14	0	28	2	42	1076
Grand Total	1	14	3243	176	3	3434	10	104	3448	11	0	3573	2	12	6	23	11	43	4	190	2	158	25	354	7404
Approach %	0.0	0.4	94.4	5.1	-	-	0.3	2.9	96.5	0.3	-	-	4.7	27.9	14.0	53.5	-	-	1.1	53.7	0.6	44.6	-	-	-
Total %	0.0	0.2	43.8	2.4	-	46.4	0.1	1.4	46.6	0.1	-	48.3	0.0	0.2	0.1	0.3	-	0.6	0.1	2.6	0.0	2.1	-	4.8	-
Car	1	14	3124	171	-	3310	10	93	3322	9	-	3434	2	8	6	20	-	36	4	181	2	153	-	340	7120
% Car	100.0	100.0	96.3	97.2	-	96.4	100.0	89.4	96.3	81.8	-	96.1	100.0	66.7	100.0	87.0	-	83.7	100.0	95.3	100.0	96.8	-	96.0	96.2
Truck	0	0	119	5	-	124	0	11	126	2	-	139	0	4	0	3	-	7	0	9	0	5	-	14	284
% Truck	0.0	0.0	3.7	2.8	-	3.6	0.0	10.6	3.7	18.2	-	3.9	0.0	33.3	0.0	13.0	-	16.3	0.0	4.7	0.0	3.2	-	4.0	3.8
Ped	-	-	-	-	3	-	-	-	-	-	0	-	-	-	-	-	11	-	-	-	-	-	25	-	-
% Ped	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: Central Blvd at Victoria Falls
Site Code:
Start Date: 04/18/2013
Page No: 3

Turning Movement Peak Hour Data (7:30 AM)

Start Time	Central Blvd Northbound						Central Blvd Southbound						Victoria Falls Blvd Eastbound						Victoria Falls Blvd Westbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
7:30 AM	0	4	131	13	0	148	0	4	176	0	0	180	0	0	0	0	1	0	0	27	0	5	1	32	360
7:45 AM	0	0	144	13	0	157	0	8	159	0	0	167	0	0	0	0	0	0	0	25	0	5	1	30	354
8:00 AM	0	1	118	12	0	131	1	3	139	1	0	144	0	0	0	0	0	0	0	3	0	3	1	6	281
8:15 AM	0	0	115	1	0	116	0	5	136	2	0	143	0	0	0	1	0	1	0	5	0	8	2	13	273
Total	0	5	508	39	0	552	1	20	610	3	0	634	0	0	0	1	1	1	0	60	0	21	5	81	1268
Approach %	0.0	0.9	92.0	7.1	-	-	0.2	3.2	96.2	0.5	-	-	0.0	0.0	0.0	100.0	-	-	0.0	74.1	0.0	25.9	-	-	-
Total %	0.0	0.4	40.1	3.1	-	43.5	0.1	1.6	48.1	0.2	-	50.0	0.0	0.0	0.0	0.1	-	0.1	0.0	4.7	0.0	1.7	-	6.4	-
PHF	0.000	0.313	0.882	0.750	-	0.879	0.250	0.625	0.866	0.375	-	0.881	0.000	0.000	0.000	0.250	-	0.250	0.000	0.556	0.000	0.656	-	0.633	0.881
Car	0	5	488	39	-	532	1	16	594	2	-	613	0	0	0	1	-	1	0	60	0	21	-	81	1227
% Car	-	100.0	96.1	100.0	-	96.4	100.0	80.0	97.4	66.7	-	96.7	-	-	-	100.0	-	100.0	-	100.0	-	100.0	-	100.0	96.8
Truck	0	0	20	0	-	20	0	4	16	1	-	21	0	0	0	0	-	0	0	0	0	0	-	0	41
% Truck	-	0.0	3.9	0.0	-	3.6	0.0	20.0	2.6	33.3	-	3.3	-	-	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	3.2
Ped	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	5	-	-
% Ped	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

FTE (Florida Transportation Engineering)
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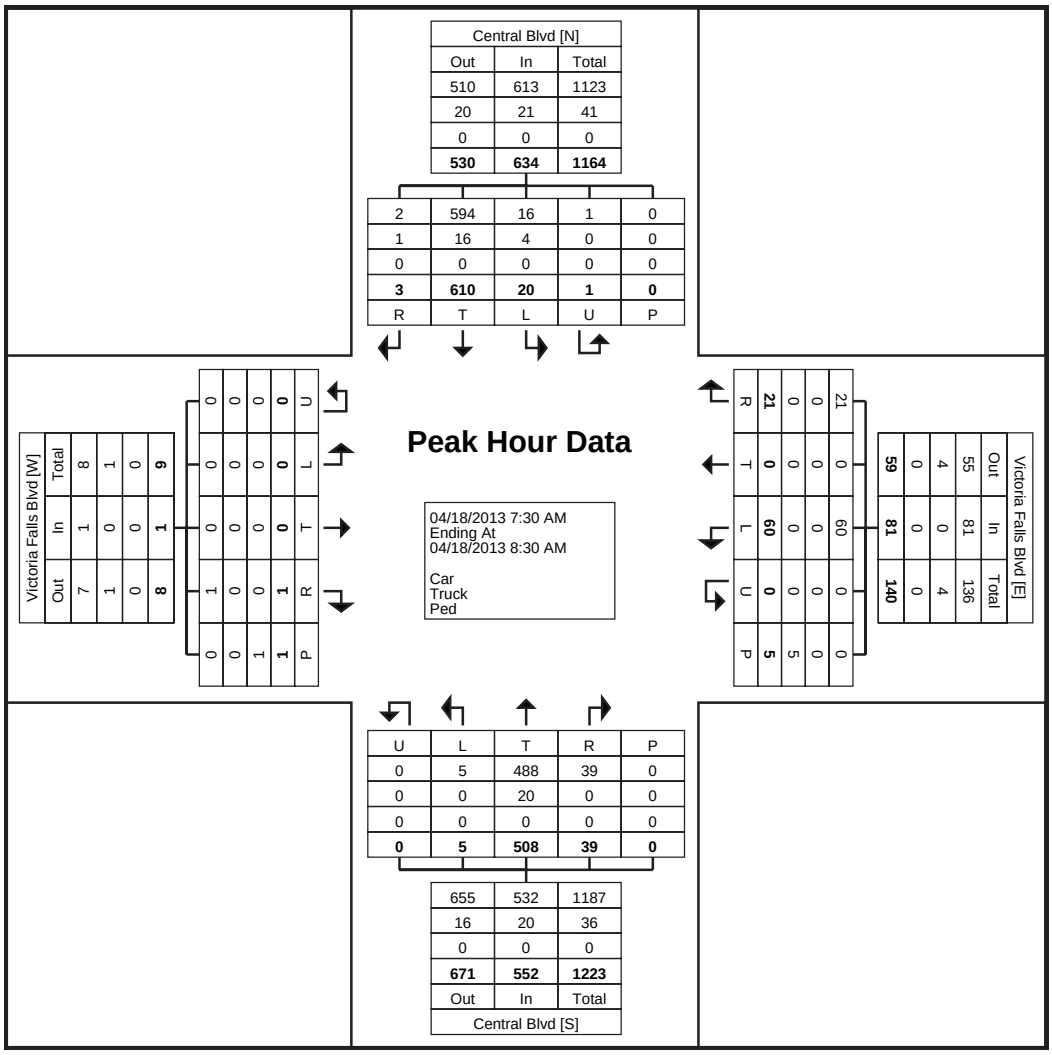
Count Name: Central Blvd at Victoria Falls
Site Code:
Start Date: 04/18/2013
Page No: 4



Turning Movement Peak Hour Data Plot (7:30 AM)

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: Central Blvd at Victoria Falls
Site Code:
Start Date: 04/18/2013
Page No: 5

Turning Movement Peak Hour Data (11:45 AM)

Start Time	Central Blvd Northbound						Central Blvd Southbound						Victoria Falls Blvd Eastbound						Victoria Falls Blvd Westbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
11:45 AM	0	0	80	5	0	85	0	2	79	1	0	82	0	0	0	1	0	1	1	1	0	2	0	4	172
12:00 PM	0	0	71	1	0	72	0	1	66	1	0	68	0	0	0	1	0	1	0	1	1	5	1	7	148
12:15 PM	0	0	75	4	0	79	0	0	75	0	0	75	0	0	0	1	0	1	0	3	0	7	0	10	165
12:30 PM	0	1	80	7	0	88	0	6	78	0	0	84	0	0	0	0	0	0	1	4	0	5	0	10	182
Total	0	1	306	17	0	324	0	9	298	2	0	309	0	0	0	3	0	3	2	9	1	19	1	31	667
Approach %	0.0	0.3	94.4	5.2	-	-	0.0	2.9	96.4	0.6	-	-	0.0	0.0	0.0	100.0	-	-	6.5	29.0	3.2	61.3	-	-	-
Total %	0.0	0.1	45.9	2.5	-	48.6	0.0	1.3	44.7	0.3	-	46.3	0.0	0.0	0.0	0.4	-	0.4	0.3	1.3	0.1	2.8	-	4.6	-
PHF	0.000	0.250	0.956	0.607	-	0.920	0.000	0.375	0.943	0.500	-	0.920	0.000	0.000	0.000	0.750	-	0.750	0.500	0.563	0.250	0.679	-	0.775	0.916
Car	0	1	290	15	-	306	0	8	282	2	-	292	0	0	0	3	-	3	2	9	1	17	-	29	630
% Car	-	100.0	94.8	88.2	-	94.4	-	88.9	94.6	100.0	-	94.5	-	-	-	100.0	-	100.0	100.0	100.0	100.0	89.5	-	93.5	94.5
Truck	0	0	16	2	-	18	0	1	16	0	-	17	0	0	0	0	-	0	0	0	0	2	-	2	37
% Truck	-	0.0	5.2	11.8	-	5.6	-	11.1	5.4	0.0	-	5.5	-	-	-	0.0	-	0.0	0.0	0.0	0.0	10.5	-	6.5	5.5
Ped	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-
% Ped	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
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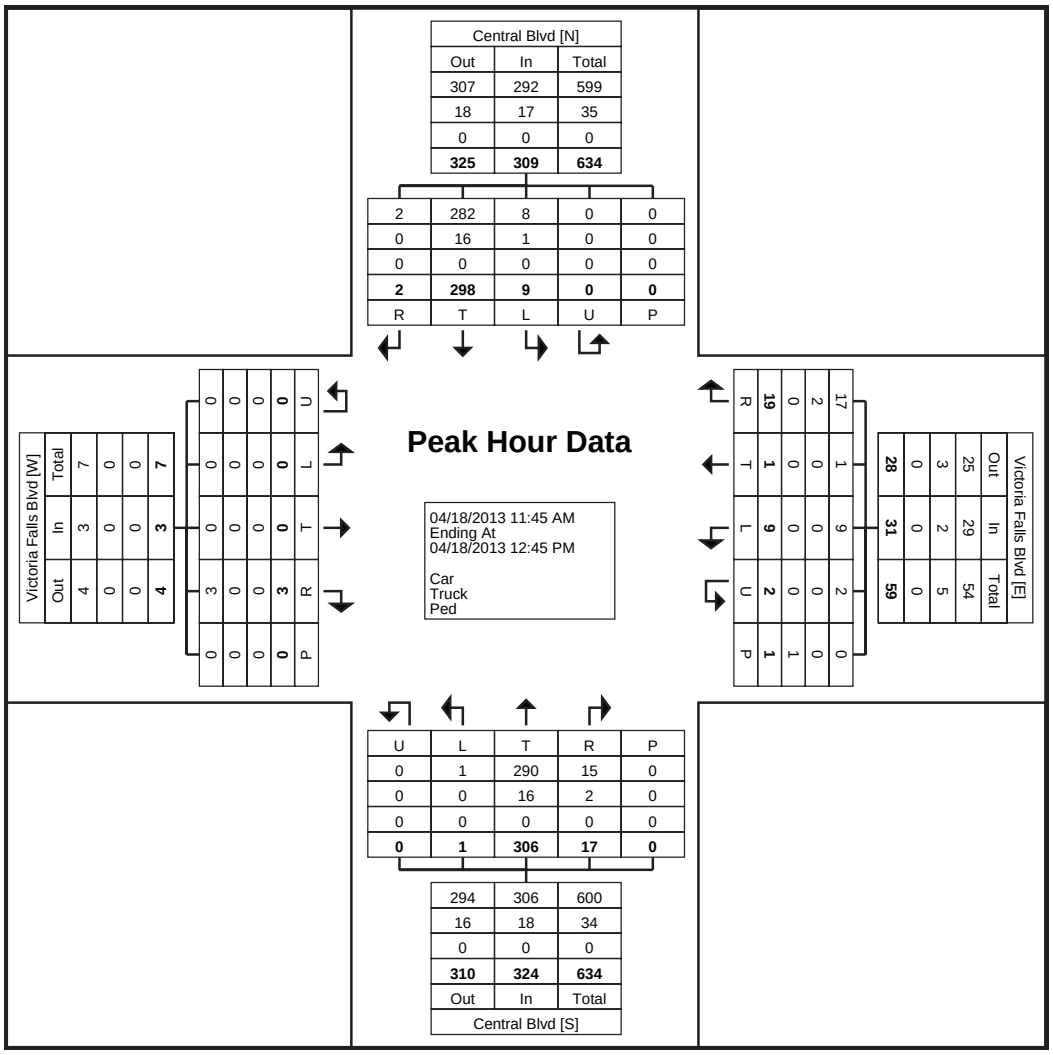
Ph# (800) 639-4851

Count Name: Central Blvd at Victoria Falls
Site Code:
Start Date: 04/18/2013



Turning Movement Peak Hour Data Plot (11:45 AM)

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: Central Blvd at Victoria Falls
Site Code:
Start Date: 04/18/2013
Page No: 7

Turning Movement Peak Hour Data (5:00 PM)

Start Time	Central Blvd Northbound						Central Blvd Southbound						Victoria Falls Blvd Eastbound						Victoria Falls Blvd Westbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
5:00 PM	0	0	118	7	0	125	0	4	141	0	0	145	0	0	0	1	0	1	0	3	0	5	2	8	279
5:15 PM	0	0	111	7	0	118	1	1	149	0	0	151	0	0	0	0	0	0	0	3	0	6	0	9	278
5:30 PM	0	0	111	4	0	115	0	4	129	0	0	133	0	1	2	1	0	4	0	5	0	11	0	16	268
5:45 PM	0	0	115	5	0	120	0	4	114	0	0	118	0	0	0	4	1	4	0	3	0	6	0	9	251
Total	0	0	455	23	0	478	1	13	533	0	0	547	0	1	2	6	1	9	0	14	0	28	2	42	1076
Approach %	0.0	0.0	95.2	4.8	-	-	0.2	2.4	97.4	0.0	-	-	0.0	11.1	22.2	66.7	-	-	0.0	33.3	0.0	66.7	-	-	-
Total %	0.0	0.0	42.3	2.1	-	44.4	0.1	1.2	49.5	0.0	-	50.8	0.0	0.1	0.2	0.6	-	0.8	0.0	1.3	0.0	2.6	-	3.9	-
PHF	0.000	0.000	0.964	0.821	-	0.956	0.250	0.813	0.894	0.000	-	0.906	0.000	0.250	0.250	0.375	-	0.563	0.000	0.700	0.000	0.636	-	0.656	0.964
Car	0	0	446	22	-	468	1	12	526	0	-	539	0	1	2	6	-	9	0	13	0	28	-	41	1057
% Car	-	-	98.0	95.7	-	97.9	100.0	92.3	98.7	-	-	98.5	-	100.0	100.0	100.0	-	100.0	-	92.9	-	100.0	-	97.6	98.2
Truck	0	0	9	1	-	10	0	1	7	0	-	8	0	0	0	0	-	0	0	1	0	0	-	1	19
% Truck	-	-	2.0	4.3	-	2.1	0.0	7.7	1.3	-	-	1.5	-	0.0	0.0	0.0	-	0.0	-	7.1	-	0.0	-	2.4	1.8
Ped	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	2	-	-
% Ped	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

FTE (Florida Transportation Engineering)
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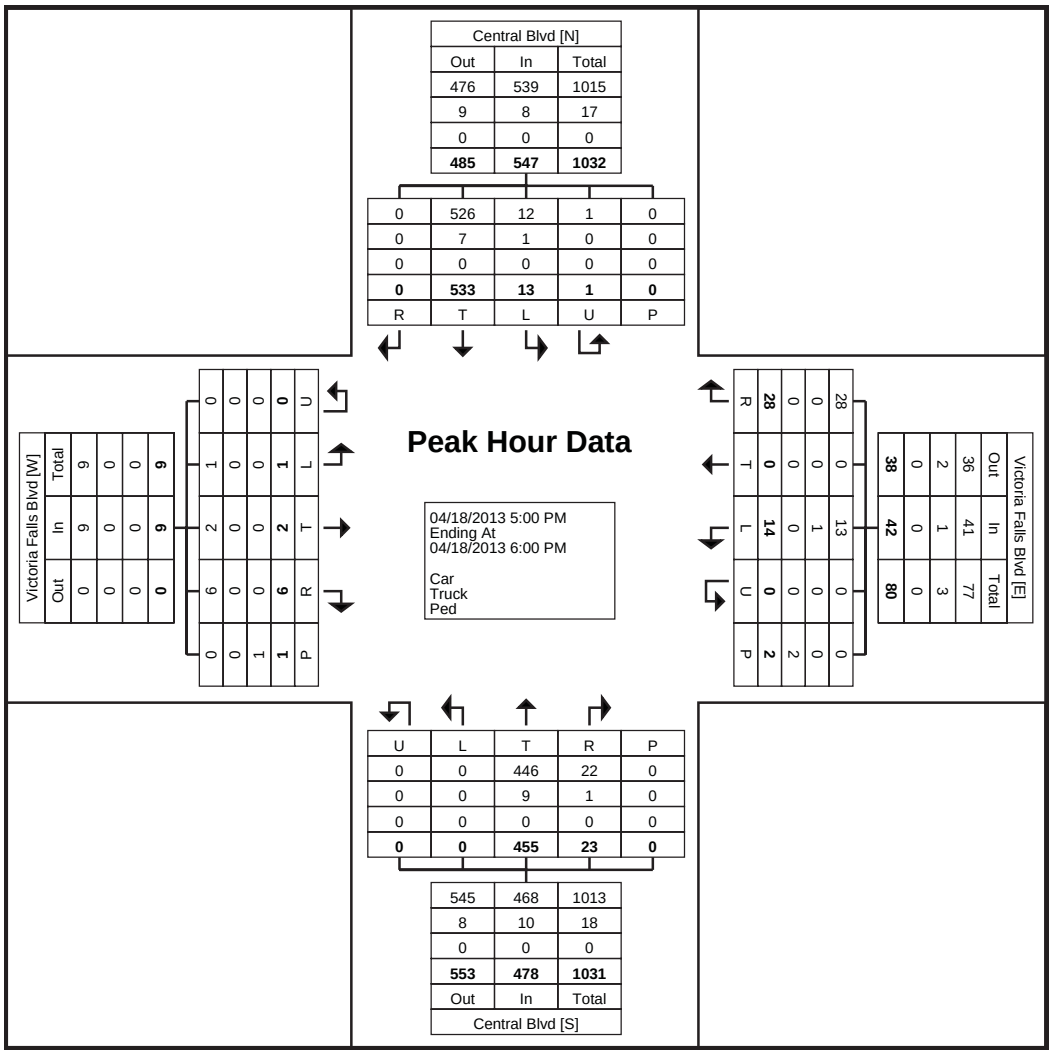
Ph# (800) 639-4851

Count Name: Central Blvd at Victoria Falls
Site Code:
Start Date: 04/18/2013
Page No: 8



Turning Movement Peak Hour Data Plot (5:00 PM)

Appendix B - Data Collection

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: Donald Ross at 64th Dr
Site Code:
Start Date: 04/25/2013
Page No: 1

Turning Movement Data

Start Time	64th Dr N Northbound						64th Dr N Southbound						Donald Ross Rd Eastbound						Donald Ross Rd Westbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
7:00 AM	0	0	0	3	0	3	0	13	0	0	0	13	0	0	159	0	0	159	0	2	37	1	0	40	215
7:15 AM	0	0	0	2	0	2	0	14	0	3	0	17	1	0	188	0	0	189	1	1	83	5	0	90	298
7:30 AM	0	0	0	5	0	5	0	11	0	1	0	12	0	0	184	0	0	184	0	3	58	3	0	64	265
7:45 AM	0	0	0	5	0	5	0	19	0	1	0	20	0	1	168	2	0	171	2	1	73	5	0	81	277
Hourly Total	0	0	0	15	0	15	0	57	0	5	0	62	1	1	699	2	0	703	3	7	251	14	0	275	1055
8:00 AM	0	1	0	4	0	5	0	16	0	0	0	16	1	0	141	2	0	144	1	5	81	6	0	93	258
8:15 AM	0	0	1	5	0	6	0	9	0	1	0	10	0	2	149	1	0	152	1	2	65	8	0	76	244
8:30 AM	0	1	0	5	0	6	0	14	0	0	0	14	0	0	152	0	0	152	2	2	75	3	0	82	254
8:45 AM	0	1	1	2	0	4	0	11	0	3	0	14	0	1	151	0	0	152	5	0	88	6	0	99	269
Hourly Total	0	3	2	16	0	21	0	50	0	4	0	54	1	3	593	3	0	600	9	9	309	23	0	350	1025
9:00 AM	0	1	0	3	0	4	0	9	0	0	0	9	0	1	114	1	0	116	11	3	70	7	0	91	220
9:15 AM	0	0	0	7	0	7	0	5	0	1	0	6	0	0	106	0	0	106	6	3	76	11	0	96	215
9:30 AM	0	0	0	4	0	4	0	12	0	0	0	12	0	0	103	1	0	104	1	1	94	5	0	101	221
9:45 AM	0	0	0	6	1	6	0	8	0	2	0	10	1	0	117	1	1	119	1	5	79	4	0	89	224
Hourly Total	0	1	0	20	1	21	0	34	0	3	0	37	1	1	440	3	1	445	19	12	319	27	0	377	880
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM	0	1	0	7	1	8	0	6	0	0	0	6	0	0	85	0	0	85	1	5	79	2	0	87	186
11:15 AM	0	3	0	6	0	9	0	6	0	0	0	6	0	0	117	0	0	117	5	6	77	2	0	90	222
11:30 AM	0	1	0	4	0	5	0	2	0	1	0	3	0	0	113	0	0	113	1	11	78	4	0	94	215
11:45 AM	0	1	0	9	0	10	0	7	0	0	0	7	0	1	130	0	0	131	2	6	79	6	0	93	241
Hourly Total	0	6	0	26	1	32	0	21	0	1	0	22	0	1	445	0	0	446	9	28	313	14	0	364	864
12:00 PM	0	0	0	7	0	7	0	6	0	0	0	6	0	1	73	2	0	76	9	5	79	5	0	98	187
12:15 PM	0	1	0	2	0	3	0	8	0	0	0	8	0	0	80	2	0	82	1	12	75	2	0	90	183
12:30 PM	0	3	0	2	1	5	0	5	0	1	0	6	0	0	78	0	0	78	1	3	86	8	0	98	187
12:45 PM	0	1	0	9	0	10	0	6	0	0	0	6	0	0	85	0	0	85	1	3	83	5	0	92	193
Hourly Total	0	5	0	20	1	25	0	25	0	1	0	26	0	1	316	4	0	321	12	23	323	20	0	378	750
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00 PM	0	1	0	5	0	6	0	5	0	0	0	5	0	1	93	1	0	95	4	4	103	8	0	119	225
3:15 PM	0	0	0	6	0	6	0	10	0	1	0	11	0	0	93	0	0	93	2	4	112	7	0	125	235
3:30 PM	0	0	0	14	0	14	0	5	0	1	0	6	0	0	103	1	0	104	0	7	105	8	0	120	244
3:45 PM	0	1	0	10	0	11	0	5	0	0	0	5	0	0	112	0	0	112	4	3	115	8	0	130	258
Hourly Total	0	2	0	35	0	37	0	25	0	2	0	27	0	1	401	2	0	404	10	18	435	31	0	494	962
4:00 PM	0	1	0	4	0	5	0	2	0	0	0	2	0	0	134	1	0	135	0	5	125	8	0	138	280
4:15 PM	0	0	0	4	0	4	0	6	0	1	0	7	0	0	101	1	0	102	4	4	155	11	1	174	287
4:30 PM	0	0	0	7	0	7	0	5	0	0	0	5	0	1	99	1	0	101	2	5	124	4	0	135	248
4:45 PM	0	1	0	7	0	8	0	5	0	0	0	5	0	0	103	0	0	103	3	4	141	10	0	158	274
Hourly Total	0	2	0	22	0	24	0	18	0	1	0	19	0	1	437	3	0	441	9	18	545	33	1	605	1089
5:00 PM	0	1	0	9	0	10	0	7	0	0	0	7	1	0	100	0	0	101	4	6	127	8	0	145	263
5:15 PM	0	0	0	3	0	3	0	6	0	0	0	6	0	0	89	0	0	89	3	9	159	7	0	178	276
5:30 PM	0	1	0	6	0	7	0	6	0	0	0	6	0	1	101	0	0	102	1	8	166	19	0	194	309
5:45 PM	1	3	0	12	0	16	0	9	0	0	0	9	1	0	105	0	0	106	1	7	150	14	0	172	303
Hourly Total	1	5	0	30	0	36	0	28	0	0	0	28	2	1	395	0	0	398	9	30	602	48	0	689	1151
Grand Total	1	24	2	184	3	211	0	258	0	17	0	275	5	10	3726	17	1	3758	80	145	3097	210	1	3532	7776
Approach %	0.5	11.4	0.9	87.2	-	-	0.0	93.8	0.0	6.2	-	-	0.1	0.3	99.1	0.5	-	-	2.3	4.1	87.7	5.9	-	-	-
Total %	0.0	0.3	0.0	2.4	-	2.7	0.0	3.3	0.0	0.2	-	3.5	0.1	0.1	47.9	0.2	-	48.3	1.0	1.9	39.8	2.7	-	45.4	-
Car	1	23	2	183	-	209	0	255	0	17	-	272	5	10	3630	16	-	3661	80	142	3009	204	-	3435	7577
% Car	100.0	95.8	100.0	99.5	-	99.1	-	98.8	-	100.0	-	98.9	100.0	100.0	97.4	94.1	-	97.4	100.0	97.9	97.2	97.1	-	97.3	97.4
Truck	0	1	0	1	-	2	0	3	0	0	-	3	0	0	96	1	-	97	0	3	88	6	-	97	199
% Truck	0.0	4.2	0.0	0.5	-	0.9	-	1.2	-	0.0	-	1.1	0.0	0.0	2.6	5.9	-	2.6	0.0	2.1	2.8	2.9	-	2.7	2.6
Ped	-	-	-	-	3	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	1	-	-
% Ped	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

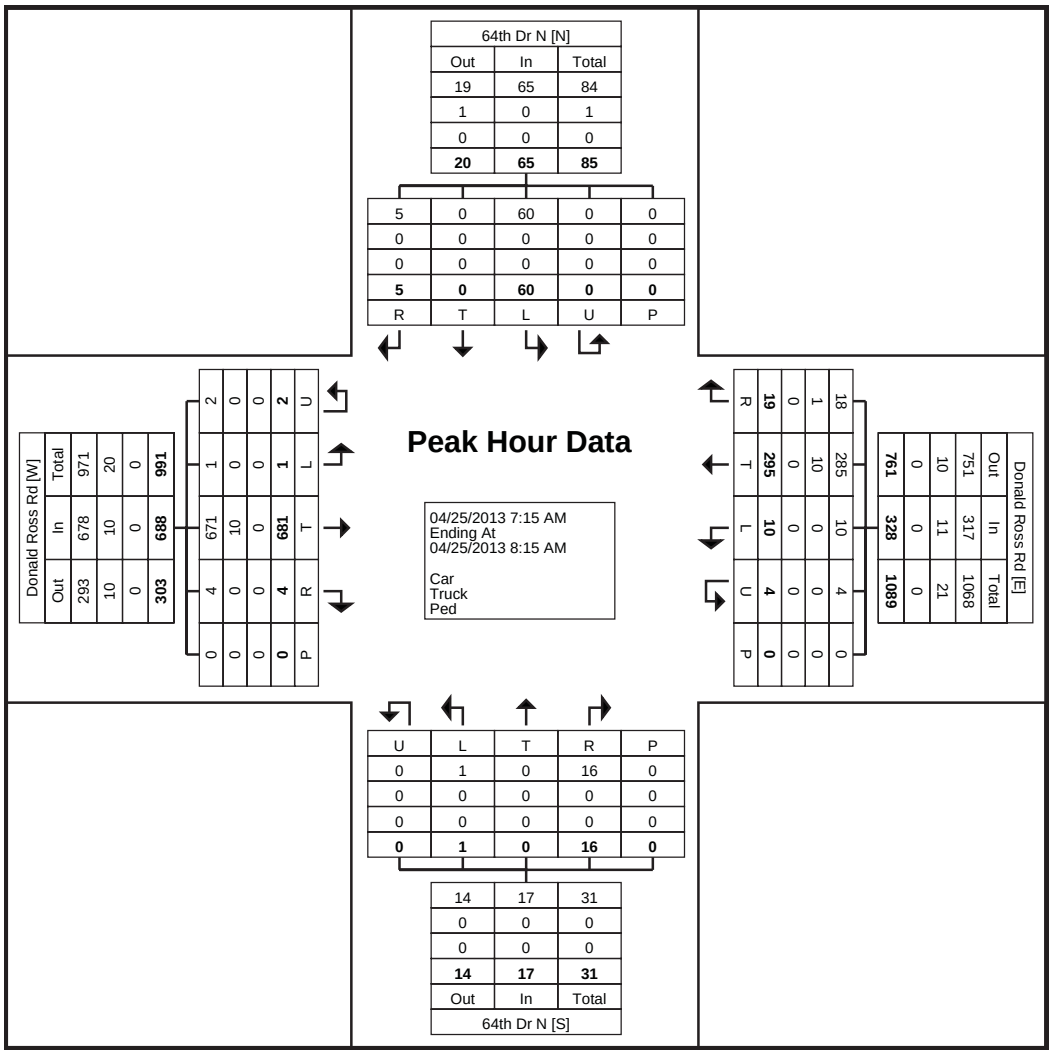
Count Name: Donald Ross at 64th Dr
Site Code:
Start Date: 04/25/2013
Page No: 3

Turning Movement Peak Hour Data (7:15 AM)

Start Time	64th Dr N Northbound						64th Dr N Southbound						Donald Ross Rd Eastbound						Donald Ross Rd Westbound						
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	Int. Total
7:15 AM	0	0	0	2	0	2	0	14	0	3	0	17	1	0	188	0	0	189	1	1	83	5	0	90	298
7:30 AM	0	0	0	5	0	5	0	11	0	1	0	12	0	0	184	0	0	184	0	3	58	3	0	64	265
7:45 AM	0	0	0	5	0	5	0	19	0	1	0	20	0	1	168	2	0	171	2	1	73	5	0	81	277
8:00 AM	0	1	0	4	0	5	0	16	0	0	0	16	1	0	141	2	0	144	1	5	81	6	0	93	258
Total	0	1	0	16	0	17	0	60	0	5	0	65	2	1	681	4	0	688	4	10	295	19	0	328	1098
Approach %	0.0	5.9	0.0	94.1	-	-	0.0	92.3	0.0	7.7	-	-	0.3	0.1	99.0	0.6	-	-	1.2	3.0	89.9	5.8	-	-	-
Total %	0.0	0.1	0.0	1.5	-	1.5	0.0	5.5	0.0	0.5	-	5.9	0.2	0.1	62.0	0.4	-	62.7	0.4	0.9	26.9	1.7	-	29.9	-
PHF	0.000	0.250	0.000	0.800	-	0.850	0.000	0.789	0.000	0.417	-	0.813	0.500	0.250	0.906	0.500	-	0.910	0.500	0.500	0.889	0.792	-	0.882	0.921
Car	0	1	0	16	-	17	0	60	0	5	-	65	2	1	671	4	-	678	4	10	285	18	-	317	1077
% Car	-	100.0	-	100.0	-	100.0	-	100.0	-	100.0	-	100.0	100.0	100.0	98.5	100.0	-	98.5	100.0	100.0	96.6	94.7	-	96.6	98.1
Truck	0	0	0	0	-	0	0	0	0	0	-	0	0	0	10	0	-	10	0	0	10	1	-	11	21
% Truck	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	0.0	0.0	1.5	0.0	-	1.5	0.0	0.0	3.4	5.3	-	3.4	1.9
Ped	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Ped	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: Donald Ross at 64th Dr
Site Code:
Start Date: 04/25/2013



Turning Movement Peak Hour Data Plot (7:15 AM)

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

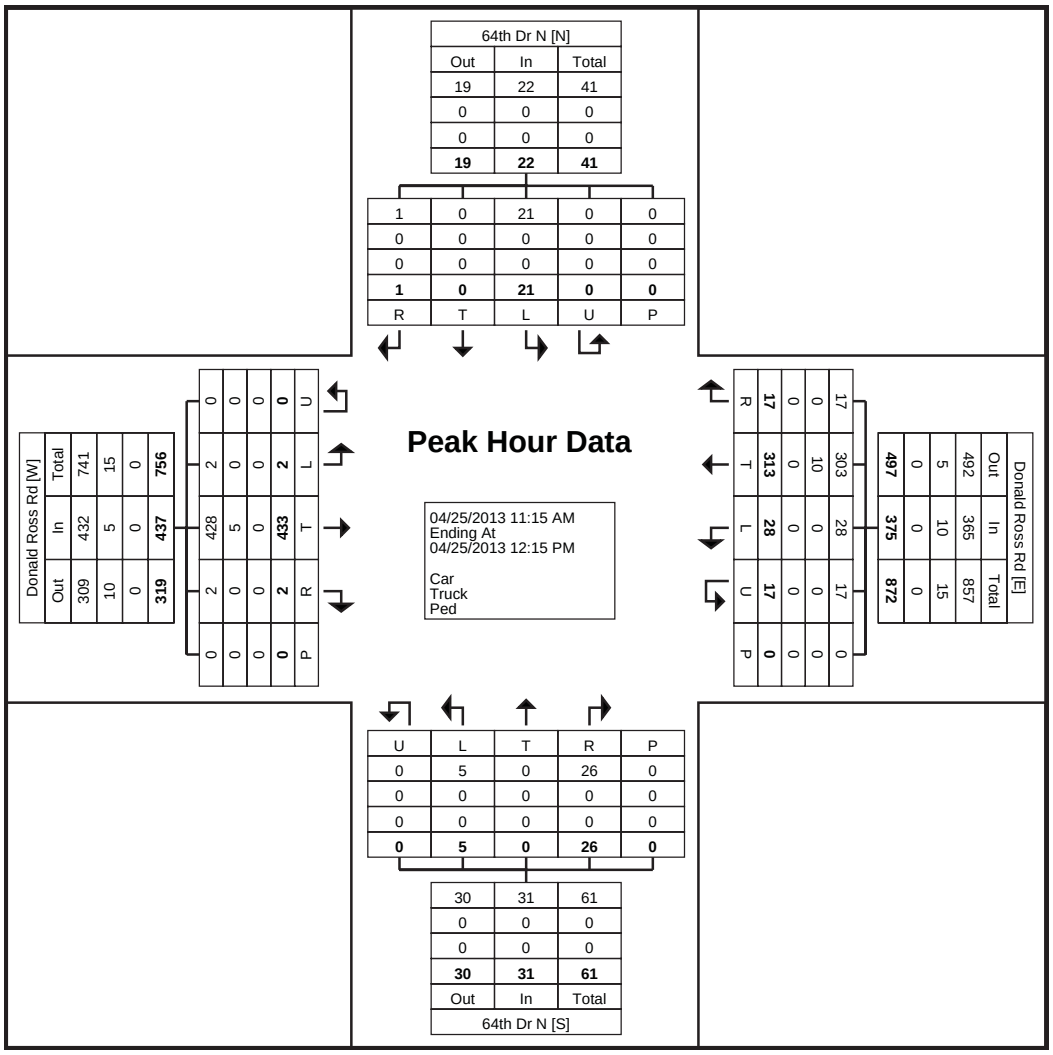
Count Name: Donald Ross at 64th Dr
Site Code:
Start Date: 04/25/2013
Page No: 5

Turning Movement Peak Hour Data (11:15 AM)

Start Time	64th Dr N Northbound						64th Dr N Southbound						Donald Ross Rd Eastbound						Donald Ross Rd Westbound						
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	Int. Total
11:15 AM	0	3	0	6	0	9	0	6	0	0	0	6	0	0	117	0	0	117	5	6	77	2	0	90	222
11:30 AM	0	1	0	4	0	5	0	2	0	1	0	3	0	0	113	0	0	113	1	11	78	4	0	94	215
11:45 AM	0	1	0	9	0	10	0	7	0	0	0	7	0	1	130	0	0	131	2	6	79	6	0	93	241
12:00 PM	0	0	0	7	0	7	0	6	0	0	0	6	0	1	73	2	0	76	9	5	79	5	0	98	187
Total	0	5	0	26	0	31	0	21	0	1	0	22	0	2	433	2	0	437	17	28	313	17	0	375	865
Approach %	0.0	16.1	0.0	83.9	-	-	0.0	95.5	0.0	4.5	-	-	0.0	0.5	99.1	0.5	-	-	4.5	7.5	83.5	4.5	-	-	-
Total %	0.0	0.6	0.0	3.0	-	3.6	0.0	2.4	0.0	0.1	-	2.5	0.0	0.2	50.1	0.2	-	50.5	2.0	3.2	36.2	2.0	-	43.4	-
PHF	0.000	0.417	0.000	0.722	-	0.775	0.000	0.750	0.000	0.250	-	0.786	0.000	0.500	0.833	0.250	-	0.834	0.472	0.636	0.991	0.708	-	0.957	0.897
Car	0	5	0	26	-	31	0	21	0	1	-	22	0	2	428	2	-	432	17	28	303	17	-	365	850
% Car	-	100.0	-	100.0	-	100.0	-	100.0	-	100.0	-	100.0	-	100.0	98.8	100.0	-	98.9	100.0	100.0	96.8	100.0	-	97.3	98.3
Truck	0	0	0	0	-	0	0	0	0	0	-	0	0	0	5	0	-	5	0	0	10	0	-	10	15
% Truck	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	1.2	0.0	-	1.1	0.0	0.0	3.2	0.0	-	2.7	1.7
Ped	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Ped	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: Donald Ross at 64th Dr
Site Code:
Start Date: 04/25/2013



Turning Movement Peak Hour Data Plot (11:15 AM)

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

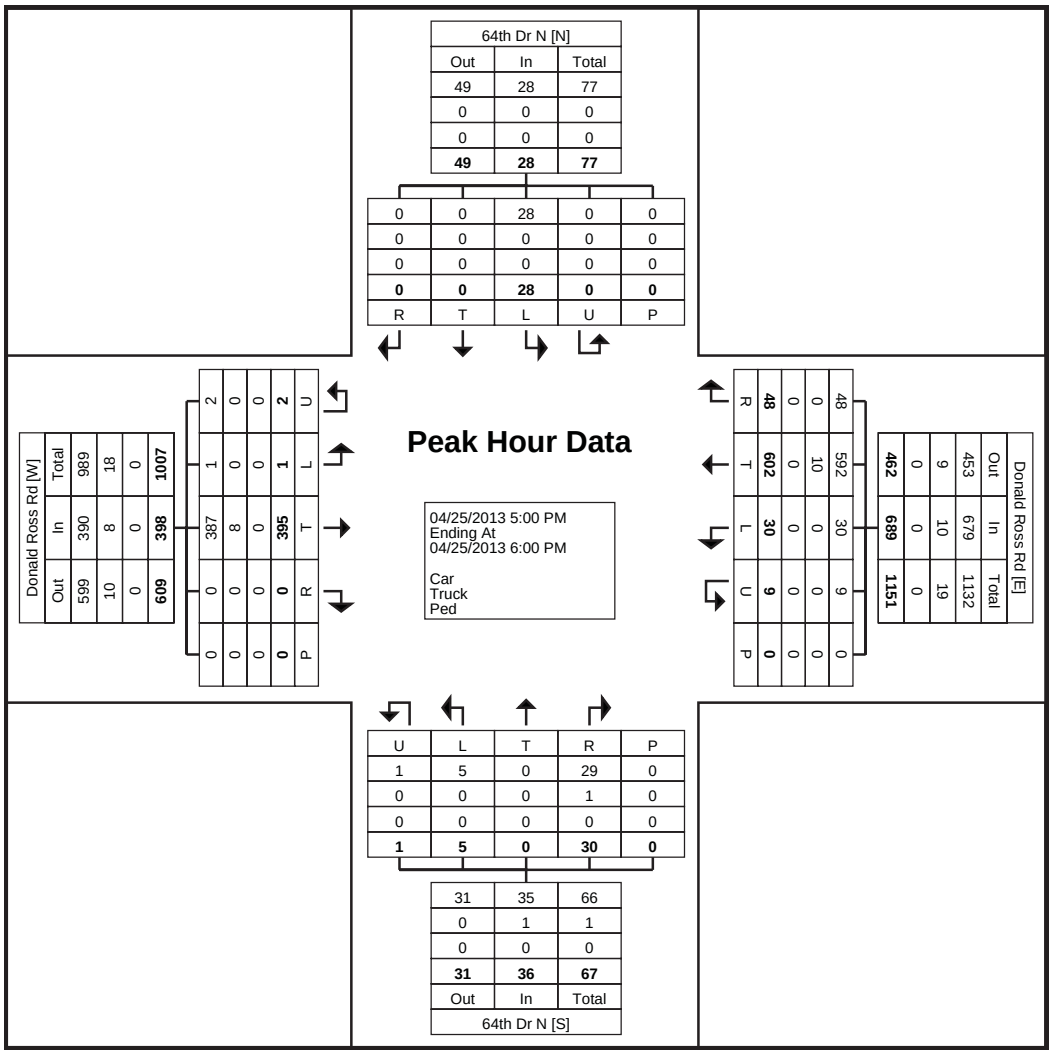
Count Name: Donald Ross at 64th Dr
Site Code:
Start Date: 04/25/2013
Page No: 7

Turning Movement Peak Hour Data (5:00 PM)

Start Time	64th Dr N Northbound						64th Dr N Southbound						Donald Ross Rd Eastbound						Donald Ross Rd Westbound						
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	Int. Total
5:00 PM	0	1	0	9	0	10	0	7	0	0	0	7	1	0	100	0	0	101	4	6	127	8	0	145	263
5:15 PM	0	0	0	3	0	3	0	6	0	0	0	6	0	0	89	0	0	89	3	9	159	7	0	178	276
5:30 PM	0	1	0	6	0	7	0	6	0	0	0	6	0	1	101	0	0	102	1	8	166	19	0	194	309
5:45 PM	1	3	0	12	0	16	0	9	0	0	0	9	1	0	105	0	0	106	1	7	150	14	0	172	303
Total	1	5	0	30	0	36	0	28	0	0	0	28	2	1	395	0	0	398	9	30	602	48	0	689	1151
Approach %	2.8	13.9	0.0	83.3	-	-	0.0	100.0	0.0	0.0	-	-	0.5	0.3	99.2	0.0	-	-	1.3	4.4	87.4	7.0	-	-	-
Total %	0.1	0.4	0.0	2.6	-	3.1	0.0	2.4	0.0	0.0	-	2.4	0.2	0.1	34.3	0.0	-	34.6	0.8	2.6	52.3	4.2	-	59.9	-
PHF	0.250	0.417	0.000	0.625	-	0.563	0.000	0.778	0.000	0.000	-	0.778	0.500	0.250	0.940	0.000	-	0.939	0.563	0.833	0.907	0.632	-	0.888	0.931
Car	1	5	0	29	-	35	0	28	0	0	-	28	2	1	387	0	-	390	9	30	592	48	-	679	1132
% Car	100.0	100.0	-	96.7	-	97.2	-	100.0	-	-	-	100.0	100.0	100.0	98.0	-	-	98.0	100.0	100.0	98.3	100.0	-	98.5	98.3
Truck	0	0	0	1	-	1	0	0	0	0	-	0	0	0	8	0	-	8	0	0	10	0	-	10	19
% Truck	0.0	0.0	-	3.3	-	2.8	-	0.0	-	-	-	0.0	0.0	0.0	2.0	-	-	2.0	0.0	0.0	1.7	0.0	-	1.5	1.7
Ped	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Ped	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: Donald Ross at 64th Dr
Site Code:
Start Date: 04/25/2013



Turning Movement Peak Hour Data Plot (5:00 PM)

Appendix B - Data Collection

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: Central at Donald Ross Rd
Site Code:
Start Date: 05/02/2013

Turning Movement Data

Start Time	Central Blvd Northbound						Central Blvd Southbound						Donald Ross Rd Eastbound						Donald Ross Rd Westbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
7:00 AM	7	37	29	27	0	100	0	23	19	44	0	86	0	32	188	42	0	262	0	27	60	7	0	94	542
7:15 AM	6	28	33	32	0	99	0	30	46	48	0	124	1	51	347	57	0	456	1	47	131	12	0	191	870
7:30 AM	3	25	60	54	0	142	1	29	56	43	1	129	0	62	274	66	1	402	5	95	176	13	0	289	962
7:45 AM	9	19	62	54	0	144	0	38	51	54	0	143	0	58	344	89	1	491	0	103	138	26	0	267	1045
Hourly Total	25	109	184	167	0	485	1	120	172	189	1	482	1	203	1153	254	2	1611	6	272	505	58	0	841	3419
8:00 AM	9	30	68	60	0	167	0	34	55	52	0	141	0	66	343	41	0	450	5	47	130	14	0	196	954
8:15 AM	7	31	70	54	0	162	0	37	48	28	0	113	0	80	256	25	0	361	2	51	126	19	3	198	834
8:30 AM	7	30	64	44	0	145	0	35	36	35	0	106	0	69	255	40	0	364	0	53	124	25	0	202	817
8:45 AM	11	33	79	64	0	187	0	28	60	40	0	128	0	83	256	40	0	379	0	62	110	23	4	195	889
Hourly Total	34	124	281	222	0	661	0	134	199	155	0	488	0	298	1110	146	0	1554	7	213	490	81	7	791	3494
9:00 AM	5	27	62	51	0	145	0	36	44	37	0	117	0	63	263	36	0	362	4	51	127	27	2	209	833
9:15 AM	7	32	64	49	0	152	0	33	39	37	0	109	0	49	198	32	0	279	2	58	146	25	0	231	771
9:30 AM	8	37	57	45	0	147	0	23	46	29	2	98	0	49	197	21	0	267	3	18	136	26	2	183	695
9:45 AM	12	29	47	41	0	129	1	26	27	18	1	72	0	36	215	16	1	267	5	48	135	20	0	208	676
Hourly Total	32	125	230	186	0	573	1	118	156	121	3	396	0	197	873	105	1	1175	14	175	544	98	4	831	2975
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM	8	23	44	29	0	104	0	24	31	20	0	75	0	37	145	9	0	191	3	43	123	12	0	181	551
11:15 AM	1	21	39	39	0	100	1	12	25	28	0	66	0	50	161	13	0	224	0	38	143	15	2	196	586
11:30 AM	10	17	43	21	0	91	1	35	35	23	0	94	0	35	135	16	0	186	1	46	121	17	2	185	556
11:45 AM	9	21	43	31	0	104	0	27	31	21	0	79	0	43	151	20	0	214	0	42	147	31	0	220	617
Hourly Total	28	82	169	120	0	399	2	98	122	92	0	314	0	165	592	58	0	815	4	169	534	75	4	782	2310
12:00 PM	6	22	33	26	0	87	1	25	23	14	0	63	0	28	116	14	0	158	4	40	158	21	0	223	531
12:15 PM	13	30	49	20	0	112	0	31	29	13	0	73	1	34	135	17	0	187	7	49	140	20	0	216	588
12:30 PM	7	26	39	23	0	95	1	34	43	24	0	102	2	39	148	12	0	201	6	41	145	33	0	225	623
12:45 PM	9	38	61	35	0	143	0	52	41	25	0	118	2	40	133	19	0	194	6	39	109	24	0	178	633
Hourly Total	35	116	182	104	0	437	2	142	136	76	0	356	5	141	532	62	0	740	23	169	552	98	0	842	2375
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00 PM	9	54	50	29	0	142	0	29	29	16	0	74	0	59	130	19	0	208	2	54	166	33	0	255	679
3:15 PM	6	46	49	36	0	137	1	34	35	42	0	112	0	44	145	19	0	208	8	46	172	34	0	260	717
3:30 PM	5	30	55	22	0	112	0	30	32	20	0	82	0	58	147	23	0	228	4	49	158	24	0	235	657
3:45 PM	8	26	46	35	0	115	0	32	29	17	0	78	0	66	121	26	0	213	5	45	167	33	0	250	656
Hourly Total	28	156	200	122	0	506	1	125	125	95	0	346	0	227	543	87	0	857	19	194	663	124	0	1000	2709
4:00 PM	9	43	59	38	0	149	0	33	18	21	0	72	0	73	133	17	0	223	3	63	183	43	0	292	736
4:15 PM	8	56	72	36	0	172	0	41	53	21	0	115	0	71	156	10	0	237	1	35	203	23	0	262	786
4:30 PM	6	62	73	31	1	172	1	32	42	22	0	97	0	50	118	17	0	185	5	51	212	25	0	293	747
4:45 PM	13	32	49	29	0	123	0	29	35	18	0	82	0	73	154	22	0	249	3	49	244	35	1	331	785
Hourly Total	36	193	253	134	1	616	1	135	148	82	0	366	0	267	561	66	0	894	12	198	842	126	1	1178	3054
5:00 PM	12	46	83	27	0	168	0	38	63	46	0	147	0	63	133	20	0	216	10	72	218	31	0	331	862
5:15 PM	13	46	69	42	0	170	0	55	58	25	0	138	0	86	184	27	0	297	6	69	315	32	0	422	1027
5:30 PM	10	56	82	30	0	178	0	36	45	31	0	112	2	84	184	21	0	291	5	38	233	28	0	304	885
5:45 PM	10	42	86	32	0	170	0	38	43	27	0	108	0	90	154	13	0	257	0	53	188	22	0	263	798
Hourly Total	45	190	320	131	0	686	0	167	209	129	0	505	2	323	655	81	0	1061	21	232	954	113	0	1320	3572
Grand Total	263	1095	1819	1186	1	4363	8	1039	1267	939	4	3253	8	1821	6019	859	3	8707	106	1622	5084	773	16	7585	23908
Approach %	6.0	25.1	41.7	27.2	-	-	0.2	31.9	38.9	28.9	-	-	0.1	20.9	69.1	9.9	-	-	1.4	21.4	67.0	10.2	-	-	-
Total %	1.1	4.6	7.6	5.0	-	18.2	0.0	4.3	5.3	3.9	-	13.6	0.0	7.6	25.2	3.6	-	36.4	0.4	6.8	21.3	3.2	-	31.7	-
Car	260	1050	1790	1138	-	4238	8	1010	1247	915	-	3180	8	1778	5859	821	-	8466	106	1576	4956	750	-	7388	23272
% Car	98.9	95.9	98.4	96.0	-	97.1	100.0	97.2	98.4	97.4	-	97.8	100.0	97.6	97.3	95.6	-	97.2	100.0	97.2	97.5	97.0	-	97.4	97.3
Truck	3	45	29	48	-	125	0	29	20	24	-	73	0	43	160	38	-	241	0	46	128	23	-	197	636
% Truck	1.1	4.1	1.6	4.0	-	2.9	0.0	2.8	1.6	2.6	-	2.2	0.0	2.4	2.7	4.4	-	2.8	0.0	2.8	2.5	3.0	-	2.6	2.7
Ped	-	-	-	-	1	-	-	-	-	-	4	-	-	-	-	-	3	-	-	-	-	-	16	-	-
% Ped	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

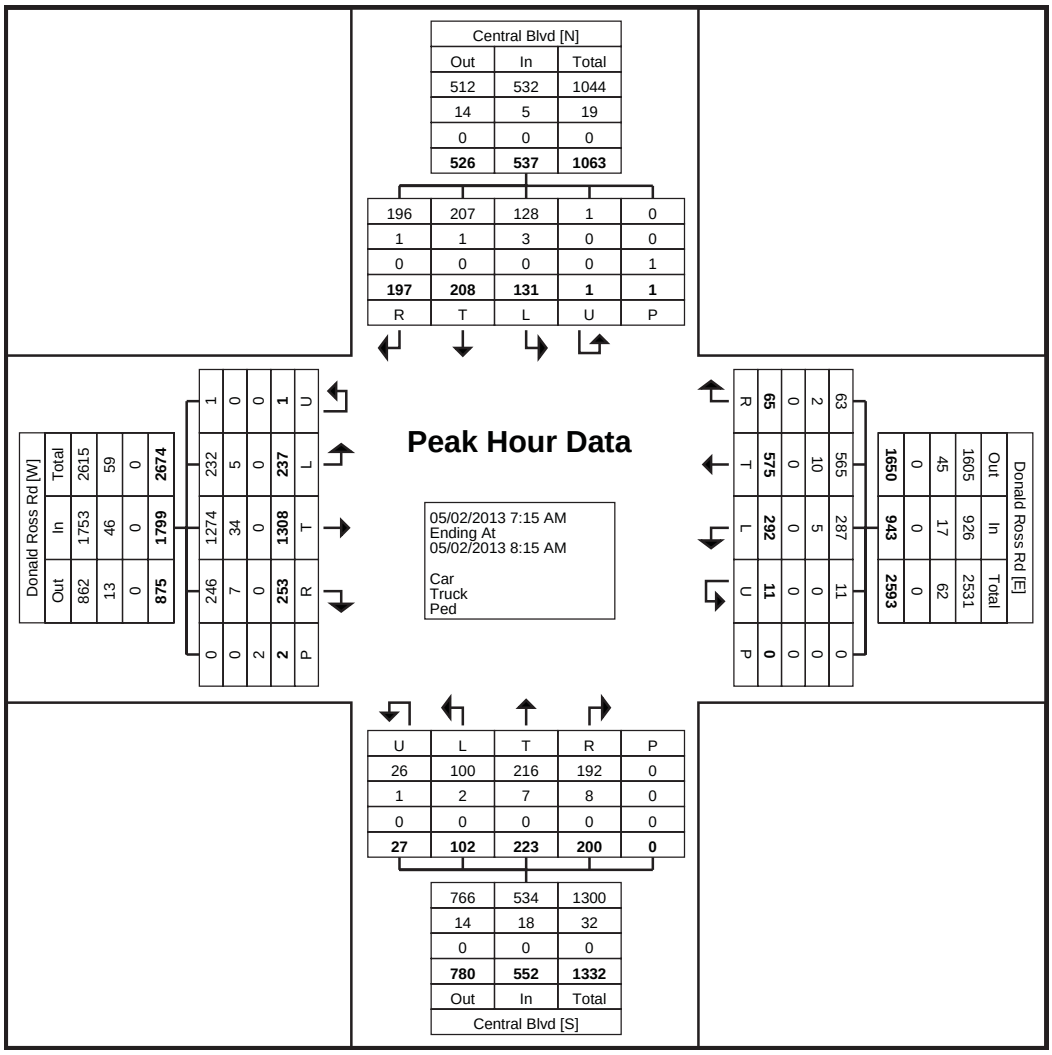
Count Name: Central at Donald Ross Rd
Site Code:
Start Date: 05/02/2013

Turning Movement Peak Hour Data (7:15 AM)

Start Time	Central Blvd Northbound						Central Blvd Southbound						Donald Ross Rd Eastbound						Donald Ross Rd Westbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
7:15 AM	6	28	33	32	0	99	0	30	46	48	0	124	1	51	347	57	0	456	1	47	131	12	0	191	870
7:30 AM	3	25	60	54	0	142	1	29	56	43	1	129	0	62	274	66	1	402	5	95	176	13	0	289	962
7:45 AM	9	19	62	54	0	144	0	38	51	54	0	143	0	58	344	89	1	491	0	103	138	26	0	267	1045
8:00 AM	9	30	68	60	0	167	0	34	55	52	0	141	0	66	343	41	0	450	5	47	130	14	0	196	954
Total	27	102	223	200	0	552	1	131	208	197	1	537	1	237	1308	253	2	1799	11	292	575	65	0	943	3831
Approach %	4.9	18.5	40.4	36.2	-	-	0.2	24.4	38.7	36.7	-	-	0.1	13.2	72.7	14.1	-	-	1.2	31.0	61.0	6.9	-	-	-
Total %	0.7	2.7	5.8	5.2	-	14.4	0.0	3.4	5.4	5.1	-	14.0	0.0	6.2	34.1	6.6	-	47.0	0.3	7.6	15.0	1.7	-	24.6	-
PHF	0.750	0.850	0.820	0.833	-	0.826	0.250	0.862	0.929	0.912	-	0.939	0.250	0.898	0.942	0.711	-	0.916	0.550	0.709	0.817	0.625	-	0.816	0.917
Car	26	100	216	192	-	534	1	128	207	196	-	532	1	232	1274	246	-	1753	11	287	565	63	-	926	3745
% Car	96.3	98.0	96.9	96.0	-	96.7	100.0	97.7	99.5	99.5	-	99.1	100.0	97.9	97.4	97.2	-	97.4	100.0	98.3	98.3	96.9	-	98.2	97.8
Truck	1	2	7	8	-	18	0	3	1	1	-	5	0	5	34	7	-	46	0	5	10	2	-	17	86
% Truck	3.7	2.0	3.1	4.0	-	3.3	0.0	2.3	0.5	0.5	-	0.9	0.0	2.1	2.6	2.8	-	2.6	0.0	1.7	1.7	3.1	-	1.8	2.2
Ped	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	2	-	-	-	-	-	0	-	-
% Ped	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: Central at Donald Ross Rd
Site Code:
Start Date: 05/02/2013



Turning Movement Peak Hour Data Plot (7:15 AM)

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

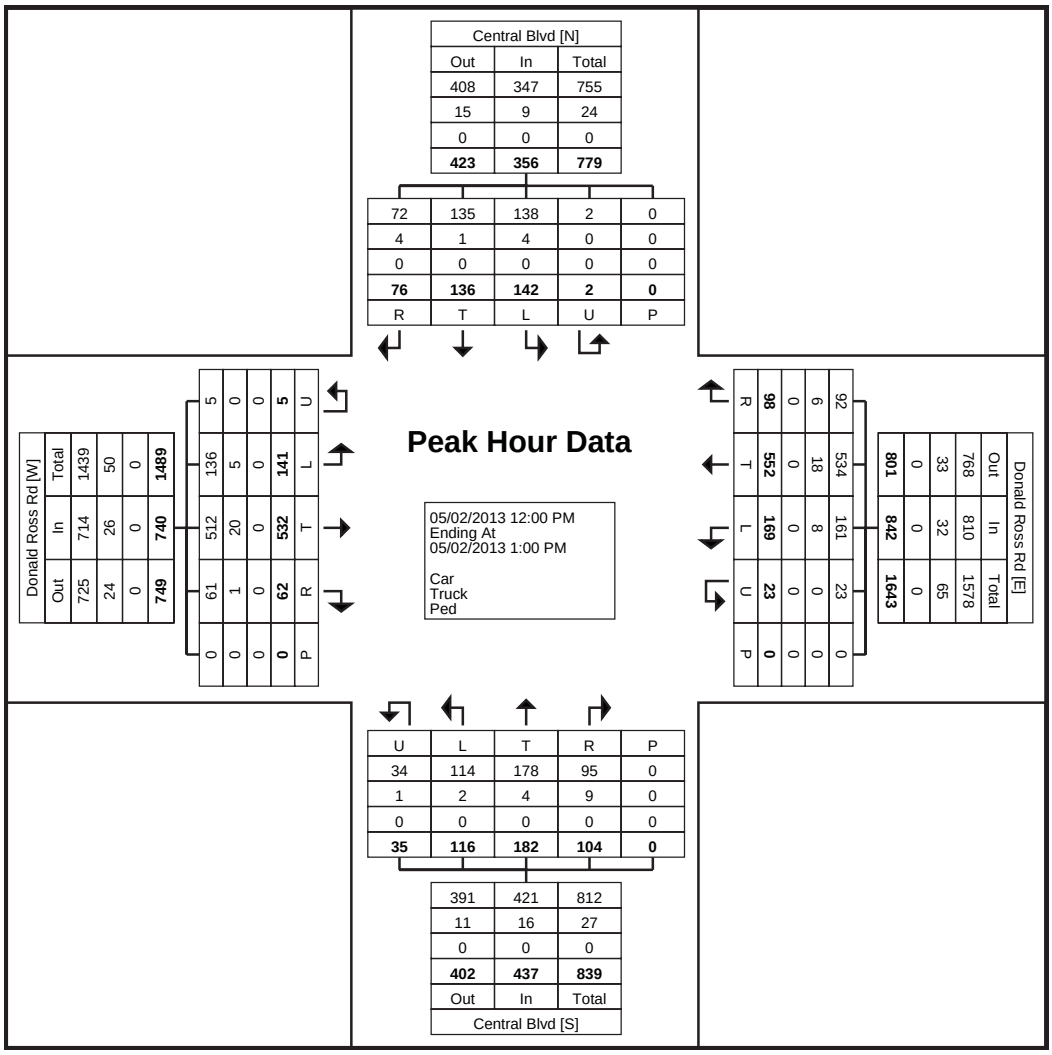
Count Name: Central at Donald Ross Rd
Site Code:
Start Date: 05/02/2013

Turning Movement Peak Hour Data (12:00 PM)

Start Time	Central Blvd Northbound						Central Blvd Southbound						Donald Ross Rd Eastbound						Donald Ross Rd Westbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
12:00 PM	6	22	33	26	0	87	1	25	23	14	0	63	0	28	116	14	0	158	4	40	158	21	0	223	531
12:15 PM	13	30	49	20	0	112	0	31	29	13	0	73	1	34	135	17	0	187	7	49	140	20	0	216	588
12:30 PM	7	26	39	23	0	95	1	34	43	24	0	102	2	39	148	12	0	201	6	41	145	33	0	225	623
12:45 PM	9	38	61	35	0	143	0	52	41	25	0	118	2	40	133	19	0	194	6	39	109	24	0	178	633
Total	35	116	182	104	0	437	2	142	136	76	0	356	5	141	532	62	0	740	23	169	552	98	0	842	2375
Approach %	8.0	26.5	41.6	23.8	-	-	0.6	39.9	38.2	21.3	-	-	0.7	19.1	71.9	8.4	-	-	2.7	20.1	65.6	11.6	-	-	-
Total %	1.5	4.9	7.7	4.4	-	18.4	0.1	6.0	5.7	3.2	-	15.0	0.2	5.9	22.4	2.6	-	31.2	1.0	7.1	23.2	4.1	-	35.5	-
PHF	0.673	0.763	0.746	0.743	-	0.764	0.500	0.683	0.791	0.760	-	0.754	0.625	0.881	0.899	0.816	-	0.920	0.821	0.862	0.873	0.742	-	0.936	0.938
Car	34	114	178	95	-	421	2	138	135	72	-	347	5	136	512	61	-	714	23	161	534	92	-	810	2292
% Car	97.1	98.3	97.8	91.3	-	96.3	100.0	97.2	99.3	94.7	-	97.5	100.0	96.5	96.2	98.4	-	96.5	100.0	95.3	96.7	93.9	-	96.2	96.5
Truck	1	2	4	9	-	16	0	4	1	4	-	9	0	5	20	1	-	26	0	8	18	6	-	32	83
% Truck	2.9	1.7	2.2	8.7	-	3.7	0.0	2.8	0.7	5.3	-	2.5	0.0	3.5	3.8	1.6	-	3.5	0.0	4.7	3.3	6.1	-	3.8	3.5
Ped	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Ped	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: Central at Donald Ross Rd
Site Code:
Start Date: 05/02/2013
Page No: 6



Turning Movement Peak Hour Data Plot (12:00 PM)

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

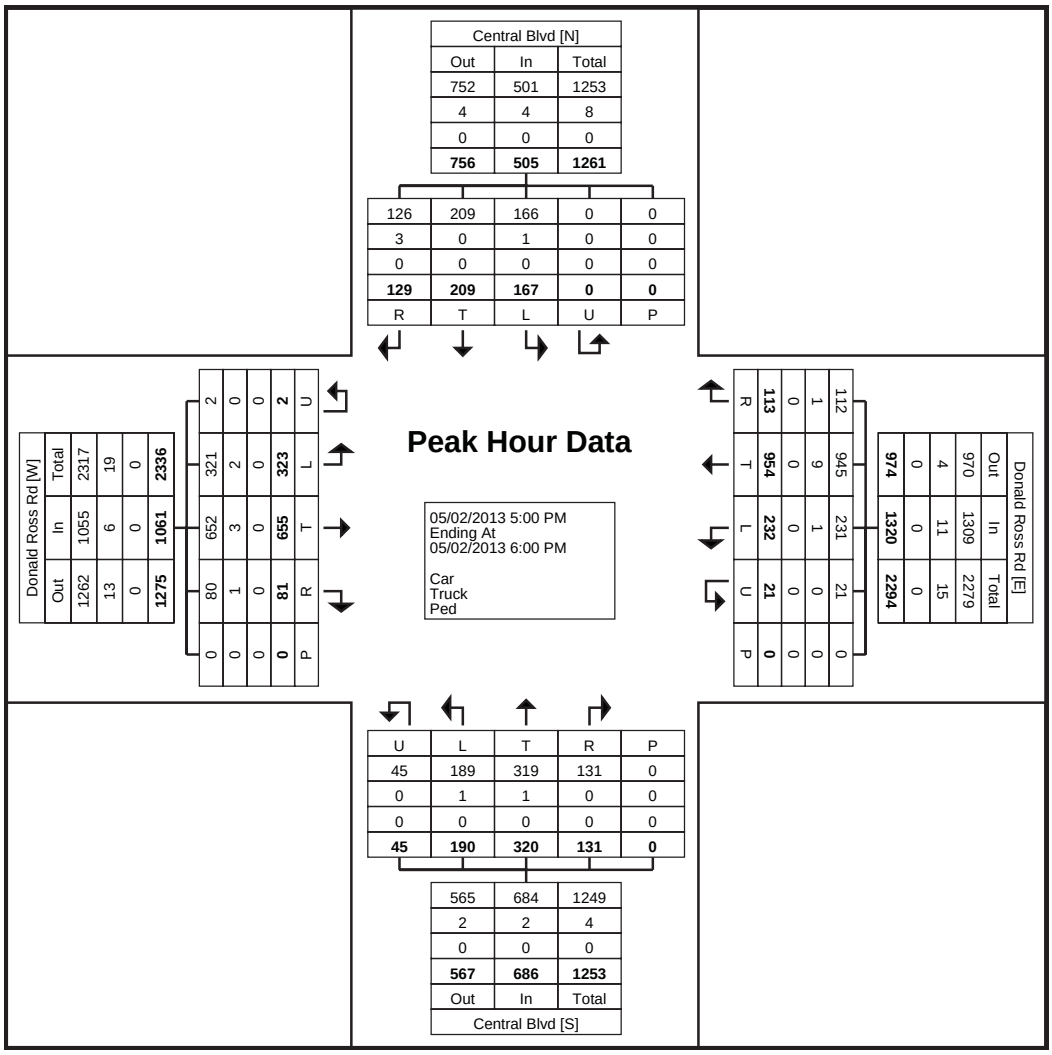
Count Name: Central at Donald Ross Rd
Site Code:
Start Date: 05/02/2013
Page No: 7

Turning Movement Peak Hour Data (5:00 PM)

Start Time	Central Blvd Northbound						Central Blvd Southbound						Donald Ross Rd Eastbound						Donald Ross Rd Westbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
5:00 PM	12	46	83	27	0	168	0	38	63	46	0	147	0	63	133	20	0	216	10	72	218	31	0	331	862
5:15 PM	13	46	69	42	0	170	0	55	58	25	0	138	0	86	184	27	0	297	6	69	315	32	0	422	1027
5:30 PM	10	56	82	30	0	178	0	36	45	31	0	112	2	84	184	21	0	291	5	38	233	28	0	304	885
5:45 PM	10	42	86	32	0	170	0	38	43	27	0	108	0	90	154	13	0	257	0	53	188	22	0	263	798
Total	45	190	320	131	0	686	0	167	209	129	0	505	2	323	655	81	0	1061	21	232	954	113	0	1320	3572
Approach %	6.6	27.7	46.6	19.1	-	-	0.0	33.1	41.4	25.5	-	-	0.2	30.4	61.7	7.6	-	-	1.6	17.6	72.3	8.6	-	-	-
Total %	1.3	5.3	9.0	3.7	-	19.2	0.0	4.7	5.9	3.6	-	14.1	0.1	9.0	18.3	2.3	-	29.7	0.6	6.5	26.7	3.2	-	37.0	-
PHF	0.865	0.848	0.930	0.780	-	0.963	0.000	0.759	0.829	0.701	-	0.859	0.250	0.897	0.890	0.750	-	0.893	0.525	0.806	0.757	0.883	-	0.782	0.870
Car	45	189	319	131	-	684	0	166	209	126	-	501	2	321	652	80	-	1055	21	231	945	112	-	1309	3549
% Car	100.0	99.5	99.7	100.0	-	99.7	-	99.4	100.0	97.7	-	99.2	100.0	99.4	99.5	98.8	-	99.4	100.0	99.6	99.1	99.1	-	99.2	99.4
Truck	0	1	1	0	-	2	0	1	0	3	-	4	0	2	3	1	-	6	0	1	9	1	-	11	23
% Truck	0.0	0.5	0.3	0.0	-	0.3	-	0.6	0.0	2.3	-	0.8	0.0	0.6	0.5	1.2	-	0.6	0.0	0.4	0.9	0.9	-	0.8	0.6
Ped	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Ped	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: Central at Donald Ross Rd
Site Code:
Start Date: 05/02/2013
Page No: 8



Turning Movement Peak Hour Data Plot (5:00 PM)

Appendix B - Data Collection

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: Military Trail at Donald Ross Rd
Site Code:
Start Date: 05/01/2013

Turning Movement Data

Start Time	N Military Trail Northbound						N Military Trail Southbound						Donald Ross Rd Eastbound						Donald Ross Rd Westbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
7:00 AM	1	13	71	19	0	104	8	57	137	46	0	248	11	60	115	58	0	244	0	18	64	40	0	122	718
7:15 AM	0	46	136	26	1	208	11	81	177	88	0	357	8	79	133	161	0	381	0	68	96	53	0	217	1163
7:30 AM	1	56	205	38	3	300	4	116	205	89	1	414	11	116	213	54	1	394	0	22	126	60	0	208	1316
7:45 AM	0	18	173	32	0	223	8	119	206	97	0	430	9	134	283	24	0	450	1	19	114	101	0	235	1338
Hourly Total	2	133	585	115	4	835	31	373	725	320	1	1449	39	389	744	297	1	1469	1	127	400	254	0	782	4535
8:00 AM	0	28	177	37	0	242	8	87	164	101	0	360	16	108	223	14	0	361	1	18	101	71	0	191	1154
8:15 AM	0	17	142	29	1	188	9	109	179	85	0	382	13	132	221	14	0	380	2	25	92	72	0	191	1141
8:30 AM	0	27	117	23	0	167	9	87	134	61	0	291	6	110	215	25	0	356	0	15	110	74	1	199	1013
8:45 AM	0	28	157	24	0	209	11	103	170	58	1	342	9	91	182	24	0	306	0	30	141	88	1	259	1116
Hourly Total	0	100	593	113	1	806	37	386	647	305	1	1375	44	441	841	77	0	1403	3	88	444	305	2	840	4424
9:00 AM	0	18	123	26	0	167	14	86	173	61	1	334	8	114	175	24	0	321	0	21	90	69	0	180	1002
9:15 AM	0	21	152	36	0	209	14	92	201	60	0	367	13	72	117	29	0	231	0	19	84	70	0	173	980
9:30 AM	0	16	121	24	2	161	20	67	133	68	1	288	11	71	127	11	0	220	0	16	120	58	0	194	863
9:45 AM	0	26	112	25	0	163	24	94	164	62	0	344	21	104	125	14	0	264	0	15	96	66	0	177	948
Hourly Total	0	81	508	111	2	700	72	339	671	251	2	1333	53	361	544	78	0	1036	0	71	390	263	0	724	3793
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM	1	21	96	20	0	138	15	93	154	67	0	329	8	61	102	24	0	195	0	13	105	65	0	183	845
11:15 AM	1	34	89	13	0	137	22	76	116	87	0	301	6	60	128	26	0	220	0	24	142	82	0	248	906
11:30 AM	0	33	101	26	0	160	19	100	157	75	0	351	15	68	124	26	0	233	0	20	103	62	0	185	929
11:45 AM	3	25	118	25	0	171	20	87	160	83	1	350	11	64	133	15	1	223	0	31	145	72	0	248	992
Hourly Total	5	113	404	84	0	606	76	356	587	312	1	1331	40	253	487	91	1	871	0	88	495	281	0	864	3672
12:00 PM	2	29	85	20	0	136	20	100	181	85	0	386	19	81	95	19	1	214	0	24	138	54	0	216	952
12:15 PM	4	35	124	24	0	187	19	88	127	73	0	307	19	60	121	15	0	215	1	26	151	74	0	252	961
12:30 PM	1	33	106	18	0	158	25	93	136	86	0	340	16	75	126	28	0	245	0	16	118	78	0	212	955
12:45 PM	1	44	126	27	0	198	23	84	171	70	1	348	14	85	110	25	0	234	0	31	110	77	0	218	998
Hourly Total	8	141	441	89	0	679	87	365	615	314	1	1381	68	301	452	87	1	908	1	97	517	283	0	898	3866
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00 PM	0	56	152	33	0	241	2	93	188	90	1	373	5	79	97	29	7	210	0	41	144	72	0	257	1081
3:15 PM	0	40	112	18	1	170	13	124	222	90	0	449	9	91	143	25	3	268	0	38	176	91	1	305	1192
3:30 PM	1	47	148	32	0	228	10	83	179	91	1	363	15	93	123	27	3	258	0	18	171	78	0	267	1116
3:45 PM	0	43	147	23	0	213	21	92	210	86	0	409	9	71	122	27	1	229	0	35	184	97	1	316	1167
Hourly Total	1	186	559	106	1	852	46	392	799	357	2	1594	38	334	485	108	14	965	0	132	675	338	2	1145	4556
4:00 PM	1	33	103	13	0	150	12	89	223	113	2	437	18	91	140	26	6	275	0	20	197	86	0	303	1165
4:15 PM	0	35	110	21	0	166	7	84	173	109	0	373	17	91	85	12	2	205	0	19	193	89	0	301	1045
4:30 PM	0	43	158	23	0	224	18	95	224	119	0	456	10	66	108	33	0	217	0	31	200	69	0	300	1197
4:45 PM	0	37	134	20	0	191	8	102	175	91	0	376	12	94	147	24	0	277	1	29	229	86	0	345	1189
Hourly Total	1	148	505	77	0	731	45	370	795	432	2	1642	57	342	480	95	8	974	1	99	819	330	0	1249	4596
5:00 PM	0	38	149	21	0	208	8	104	199	139	0	450	11	67	112	40	0	230	0	28	217	64	0	309	1197
5:15 PM	0	35	121	18	0	174	11	89	234	117	0	451	8	87	113	23	0	231	0	42	283	111	0	436	1292
5:30 PM	0	40	163	14	0	217	6	61	135	92	0	294	9	83	120	25	0	237	0	38	214	80	0	332	1080
5:45 PM	1	45	142	24	0	212	18	74	168	78	1	338	14	71	106	37	0	228	1	20	160	85	0	266	1044
Hourly Total	1	158	575	77	0	811	43	328	736	426	1	1533	42	308	451	125	0	926	1	128	874	340	0	1343	4613
Grand Total	18	1060	4170	772	8	6020	437	2909	5575	2717	11	11638	381	2729	4484	958	25	8552	7	830	4614	2394	4	7845	34055
Approach %	0.3	17.6	69.3	12.8	-	-	3.8	25.0	47.9	23.3	-	-	4.5	31.9	52.4	11.2	-	-	0.1	10.6	58.8	30.5	-	-	-
Total %	0.1	3.1	12.2	2.3	-	17.7	1.3	8.5	16.4	8.0	-	34.2	1.1	8.0	13.2	2.8	-	25.1	0.0	2.4	13.5	7.0	-	23.0	-
Car	18	1034	4059	764	-	5875	430	2831	5433	2603	-	11297	379	2660	4374	929	-	8342	7	815	4496	2326	-	7644	33158
% Car	100.0	97.5	97.3	99.0	-	97.6	98.4	97.3	97.5	95.8	-	97.1	99.5	97.5	97.5	97.0	-	97.5	100.0	98.2	97.4	97.2	-	97.4	97.4
Truck	0	26	111	8	-	145	7	78	142	114	-	341	2	69	110	29	-	210	0	15	118	68	-	201	897
% Truck	0.0	2.5	2.7	1.0	-	2.4	1.6	2.7	2.5	4.2	-	2.9	0.5	2.5	2.5	3.0	-	2.5	0.0	1.8	2.6	2.8	-	2.6	2.6
Ped	-	-	-	-	8	-	-	-	-	-	11	-	-	-	-	-	25	-	-	-	-	-	4	-	-
% Ped	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: Military Trail at Donald Ross Rd
Site Code:
Start Date: 05/01/2013

Turning Movement Peak Hour Data (7:15 AM)

Start Time	N Military Trail Northbound						N Military Trail Southbound						Donald Ross Rd Eastbound						Donald Ross Rd Westbound						
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	Int. Total
7:15 AM	0	46	136	26	1	208	11	81	177	88	0	357	8	79	133	161	0	381	0	68	96	53	0	217	1163
7:30 AM	1	56	205	38	3	300	4	116	205	89	1	414	11	116	213	54	1	394	0	22	126	60	0	208	1316
7:45 AM	0	18	173	32	0	223	8	119	206	97	0	430	9	134	283	24	0	450	1	19	114	101	0	235	1338
8:00 AM	0	28	177	37	0	242	8	87	164	101	0	360	16	108	223	14	0	361	1	18	101	71	0	191	1154
Total	1	148	691	133	4	973	31	403	752	375	1	1561	44	437	852	253	1	1586	2	127	437	285	0	851	4971
Approach %	0.1	15.2	71.0	13.7	-	-	2.0	25.8	48.2	24.0	-	-	2.8	27.6	53.7	16.0	-	-	0.2	14.9	51.4	33.5	-	-	-
Total %	0.0	3.0	13.9	2.7	-	19.6	0.6	8.1	15.1	7.5	-	31.4	0.9	8.8	17.1	5.1	-	31.9	0.0	2.6	8.8	5.7	-	17.1	-
PHF	0.250	0.661	0.843	0.875	-	0.811	0.705	0.847	0.913	0.928	-	0.908	0.688	0.815	0.753	0.393	-	0.881	0.500	0.467	0.867	0.705	-	0.905	0.929
Car	1	146	678	133	-	958	31	394	727	359	-	1511	44	425	834	251	-	1554	2	127	432	279	-	840	4863
% Car	100.0	98.6	98.1	100.0	-	98.5	100.0	97.8	96.7	95.7	-	96.8	100.0	97.3	97.9	99.2	-	98.0	100.0	100.0	98.9	97.9	-	98.7	97.8
Truck	0	2	13	0	-	15	0	9	25	16	-	50	0	12	18	2	-	32	0	0	5	6	-	11	108
% Truck	0.0	1.4	1.9	0.0	-	1.5	0.0	2.2	3.3	4.3	-	3.2	0.0	2.7	2.1	0.8	-	2.0	0.0	0.0	1.1	2.1	-	1.3	2.2
Ped	-	-	-	-	4	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	0	-	-
% Ped	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-

FTE (Florida Transportation Engineering)
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Punta Gorda, Florida, United States 33950
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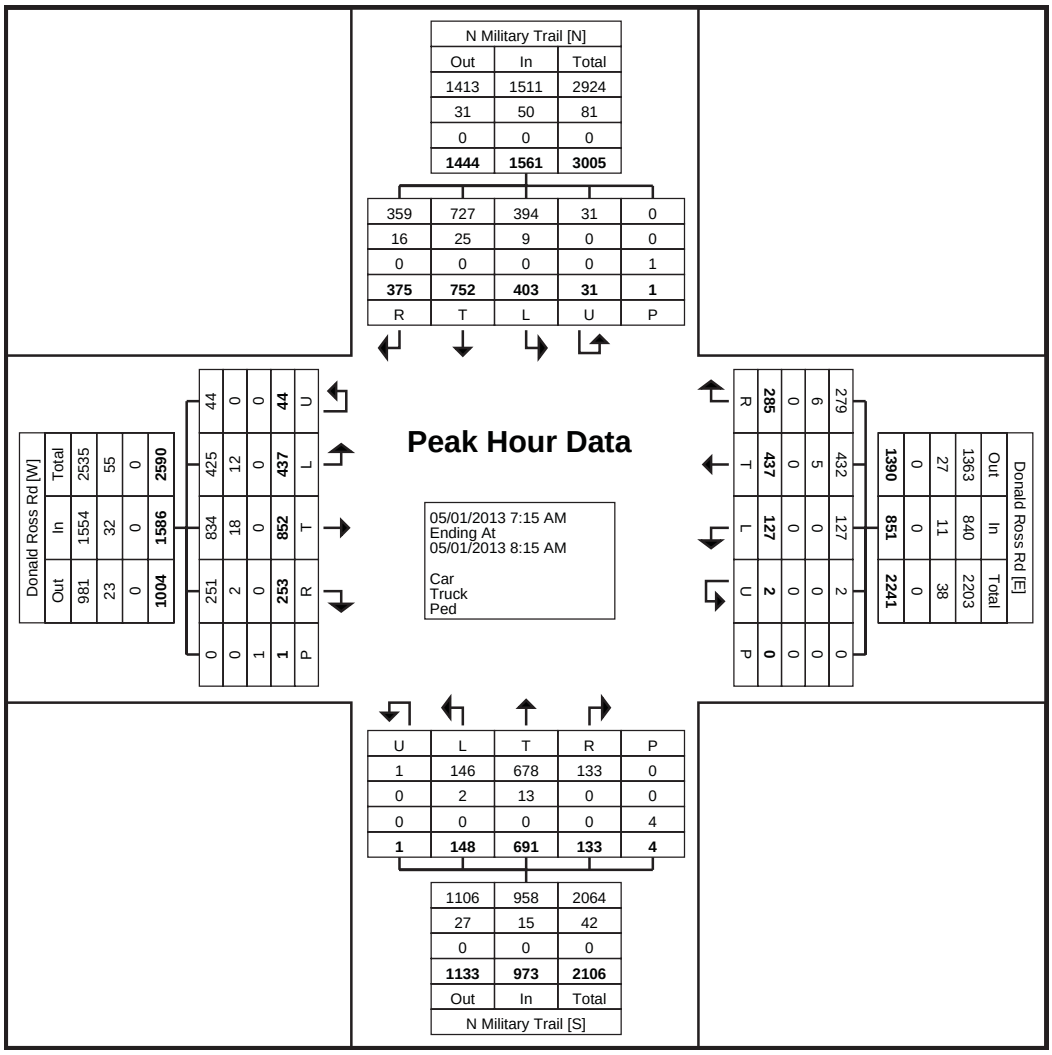
Count Name: Military Trail at Donald Ross Rd
Site Code:
Start Date: 05/01/2013
Page No: 4



Turning Movement Peak Hour Data Plot (7:15 AM)

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: Military Trail at Donald Ross Rd
Site Code:
Start Date: 05/01/2013
Page No: 5

Turning Movement Peak Hour Data (12:00 PM)

Start Time	N Military Trail Northbound						N Military Trail Southbound						Donald Ross Rd Eastbound						Donald Ross Rd Westbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
12:00 PM	2	29	85	20	0	136	20	100	181	85	0	386	19	81	95	19	1	214	0	24	138	54	0	216	952
12:15 PM	4	35	124	24	0	187	19	88	127	73	0	307	19	60	121	15	0	215	1	26	151	74	0	252	961
12:30 PM	1	33	106	18	0	158	25	93	136	86	0	340	16	75	126	28	0	245	0	16	118	78	0	212	955
12:45 PM	1	44	126	27	0	198	23	84	171	70	1	348	14	85	110	25	0	234	0	31	110	77	0	218	998
Total	8	141	441	89	0	679	87	365	615	314	1	1381	68	301	452	87	1	908	1	97	517	283	0	898	3866
Approach %	1.2	20.8	64.9	13.1	-	-	6.3	26.4	44.5	22.7	-	-	7.5	33.1	49.8	9.6	-	-	0.1	10.8	57.6	31.5	-	-	-
Total %	0.2	3.6	11.4	2.3	-	17.6	2.3	9.4	15.9	8.1	-	35.7	1.8	7.8	11.7	2.3	-	23.5	0.0	2.5	13.4	7.3	-	23.2	-
PHF	0.500	0.801	0.875	0.824	-	0.857	0.870	0.913	0.849	0.913	-	0.894	0.895	0.885	0.897	0.777	-	0.927	0.250	0.782	0.856	0.907	-	0.891	0.968
Car	8	137	428	88	-	661	86	356	600	295	-	1337	68	295	438	85	-	886	1	96	500	269	-	866	3750
% Car	100.0	97.2	97.1	98.9	-	97.3	98.9	97.5	97.6	93.9	-	96.8	100.0	98.0	96.9	97.7	-	97.6	100.0	99.0	96.7	95.1	-	96.4	97.0
Truck	0	4	13	1	-	18	1	9	15	19	-	44	0	6	14	2	-	22	0	1	17	14	-	32	116
% Truck	0.0	2.8	2.9	1.1	-	2.7	1.1	2.5	2.4	6.1	-	3.2	0.0	2.0	3.1	2.3	-	2.4	0.0	1.0	3.3	4.9	-	3.6	3.0
Ped	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	0	-	-
% Ped	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-

FTE (Florida Transportation Engineering)
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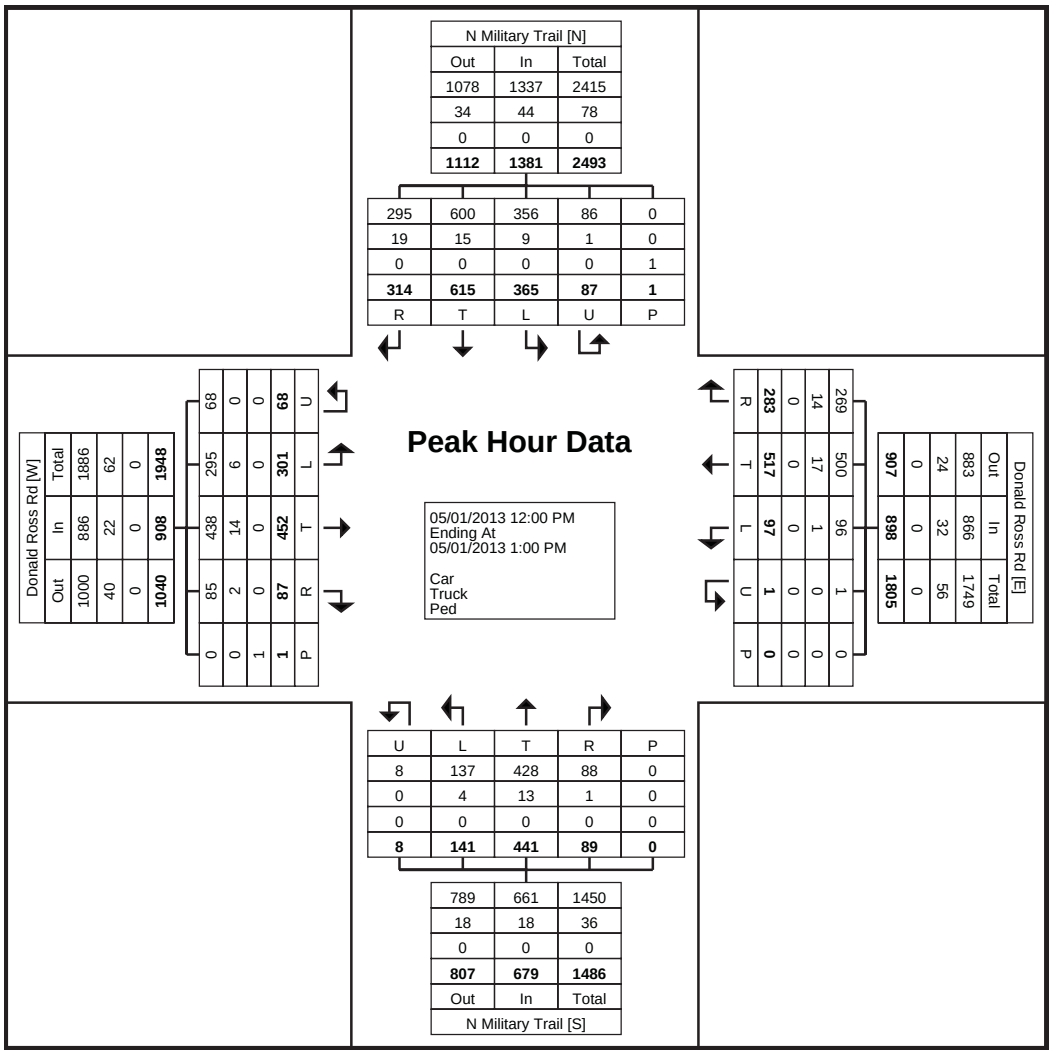
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: Military Trail at Donald Ross Rd
Site Code:
Start Date: 05/01/2013
Page No: 6



Turning Movement Peak Hour Data Plot (12:00 PM)

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

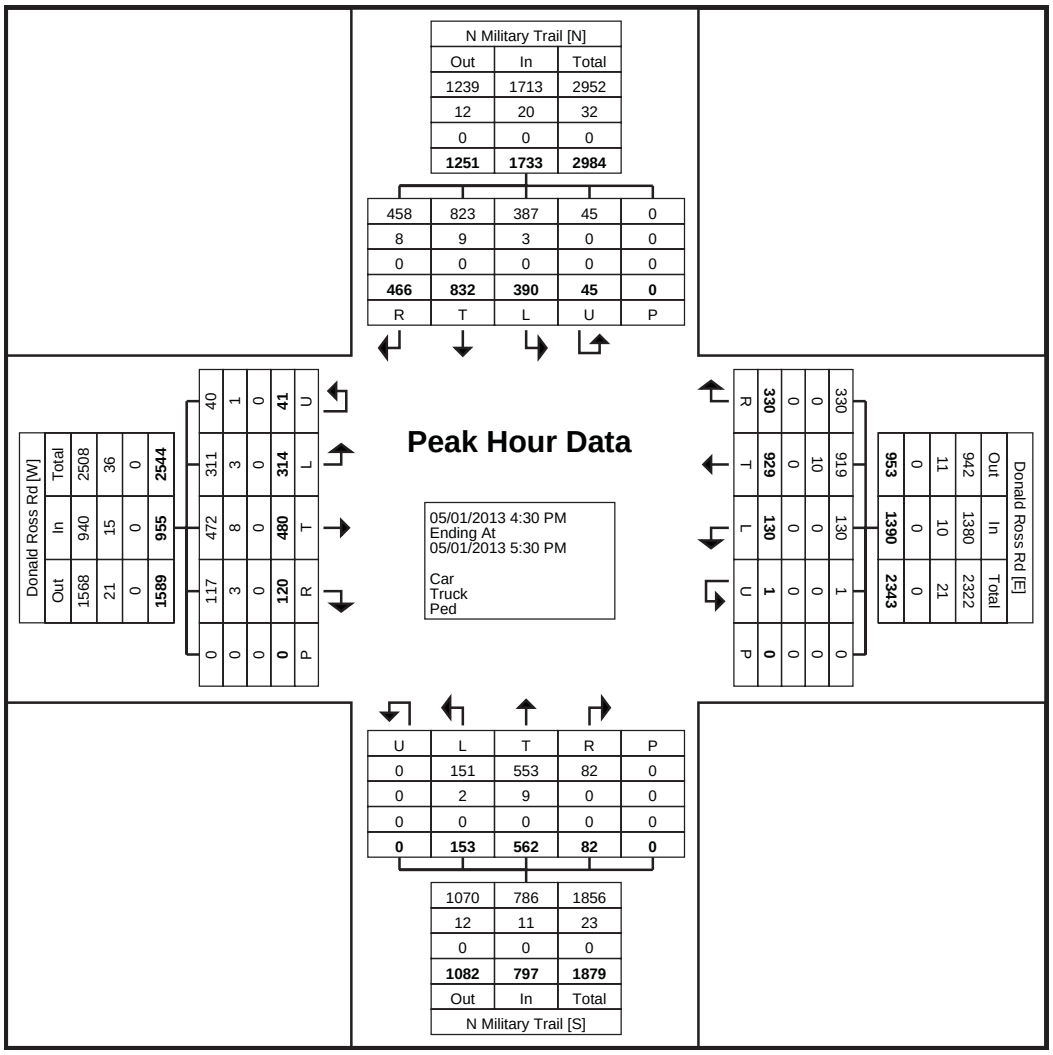
Count Name: Military Trail at Donald Ross Rd
Site Code:
Start Date: 05/01/2013
Page No: 7

Turning Movement Peak Hour Data (4:30 PM)

Start Time	N Military Trail Northbound						N Military Trail Southbound						Donald Ross Rd Eastbound						Donald Ross Rd Westbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
4:30 PM	0	43	158	23	0	224	18	95	224	119	0	456	10	66	108	33	0	217	0	31	200	69	0	300	1197
4:45 PM	0	37	134	20	0	191	8	102	175	91	0	376	12	94	147	24	0	277	1	29	229	86	0	345	1189
5:00 PM	0	38	149	21	0	208	8	104	199	139	0	450	11	67	112	40	0	230	0	28	217	64	0	309	1197
5:15 PM	0	35	121	18	0	174	11	89	234	117	0	451	8	87	113	23	0	231	0	42	283	111	0	436	1292
Total	0	153	562	82	0	797	45	390	832	466	0	1733	41	314	480	120	0	955	1	130	929	330	0	1390	4875
Approach %	0.0	19.2	70.5	10.3	-	-	2.6	22.5	48.0	26.9	-	-	4.3	32.9	50.3	12.6	-	-	0.1	9.4	66.8	23.7	-	-	-
Total %	0.0	3.1	11.5	1.7	-	16.3	0.9	8.0	17.1	9.6	-	35.5	0.8	6.4	9.8	2.5	-	19.6	0.0	2.7	19.1	6.8	-	28.5	-
PHF	0.000	0.890	0.889	0.891	-	0.890	0.625	0.938	0.889	0.838	-	0.950	0.854	0.835	0.816	0.750	-	0.862	0.250	0.774	0.821	0.743	-	0.797	0.943
Car	0	151	553	82	-	786	45	387	823	458	-	1713	40	311	472	117	-	940	1	130	919	330	-	1380	4819
% Car	-	98.7	98.4	100.0	-	98.6	100.0	99.2	98.9	98.3	-	98.8	97.6	99.0	98.3	97.5	-	98.4	100.0	100.0	98.9	100.0	-	99.3	98.9
Truck	0	2	9	0	-	11	0	3	9	8	-	20	1	3	8	3	-	15	0	0	10	0	-	10	56
% Truck	-	1.3	1.6	0.0	-	1.4	0.0	0.8	1.1	1.7	-	1.2	2.4	1.0	1.7	2.5	-	1.6	0.0	0.0	1.1	0.0	-	0.7	1.1
Ped	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Ped	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: Military Trail at Donald Ross Rd
Site Code:
Start Date: 05/01/2013
Page No: 8



Turning Movement Peak Hour Data Plot (4:30 PM)

Appendix B - Data Collection

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: Parkside at Donald Ross Rd
Site Code:
Start Date: 05/01/2013
Page No: 1

Turning Movement Data

Start Time	Southbound Approach Southbound					Eastbound Approach Eastbound					Westbound Approach Westbound					
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	Int. Total
7:00 AM	0	11	53	0	64	0	37	313	0	350	0	146	4	0	150	564
7:15 AM	0	19	60	0	79	0	38	448	0	486	0	164	18	0	182	747
7:30 AM	0	12	56	0	68	2	59	446	0	507	1	230	37	0	268	843
7:45 AM	0	24	56	0	80	1	60	494	0	555	0	196	16	0	212	847
Hourly Total	0	66	225	0	291	3	194	1701	0	1898	1	736	75	0	812	3001
8:00 AM	1	21	78	0	100	1	47	407	0	455	1	197	18	0	216	771
8:15 AM	0	10	67	0	77	0	58	368	0	426	2	182	19	0	203	706
8:30 AM	0	22	58	0	80	0	59	347	0	406	3	170	19	0	192	678
8:45 AM	0	26	58	0	84	0	61	343	0	404	0	183	20	0	203	691
Hourly Total	1	79	261	0	341	1	225	1465	0	1691	6	732	76	0	814	2846
9:00 AM	0	19	73	0	92	0	63	305	0	368	1	178	20	0	199	659
9:15 AM	0	14	26	1	40	1	34	206	0	241	3	139	9	1	151	432
9:30 AM	0	10	31	1	41	0	30	220	0	250	2	172	12	0	186	477
9:45 AM	0	6	29	0	35	1	33	231	0	265	0	156	11	0	167	467
Hourly Total	0	49	159	2	208	2	160	962	0	1124	6	645	52	1	703	2035
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM	0	10	21	0	31	0	22	193	0	215	1	176	10	0	187	433
11:15 AM	0	12	14	0	26	0	25	202	0	227	3	205	18	0	226	479
11:30 AM	0	11	29	0	40	0	28	188	0	216	1	170	18	0	189	445
11:45 AM	0	14	28	0	42	1	36	232	0	269	1	200	21	0	222	533
Hourly Total	0	47	92	0	139	1	111	815	0	927	6	751	67	0	824	1890
12:00 PM	0	13	22	0	35	0	22	196	0	218	3	172	15	0	190	443
12:15 PM	0	10	23	0	33	0	24	183	0	207	3	179	17	0	199	439
12:30 PM	0	8	24	6	32	1	23	218	0	242	5	186	17	0	208	482
12:45 PM	0	16	33	0	49	0	23	202	0	225	0	156	17	0	173	447
Hourly Total	0	47	102	6	149	1	92	799	0	892	11	693	66	0	770	1811
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00 PM	0	10	36	2	46	0	42	235	0	277	0	258	18	0	276	599
3:15 PM	0	11	38	0	49	1	39	242	0	282	5	245	17	0	267	598
3:30 PM	0	9	43	0	52	0	39	261	0	300	2	285	18	0	305	657
3:45 PM	0	16	42	0	58	0	61	251	0	312	2	242	26	0	270	640
Hourly Total	0	46	159	2	205	1	181	989	0	1171	9	1030	79	0	1118	2494
4:00 PM	1	22	80	0	103	2	53	273	0	328	0	332	28	0	360	791
4:15 PM	0	20	45	0	65	0	38	241	0	279	4	344	20	0	368	712
4:30 PM	0	16	66	0	82	0	50	232	0	282	0	350	16	0	366	730
4:45 PM	0	9	47	0	56	0	43	316	0	359	0	336	16	0	352	767
Hourly Total	1	67	238	0	306	2	184	1062	0	1248	4	1362	80	0	1446	3000
5:00 PM	0	24	65	0	89	0	55	282	0	337	6	404	26	0	436	862
5:15 PM	0	19	52	0	71	0	56	207	0	263	1	402	26	0	429	763
5:30 PM	0	19	35	0	54	0	49	255	0	304	1	319	12	0	332	690
5:45 PM	0	26	61	0	87	0	55	268	0	323	0	254	19	0	273	683
Hourly Total	0	88	213	0	301	0	215	1012	0	1227	8	1379	83	0	1470	2998
Grand Total	2	489	1449	10	1940	11	1362	8805	0	10178	51	7328	578	1	7957	20075
Approach %	0.1	25.2	74.7	-	-	0.1	13.4	86.5	-	-	0.6	92.1	7.3	-	-	-
Total %	0.0	2.4	7.2	-	9.7	0.1	6.8	43.9	-	50.7	0.3	36.5	2.9	-	39.6	-
Car	2	480	1418	-	1900	11	1332	8574	-	9917	51	7108	567	-	7726	19543
% Car	100.0	98.2	97.9	-	97.9	100.0	97.8	97.4	-	97.4	100.0	97.0	98.1	-	97.1	97.3
Truck	0	9	31	-	40	0	30	231	-	261	0	220	11	-	231	532
% Truck	0.0	1.8	2.1	-	2.1	0.0	2.2	2.6	-	2.6	0.0	3.0	1.9	-	2.9	2.7
Ped	-	-	-	10	-	-	-	-	0	-	-	-	-	1	-	-
% Ped	-	-	-	100.0	-	-	-	-	-	-	-	-	-	100.0	-	-

FTE (Florida Transportation Engineering)
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Ph# (800) 639-4851

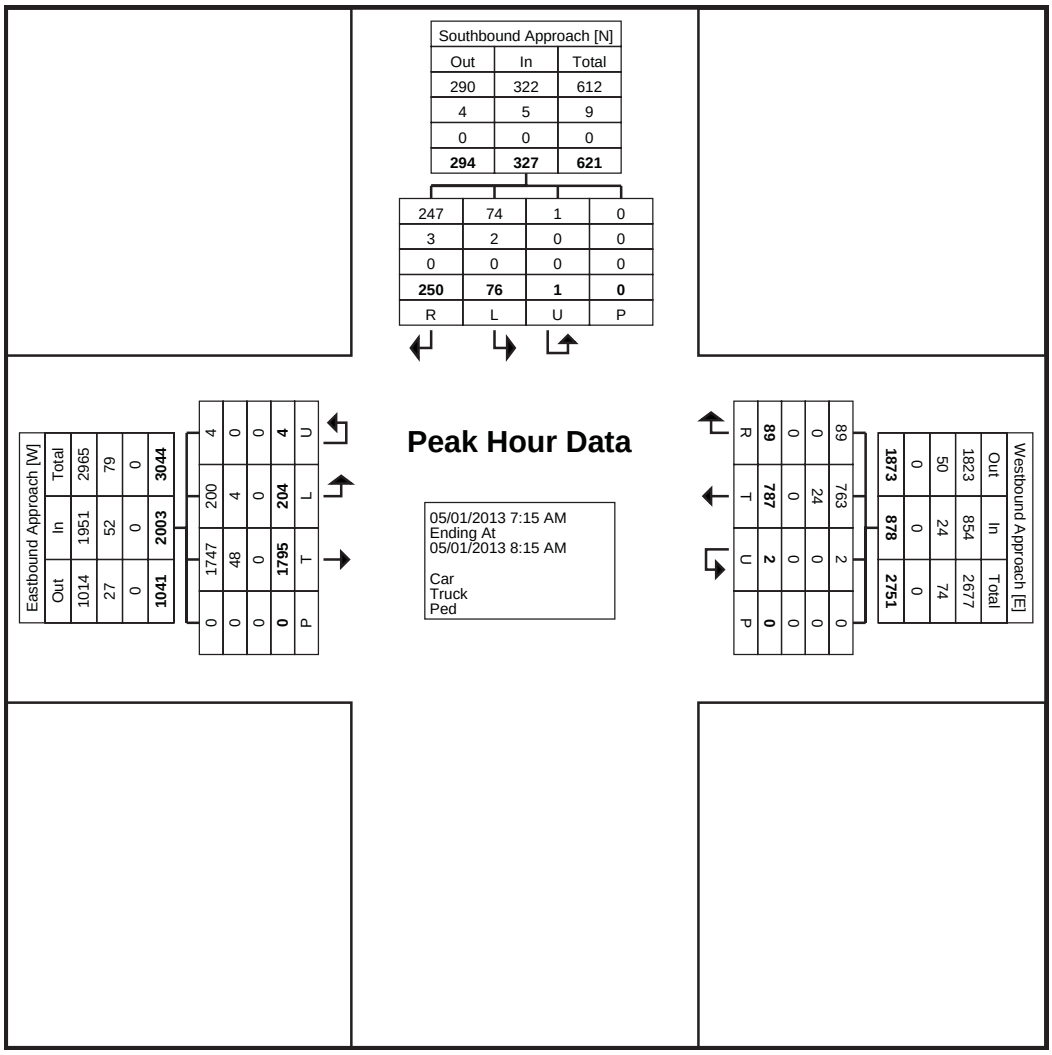
Count Name: Parkside at Donald Ross Rd
Site Code:
Start Date: 05/01/2013
Page No: 3

Turning Movement Peak Hour Data (7:15 AM)

Start Time	Southbound Approach Southbound U-Turn	Left	Right	Peds	App. Total	Eastbound Approach Eastbound U-Turn	Left	Thru	Peds	App. Total	Westbound Approach Westbound U-Turn	Thru	Right	Peds	App. Total	Int. Total
7:15 AM	0	19	60	0	79	0	38	448	0	486	0	164	18	0	182	747
7:30 AM	0	12	56	0	68	2	59	446	0	507	1	230	37	0	268	843
7:45 AM	0	24	56	0	80	1	60	494	0	555	0	196	16	0	212	847
8:00 AM	1	21	78	0	100	1	47	407	0	455	1	197	18	0	216	771
Total	1	76	250	0	327	4	204	1795	0	2003	2	787	89	0	878	3208
Approach %	0.3	23.2	76.5	-	-	0.2	10.2	89.6	-	-	0.2	89.6	10.1	-	-	-
Total %	0.0	2.4	7.8	-	10.2	0.1	6.4	56.0	-	62.4	0.1	24.5	2.8	-	27.4	-
PHF	0.250	0.792	0.801	-	0.818	0.500	0.850	0.908	-	0.902	0.500	0.855	0.601	-	0.819	0.947
Car	1	74	247	-	322	4	200	1747	-	1951	2	763	89	-	854	3127
% Car	100.0	97.4	98.8	-	98.5	100.0	98.0	97.3	-	97.4	100.0	97.0	100.0	-	97.3	97.5
Truck	0	2	3	-	5	0	4	48	-	52	0	24	0	-	24	81
% Truck	0.0	2.6	1.2	-	1.5	0.0	2.0	2.7	-	2.6	0.0	3.0	0.0	-	2.7	2.5
Ped	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Ped	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: Parkside at Donald Ross Rd
Site Code:
Start Date: 05/01/2013



Turning Movement Peak Hour Data Plot (7:15 AM)

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: Parkside at Donald Ross Rd
Site Code:
Start Date: 05/01/2013
Page No: 5

Turning Movement Peak Hour Data (11:00 AM)

Start Time	Southbound Approach Southbound U-Turn	Left	Right	Peds	App. Total	Eastbound Approach Eastbound U-Turn	Left	Thru	Peds	App. Total	Westbound Approach Westbound U-Turn	Thru	Right	Peds	App. Total	Int. Total
11:00 AM	0	10	21	0	31	0	22	193	0	215	1	176	10	0	187	433
11:15 AM	0	12	14	0	26	0	25	202	0	227	3	205	18	0	226	479
11:30 AM	0	11	29	0	40	0	28	188	0	216	1	170	18	0	189	445
11:45 AM	0	14	28	0	42	1	36	232	0	269	1	200	21	0	222	533
Total	0	47	92	0	139	1	111	815	0	927	6	751	67	0	824	1890
Approach %	0.0	33.8	66.2	-	-	0.1	12.0	87.9	-	-	0.7	91.1	8.1	-	-	-
Total %	0.0	2.5	4.9	-	7.4	0.1	5.9	43.1	-	49.0	0.3	39.7	3.5	-	43.6	-
PHF	0.000	0.839	0.793	-	0.827	0.250	0.771	0.878	-	0.862	0.500	0.916	0.798	-	0.912	0.886
Car	0	47	90	-	137	1	110	790	-	901	6	716	67	-	789	1827
% Car	-	100.0	97.8	-	98.6	100.0	99.1	96.9	-	97.2	100.0	95.3	100.0	-	95.8	96.7
Truck	0	0	2	-	2	0	1	25	-	26	0	35	0	-	35	63
% Truck	-	0.0	2.2	-	1.4	0.0	0.9	3.1	-	2.8	0.0	4.7	0.0	-	4.2	3.3
Ped	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Ped	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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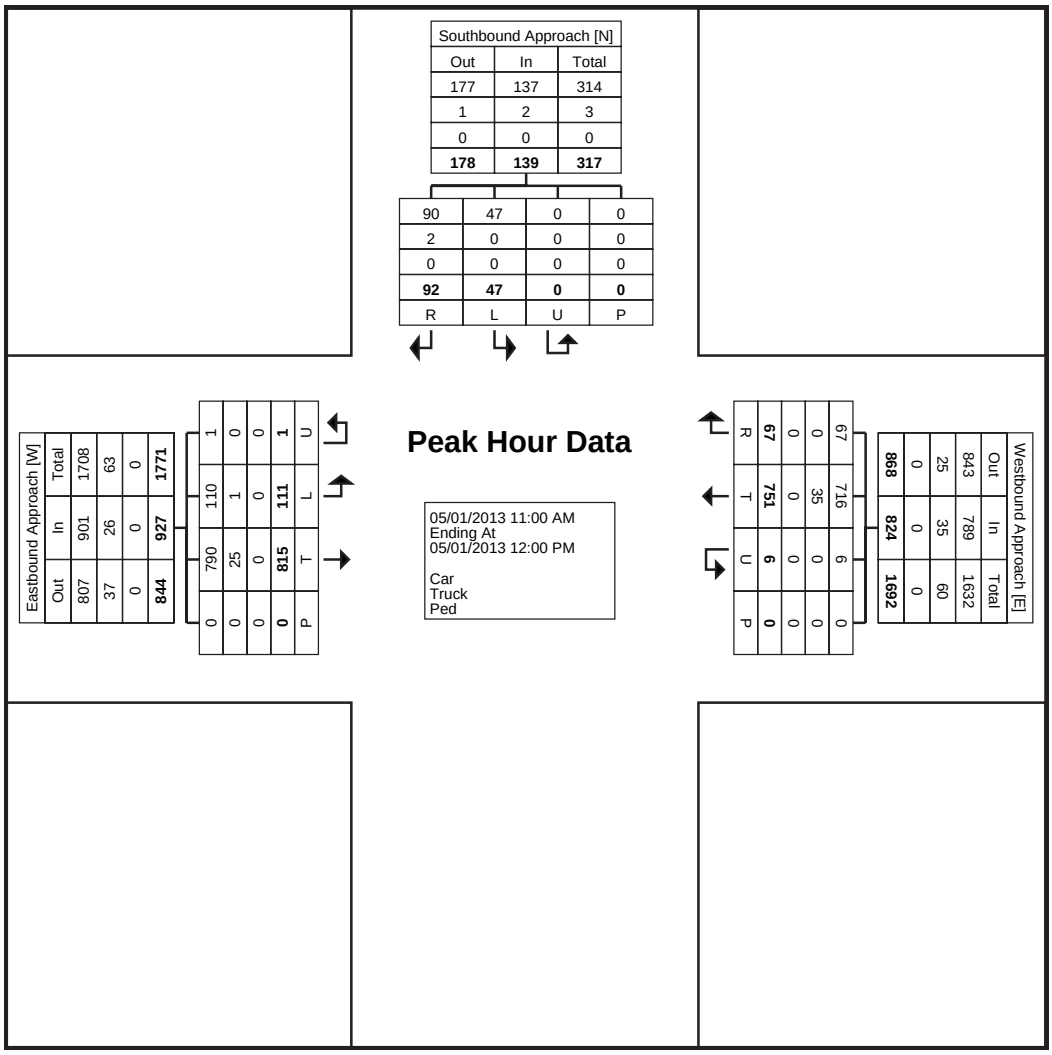
Ph# (800) 639-4851

Count Name: Parkside at Donald Ross Rd
Site Code:
Start Date: 05/01/2013



Turning Movement Peak Hour Data Plot (11:00 AM)

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: Parkside at Donald Ross Rd
Site Code:
Start Date: 05/01/2013
Page No: 7

Turning Movement Peak Hour Data (12:00 PM)

Start Time	Southbound Approach					Eastbound Approach					Westbound Approach					
	Southbound					Eastbound					Westbound					
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	Int. Total
12:00 PM	0	13	22	0	35	0	22	196	0	218	3	172	15	0	190	443
12:15 PM	0	10	23	0	33	0	24	183	0	207	3	179	17	0	199	439
12:30 PM	0	8	24	6	32	1	23	218	0	242	5	186	17	0	208	482
12:45 PM	0	16	33	0	49	0	23	202	0	225	0	156	17	0	173	447
Total	0	47	102	6	149	1	92	799	0	892	11	693	66	0	770	1811
Approach %	0.0	31.5	68.5	-	-	0.1	10.3	89.6	-	-	1.4	90.0	8.6	-	-	-
Total %	0.0	2.6	5.6	-	8.2	0.1	5.1	44.1	-	49.3	0.6	38.3	3.6	-	42.5	-
PHF	0.000	0.734	0.773	-	0.760	0.250	0.958	0.916	-	0.921	0.550	0.931	0.971	-	0.925	0.939
Car	0	47	99	-	146	1	91	769	-	861	11	666	65	-	742	1749
% Car	-	100.0	97.1	-	98.0	100.0	98.9	96.2	-	96.5	100.0	96.1	98.5	-	96.4	96.6
Truck	0	0	3	-	3	0	1	30	-	31	0	27	1	-	28	62
% Truck	-	0.0	2.9	-	2.0	0.0	1.1	3.8	-	3.5	0.0	3.9	1.5	-	3.6	3.4
Ped	-	-	-	6	-	-	-	-	0	-	-	-	-	0	-	-
% Ped	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-

FTE (Florida Transportation Engineering)
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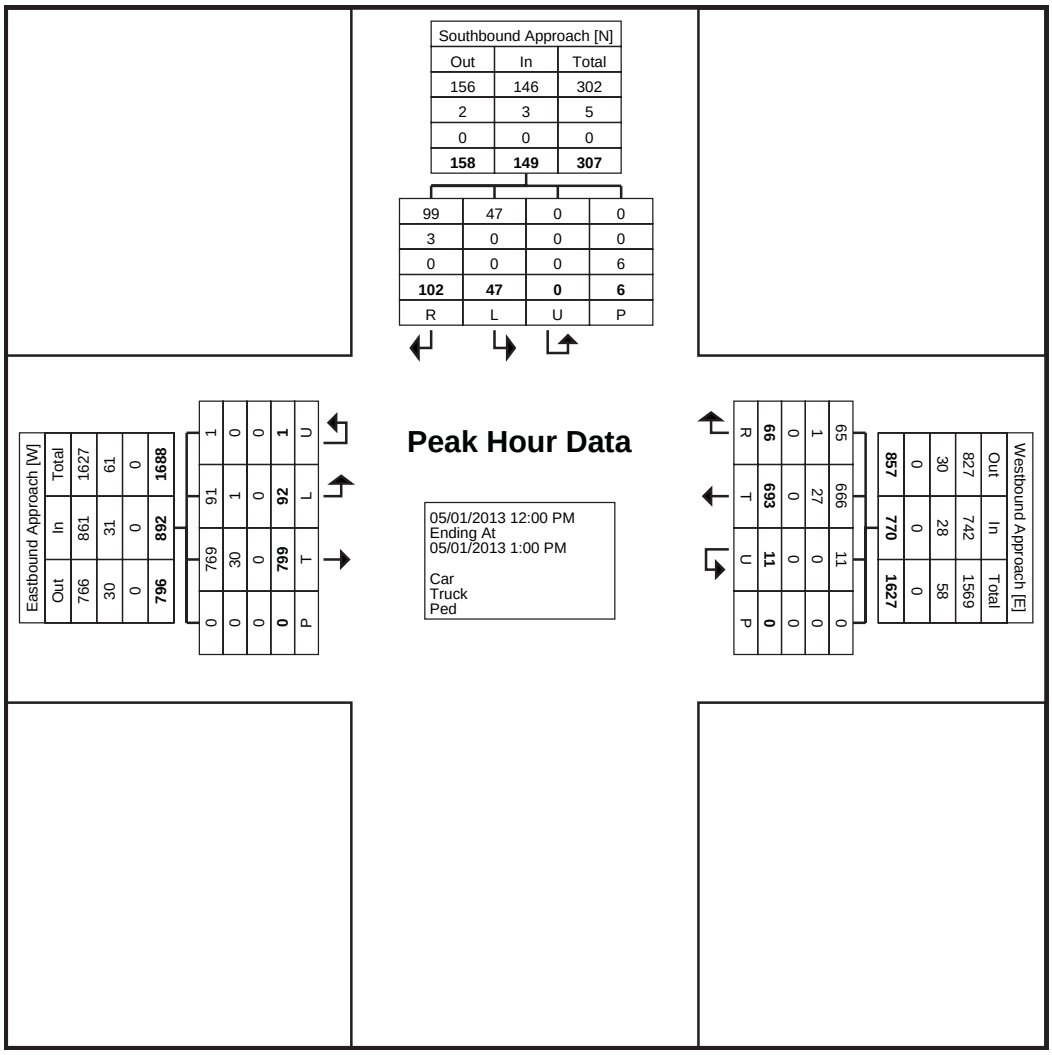
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: Parkside at Donald Ross Rd
Site Code:
Start Date: 05/01/2013



Turning Movement Peak Hour Data Plot (12:00 PM)

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

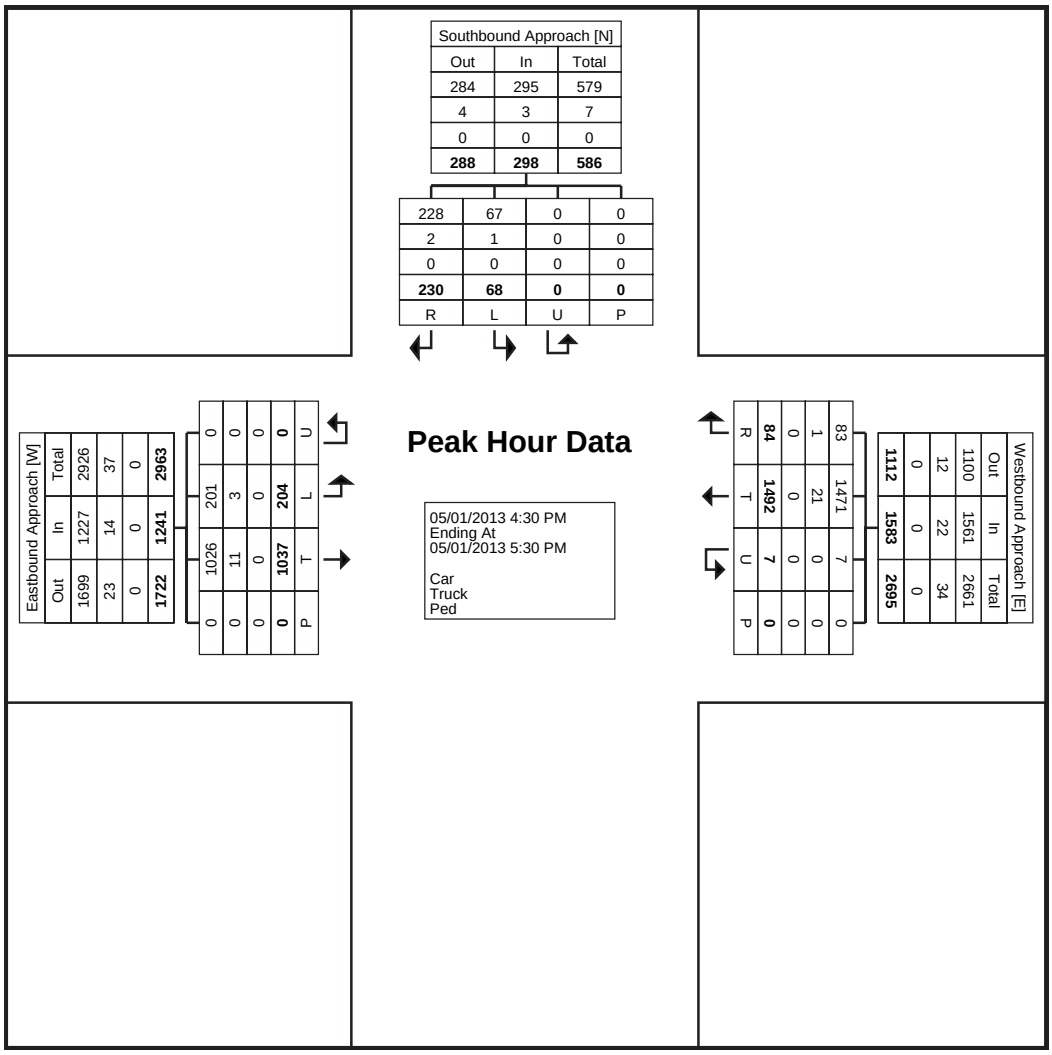
Count Name: Parkside at Donald Ross Rd
Site Code:
Start Date: 05/01/2013
Page No: 9

Turning Movement Peak Hour Data (4:30 PM)

Start Time	Southbound Approach Southbound U-Turn	Left	Right	Peds	App. Total	Eastbound Approach Eastbound U-Turn	Left	Thru	Peds	App. Total	Westbound Approach Westbound U-Turn	Thru	Right	Peds	App. Total	Int. Total
4:30 PM	0	16	66	0	82	0	50	232	0	282	0	350	16	0	366	730
4:45 PM	0	9	47	0	56	0	43	316	0	359	0	336	16	0	352	767
5:00 PM	0	24	65	0	89	0	55	282	0	337	6	404	26	0	436	862
5:15 PM	0	19	52	0	71	0	56	207	0	263	1	402	26	0	429	763
Total	0	68	230	0	298	0	204	1037	0	1241	7	1492	84	0	1583	3122
Approach %	0.0	22.8	77.2	-	-	0.0	16.4	83.6	-	-	0.4	94.3	5.3	-	-	-
Total %	0.0	2.2	7.4	-	9.5	0.0	6.5	33.2	-	39.8	0.2	47.8	2.7	-	50.7	-
PHF	0.000	0.708	0.871	-	0.837	0.000	0.911	0.820	-	0.864	0.292	0.923	0.808	-	0.908	0.905
Car	0	67	228	-	295	0	201	1026	-	1227	7	1471	83	-	1561	3083
% Car	-	98.5	99.1	-	99.0	-	98.5	98.9	-	98.9	100.0	98.6	98.8	-	98.6	98.8
Truck	0	1	2	-	3	0	3	11	-	14	0	21	1	-	22	39
% Truck	-	1.5	0.9	-	1.0	-	1.5	1.1	-	1.1	0.0	1.4	1.2	-	1.4	1.2
Ped	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Ped	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: Parkside at Donald Ross Rd
Site Code:
Start Date: 05/01/2013



Turning Movement Peak Hour Data Plot (4:30 PM)

Appendix B - Data Collection

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: East Pointe Blvd at Hood Rd
Site Code:
Start Date: 04/18/2013
Page No: 1

Turning Movement Data

Start Time	Eastpointe Blvd Southbound					Hood Rd Eastbound					Hood Rd Westbound					Int. Total
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	
7:00 AM	0	7	0	0	7	0	0	26	0	26	0	16	3	0	19	52
7:15 AM	0	6	2	0	8	0	2	35	0	37	0	41	5	0	46	91
7:30 AM	0	5	5	0	10	0	2	70	0	72	0	88	1	0	89	171
7:45 AM	0	7	1	0	8	0	3	92	0	95	0	59	3	0	62	165
Hourly Total	0	25	8	0	33	0	7	223	0	230	0	204	12	0	216	479
8:00 AM	0	5	3	0	8	0	1	67	0	68	0	27	10	0	37	113
8:15 AM	0	12	1	0	13	0	4	35	0	39	0	24	16	0	40	92
8:30 AM	0	12	0	0	12	0	2	44	0	46	0	21	11	0	32	90
8:45 AM	0	15	3	0	18	0	4	51	0	55	0	18	10	0	28	101
Hourly Total	0	44	7	0	51	0	11	197	0	208	0	90	47	0	137	396
9:00 AM	2	9	1	0	12	0	3	54	0	57	0	18	7	0	25	94
9:15 AM	0	13	3	0	16	0	6	28	0	34	0	24	18	0	42	92
9:30 AM	0	15	2	0	17	0	4	21	0	25	0	21	22	0	43	85
9:45 AM	1	11	2	0	14	0	6	22	0	28	0	18	17	0	35	77
Hourly Total	3	48	8	0	59	0	19	125	0	144	0	81	64	0	145	348
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM	0	19	3	0	22	0	6	18	0	24	0	15	19	0	34	80
11:15 AM	0	6	1	0	7	0	3	21	0	24	0	19	17	0	36	67
11:30 AM	0	20	4	0	24	0	3	16	0	19	0	16	11	0	27	70
11:45 AM	0	8	3	0	11	0	3	27	0	30	0	26	14	0	40	81
Hourly Total	0	53	11	0	64	0	15	82	0	97	0	76	61	0	137	298
12:00 PM	0	14	1	0	15	0	2	22	0	24	0	19	9	0	28	67
12:15 PM	0	14	1	0	15	0	4	17	0	21	0	28	17	0	45	81
12:30 PM	0	18	4	0	22	0	1	18	0	19	0	21	13	0	34	75
12:45 PM	0	14	6	0	20	0	2	29	0	31	0	22	15	0	37	88
Hourly Total	0	60	12	0	72	0	9	86	0	95	0	90	54	0	144	311
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00 PM	0	18	4	0	22	0	0	37	0	37	0	26	17	0	43	102
3:15 PM	0	22	0	0	22	0	2	29	0	31	0	25	14	0	39	92
3:30 PM	0	13	3	0	16	0	0	19	0	19	0	27	14	0	41	76
3:45 PM	0	9	1	0	10	0	2	32	0	34	0	36	12	0	48	92
Hourly Total	0	62	8	0	70	0	4	117	0	121	0	114	57	0	171	362
4:00 PM	0	14	2	0	16	0	1	26	0	27	0	35	14	0	49	92
4:15 PM	0	20	2	0	22	0	3	32	0	35	0	47	18	0	65	122
4:30 PM	0	11	4	0	15	0	1	24	0	25	0	21	8	0	29	69
4:45 PM	0	13	2	0	15	0	3	22	0	25	0	36	17	0	53	93
Hourly Total	0	58	10	0	68	0	8	104	0	112	0	139	57	0	196	376
5:00 PM	0	13	0	0	13	0	3	31	0	34	0	35	14	0	49	96
5:15 PM	0	11	2	0	13	0	5	29	0	34	0	47	13	0	60	107
5:30 PM	0	12	2	0	14	0	2	33	0	35	0	28	12	0	40	89
5:45 PM	0	8	1	0	9	0	3	33	0	36	0	39	12	0	51	96
Hourly Total	0	44	5	0	49	0	13	126	0	139	0	149	51	0	200	388
Grand Total	3	394	69	0	466	0	86	1060	0	1146	0	943	403	0	1346	2958
Approach %	0.6	84.5	14.8	-	-	0.0	7.5	92.5	-	-	0.0	70.1	29.9	-	-	-
Total %	0.1	13.3	2.3	-	15.8	0.0	2.9	35.8	-	38.7	0.0	31.9	13.6	-	45.5	-
Car	3	380	68	-	451	0	85	1038	-	1123	0	908	392	-	1300	2874
% Car	100.0	96.4	98.6	-	96.8	-	98.8	97.9	-	98.0	-	96.3	97.3	-	96.6	97.2
Truck	0	14	1	-	15	0	1	22	-	23	0	35	11	-	46	84
% Truck	0.0	3.6	1.4	-	3.2	-	1.2	2.1	-	2.0	-	3.7	2.7	-	3.4	2.8
Ped	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Ped	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: East Pointe Blvd at Hood Rd
Site Code:
Start Date: 04/18/2013
Page No: 3

Turning Movement Peak Hour Data (7:30 AM)

Start Time	Eastpointe Blvd Southbound					Hood Rd Eastbound					Hood Rd Westbound					Int. Total
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	
7:30 AM	0	5	5	0	10	0	2	70	0	72	0	88	1	0	89	171
7:45 AM	0	7	1	0	8	0	3	92	0	95	0	59	3	0	62	165
8:00 AM	0	5	3	0	8	0	1	67	0	68	0	27	10	0	37	113
8:15 AM	0	12	1	0	13	0	4	35	0	39	0	24	16	0	40	92
Total	0	29	10	0	39	0	10	264	0	274	0	198	30	0	228	541
Approach %	0.0	74.4	25.6	-	-	0.0	3.6	96.4	-	-	0.0	86.8	13.2	-	-	-
Total %	0.0	5.4	1.8	-	7.2	0.0	1.8	48.8	-	50.6	0.0	36.6	5.5	-	42.1	-
PHF	0.000	0.604	0.500	-	0.750	0.000	0.625	0.717	-	0.721	0.000	0.563	0.469	-	0.640	0.791
Car	0	29	9	-	38	0	10	260	-	270	0	193	25	-	218	526
% Car	-	100.0	90.0	-	97.4	-	100.0	98.5	-	98.5	-	97.5	83.3	-	95.6	97.2
Truck	0	0	1	-	1	0	0	4	-	4	0	5	5	-	10	15
% Truck	-	0.0	10.0	-	2.6	-	0.0	1.5	-	1.5	-	2.5	16.7	-	4.4	2.8
Ped	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Ped	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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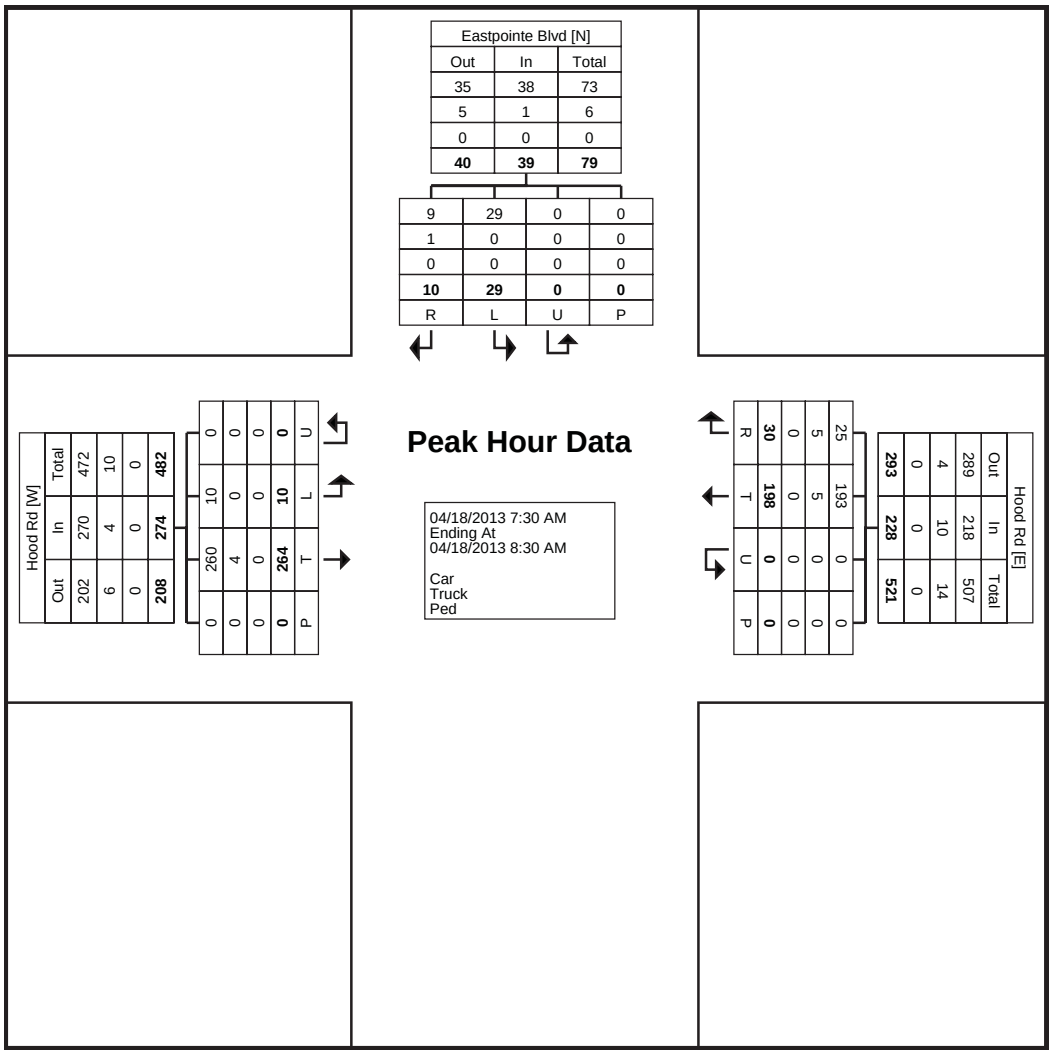
Count Name: East Pointe Blvd at Hood Rd
Site Code:
Start Date: 04/18/2013



Turning Movement Peak Hour Data Plot (7:30 AM)

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

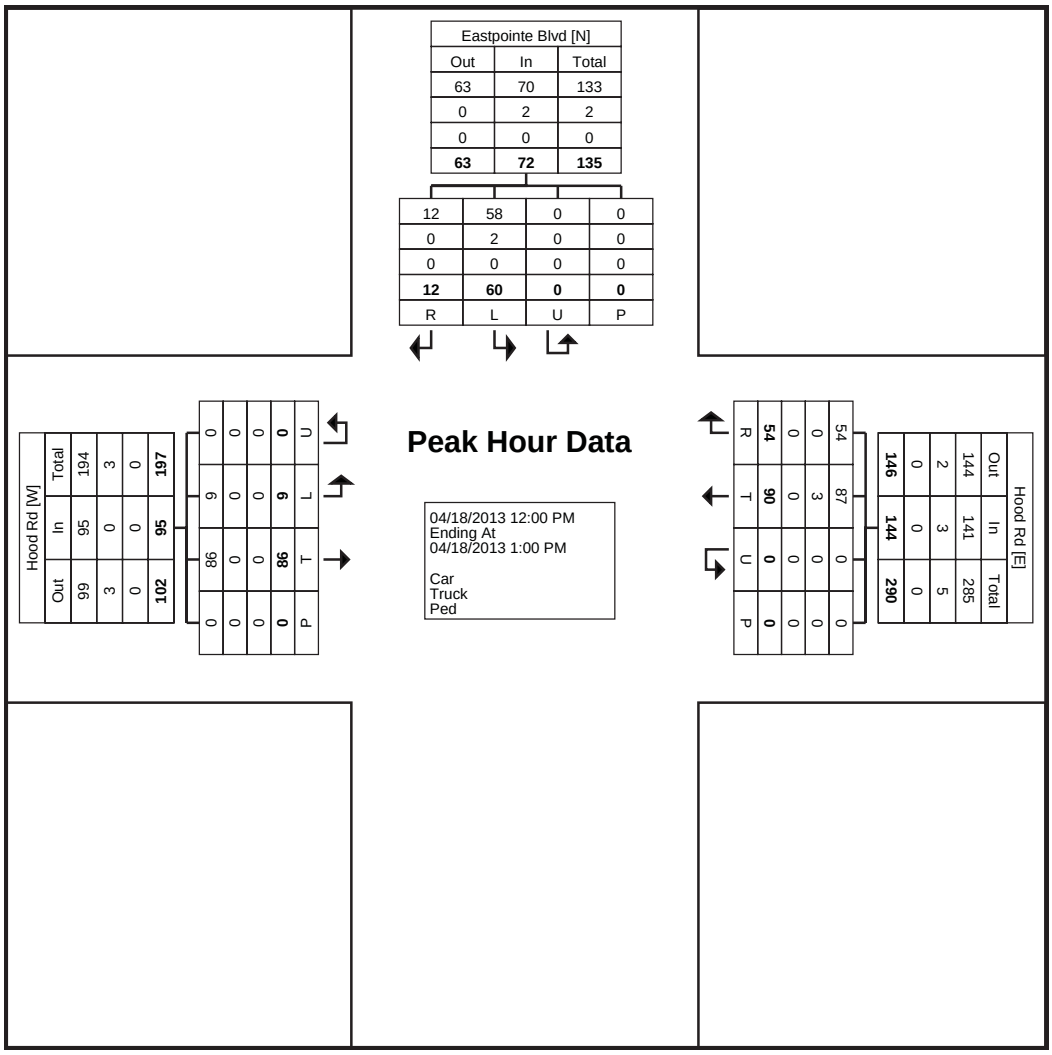
Count Name: East Pointe Blvd at Hood Rd
Site Code:
Start Date: 04/18/2013
Page No: 5

Turning Movement Peak Hour Data (12:00 PM)

Start Time	Eastpointe Blvd Southbound					Hood Rd Eastbound					Hood Rd Westbound					Int. Total
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	
12:00 PM	0	14	1	0	15	0	2	22	0	24	0	19	9	0	28	67
12:15 PM	0	14	1	0	15	0	4	17	0	21	0	28	17	0	45	81
12:30 PM	0	18	4	0	22	0	1	18	0	19	0	21	13	0	34	75
12:45 PM	0	14	6	0	20	0	2	29	0	31	0	22	15	0	37	88
Total	0	60	12	0	72	0	9	86	0	95	0	90	54	0	144	311
Approach %	0.0	83.3	16.7	-	-	0.0	9.5	90.5	-	-	0.0	62.5	37.5	-	-	-
Total %	0.0	19.3	3.9	-	23.2	0.0	2.9	27.7	-	30.5	0.0	28.9	17.4	-	46.3	-
PHF	0.000	0.833	0.500	-	0.818	0.000	0.563	0.741	-	0.766	0.000	0.804	0.794	-	0.800	0.884
Car	0	58	12	-	70	0	9	86	-	95	0	87	54	-	141	306
% Car	-	96.7	100.0	-	97.2	-	100.0	100.0	-	100.0	-	96.7	100.0	-	97.9	98.4
Truck	0	2	0	-	2	0	0	0	-	0	0	3	0	-	3	5
% Truck	-	3.3	0.0	-	2.8	-	0.0	0.0	-	0.0	-	3.3	0.0	-	2.1	1.6
Ped	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Ped	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: East Pointe Blvd at Hood Rd
Site Code:
Start Date: 04/18/2013
Page No: 6



Turning Movement Peak Hour Data Plot (12:00 PM)

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: East Pointe Blvd at Hood Rd
Site Code:
Start Date: 04/18/2013
Page No: 7

Turning Movement Peak Hour Data (5:00 PM)

Start Time	Eastpointe Blvd Southbound					Hood Rd Eastbound					Hood Rd Westbound					Int. Total
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	
5:00 PM	0	13	0	0	13	0	3	31	0	34	0	35	14	0	49	96
5:15 PM	0	11	2	0	13	0	5	29	0	34	0	47	13	0	60	107
5:30 PM	0	12	2	0	14	0	2	33	0	35	0	28	12	0	40	89
5:45 PM	0	8	1	0	9	0	3	33	0	36	0	39	12	0	51	96
Total	0	44	5	0	49	0	13	126	0	139	0	149	51	0	200	388
Approach %	0.0	89.8	10.2	-	-	0.0	9.4	90.6	-	-	0.0	74.5	25.5	-	-	-
Total %	0.0	11.3	1.3	-	12.6	0.0	3.4	32.5	-	35.8	0.0	38.4	13.1	-	51.5	-
PHF	0.000	0.846	0.625	-	0.875	0.000	0.650	0.955	-	0.965	0.000	0.793	0.911	-	0.833	0.907
Car	0	43	5	-	48	0	13	126	-	139	0	149	51	-	200	387
% Car	-	97.7	100.0	-	98.0	-	100.0	100.0	-	100.0	-	100.0	100.0	-	100.0	99.7
Truck	0	1	0	-	1	0	0	0	-	0	0	0	0	-	0	1
% Truck	-	2.3	0.0	-	2.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.3
Ped	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Ped	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
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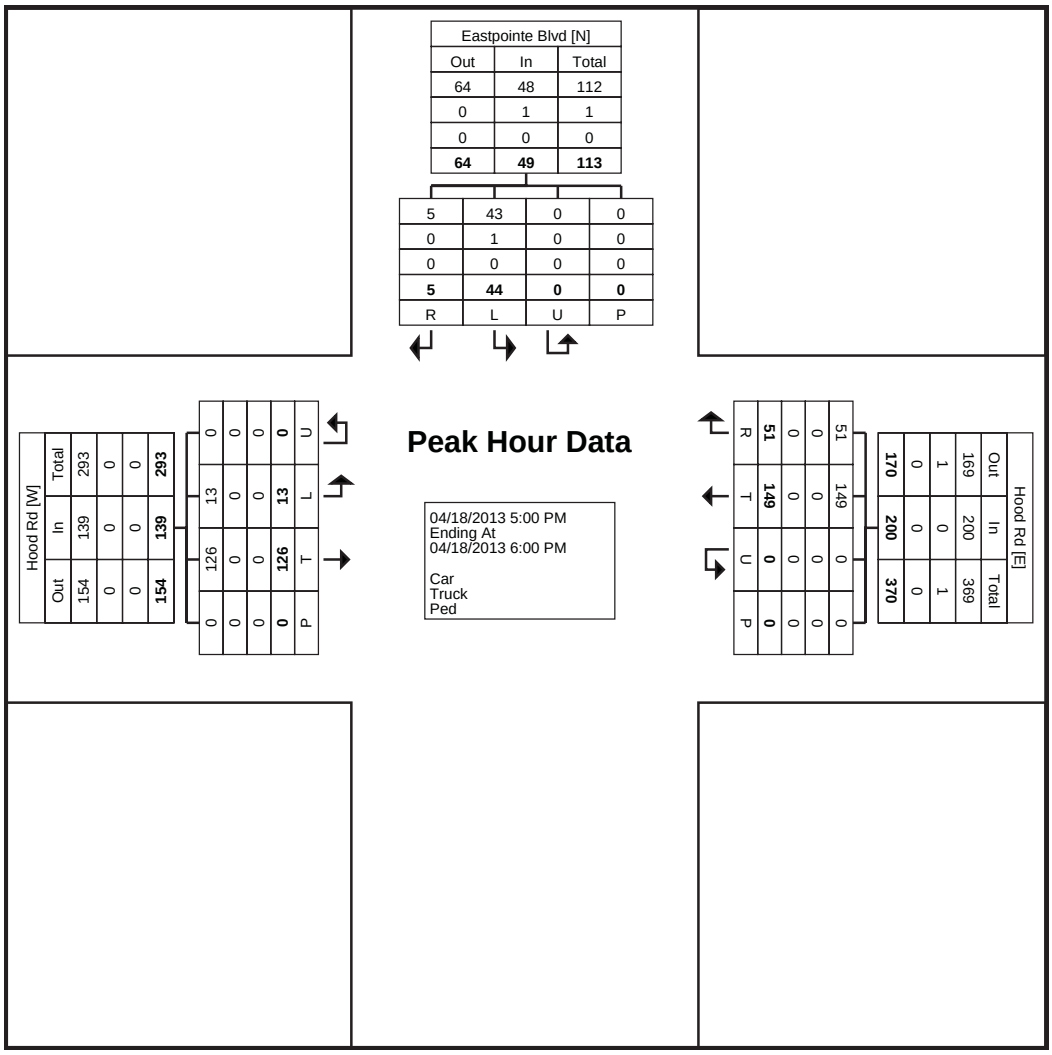
Count Name: East Pointe Blvd at Hood Rd
Site Code:
Start Date: 04/18/2013
Page No: 8



Turning Movement Peak Hour Data Plot (5:00 PM)

Appendix B - Data Collection

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: Military Trail at Hood Rd
Site Code:
Start Date: 04/18/2013
Page No: 1

Turning Movement Data

Start Time	N Military Trail Northbound						N Military Trail Southbound						Hood Rd Eastbound						Hood Rd Westbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
7:00 AM	0	15	162	12	0	189	0	27	121	15	0	163	0	34	32	32	2	98	0	18	20	56	0	94	544
7:15 AM	0	26	222	27	0	275	1	37	157	41	0	236	0	35	45	23	0	103	0	10	39	92	1	141	755
7:30 AM	0	11	139	40	0	190	0	71	208	56	0	335	0	18	87	37	0	142	0	8	77	44	0	129	796
7:45 AM	0	12	211	50	0	273	0	37	218	37	0	292	0	33	87	53	0	173	0	11	43	59	1	113	851
Hourly Total	0	64	734	129	0	927	1	172	704	149	0	1026	0	120	251	145	2	516	0	47	179	251	2	477	2946
8:00 AM	0	19	168	48	0	235	0	49	199	19	0	267	0	19	97	38	1	154	0	8	34	24	3	66	722
8:15 AM	1	25	168	29	0	223	0	33	161	10	0	204	0	8	62	44	0	114	0	13	46	25	0	84	625
8:30 AM	0	26	158	38	0	222	0	37	153	17	0	207	0	21	47	28	0	96	0	17	31	19	0	67	592
8:45 AM	0	25	179	46	0	250	0	41	171	14	0	226	0	13	72	43	0	128	0	18	44	16	0	78	682
Hourly Total	1	95	673	161	0	930	0	160	684	60	0	904	0	61	278	153	1	492	0	56	155	84	3	295	2621
9:00 AM	1	23	148	36	0	208	0	36	166	18	0	220	0	16	67	26	0	109	0	17	27	40	0	84	621
9:15 AM	0	22	122	36	0	180	0	31	129	14	0	174	0	13	90	23	0	126	0	11	49	36	0	96	576
9:30 AM	0	19	127	35	0	181	1	23	153	12	0	189	0	11	43	22	0	76	0	14	36	21	1	71	517
9:45 AM	0	12	121	29	0	162	0	31	155	14	0	200	0	20	53	28	0	101	0	18	32	27	1	77	540
Hourly Total	1	76	518	136	0	731	1	121	603	58	0	783	0	60	253	99	0	412	0	60	144	124	2	328	2254
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM	0	16	98	32	1	146	0	40	141	8	0	189	0	12	54	25	1	91	0	23	34	29	0	86	512
11:15 AM	0	26	126	37	0	189	1	43	127	10	0	181	0	3	45	14	0	62	0	20	35	31	0	86	518
11:30 AM	0	18	95	27	0	140	1	33	160	18	0	212	0	6	38	20	1	64	0	20	36	26	0	82	498
11:45 AM	0	31	126	37	1	194	0	34	148	14	1	196	0	10	53	29	0	92	0	23	36	21	0	80	562
Hourly Total	0	91	445	133	2	669	2	150	576	50	1	778	0	31	190	88	2	309	0	86	141	107	0	334	2090
12:00 PM	0	17	131	25	0	173	0	33	181	4	0	218	0	8	46	23	0	77	0	18	26	33	1	77	545
12:15 PM	0	20	120	29	0	169	0	44	167	12	0	223	1	8	50	17	0	76	0	31	60	25	0	116	584
12:30 PM	1	10	161	29	0	201	0	33	163	11	1	207	0	10	55	23	2	88	0	26	40	35	0	101	597
12:45 PM	1	26	155	33	0	215	0	42	159	11	0	212	0	11	63	22	0	96	0	31	51	40	0	122	645
Hourly Total	2	73	567	116	0	758	0	152	670	38	1	860	1	37	214	85	2	337	0	106	177	133	1	416	2371
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00 PM	0	26	145	31	0	202	1	60	208	20	1	289	0	11	56	31	2	98	1	38	55	54	2	148	737
3:15 PM	0	17	144	36	2	197	1	43	188	12	0	244	0	7	62	31	1	100	0	21	51	32	0	104	645
3:30 PM	0	33	172	23	0	228	0	36	183	11	0	230	1	9	44	44	0	98	0	20	53	46	1	119	675
3:45 PM	0	34	156	35	1	225	0	32	153	20	2	205	0	13	70	27	0	110	0	27	67	37	0	131	671
Hourly Total	0	110	617	125	3	852	2	171	732	63	3	968	1	40	232	133	3	406	1	106	226	169	3	502	2728
4:00 PM	2	19	145	30	0	196	1	37	166	21	1	225	0	10	60	37	0	107	0	23	57	48	0	128	656
4:15 PM	0	25	153	37	2	215	0	47	198	20	1	265	0	10	64	19	2	93	0	28	54	47	2	129	702
4:30 PM	0	21	167	31	0	219	2	37	197	18	0	254	0	12	56	29	0	97	0	32	58	40	0	130	700
4:45 PM	0	33	184	40	0	257	0	47	262	18	0	327	0	12	45	25	1	82	0	29	59	41	0	129	795
Hourly Total	2	98	649	138	2	887	3	168	823	77	2	1071	0	44	225	110	3	379	0	112	228	176	2	516	2853
5:00 PM	0	25	170	48	0	243	0	38	226	23	0	287	0	8	58	36	0	102	0	22	63	50	0	135	767
5:15 PM	0	26	187	44	0	257	0	35	230	29	0	294	0	22	77	24	0	123	0	49	88	50	0	187	861
5:30 PM	0	35	192	34	0	261	1	40	201	27	0	269	0	17	50	32	0	99	0	22	48	52	0	122	751
5:45 PM	0	24	213	40	0	277	0	39	186	12	0	237	0	19	62	33	0	114	0	29	75	66	0	170	798
Hourly Total	0	110	762	166	0	1038	1	152	843	91	0	1087	0	66	247	125	0	438	0	122	274	218	0	614	3177
Grand Total	6	717	4965	1104	7	6792	10	1246	5635	586	7	7477	2	459	1890	938	13	3289	1	695	1524	1262	13	3482	21040
Approach %	0.1	10.6	73.1	16.3	-	-	0.1	16.7	75.4	7.8	-	-	0.1	14.0	57.5	28.5	-	-	0.0	20.0	43.8	36.2	-	-	-
Total %	0.0	3.4	23.6	5.2	-	32.3	0.0	5.9	26.8	2.8	-	35.5	0.0	2.2	9.0	4.5	-	15.6	0.0	3.3	7.2	6.0	-	16.5	-
Car	6	698	4861	1080	-	6645	10	1225	5529	568	-	7332	2	428	1861	918	-	3209	1	683	1503	1242	-	3429	20615
% Car	100.0	97.4	97.9	97.8	-	97.8	100.0	98.3	98.1	96.9	-	98.1	100.0	93.2	98.5	97.9	-	97.6	100.0	98.3	98.6	98.4	-	98.5	98.0
Truck	0	19	104	24	-	147	0	21	106	18	-	145	0	31	29	20	-	80	0	12	21	20	-	53	425
% Truck	0.0	2.6	2.1	2.2	-	2.2	0.0	1.7	1.9	3.1	-	1.9	0.0	6.8	1.5	2.1	-	2.4	0.0	1.7	1.4	1.6	-	1.5	2.0
Ped	-	-	-	-	7	-	-	-	-	-	7	-	-	-	-	-	13	-	-	-	-	-	13	-	-
% Ped	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: Military Trail at Hood Rd
Site Code:
Start Date: 04/18/2013
Page No: 3

Turning Movement Peak Hour Data (7:15 AM)

Start Time	N Military Trail Northbound						N Military Trail Southbound						Hood Rd Eastbound						Hood Rd Westbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
7:15 AM	0	26	222	27	0	275	1	37	157	41	0	236	0	35	45	23	0	103	0	10	39	92	1	141	755
7:30 AM	0	11	139	40	0	190	0	71	208	56	0	335	0	18	87	37	0	142	0	8	77	44	0	129	796
7:45 AM	0	12	211	50	0	273	0	37	218	37	0	292	0	33	87	53	0	173	0	11	43	59	1	113	851
8:00 AM	0	19	168	48	0	235	0	49	199	19	0	267	0	19	97	38	1	154	0	8	34	24	3	66	722
Total	0	68	740	165	0	973	1	194	782	153	0	1130	0	105	316	151	1	572	0	37	193	219	5	449	3124
Approach %	0.0	7.0	76.1	17.0	-	-	0.1	17.2	69.2	13.5	-	-	0.0	18.4	55.2	26.4	-	-	0.0	8.2	43.0	48.8	-	-	-
Total %	0.0	2.2	23.7	5.3	-	31.1	0.0	6.2	25.0	4.9	-	36.2	0.0	3.4	10.1	4.8	-	18.3	0.0	1.2	6.2	7.0	-	14.4	-
PHF	0.000	0.654	0.833	0.825	-	0.885	0.250	0.683	0.897	0.683	-	0.843	0.000	0.750	0.814	0.712	-	0.827	0.000	0.841	0.627	0.595	-	0.796	0.918
Car	0	66	726	162	-	954	1	189	767	151	-	1108	0	103	311	149	-	563	0	33	190	216	-	439	3064
% Car	-	97.1	98.1	98.2	-	98.0	100.0	97.4	98.1	98.7	-	98.1	-	98.1	98.4	98.7	-	98.4	-	89.2	98.4	98.6	-	97.8	98.1
Truck	0	2	14	3	-	19	0	5	15	2	-	22	0	2	5	2	-	9	0	4	3	3	-	10	60
% Truck	-	2.9	1.9	1.8	-	2.0	0.0	2.6	1.9	1.3	-	1.9	-	1.9	1.6	1.3	-	1.6	-	10.8	1.6	1.4	-	2.2	1.9
Ped	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	5	-	-
% Ped	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
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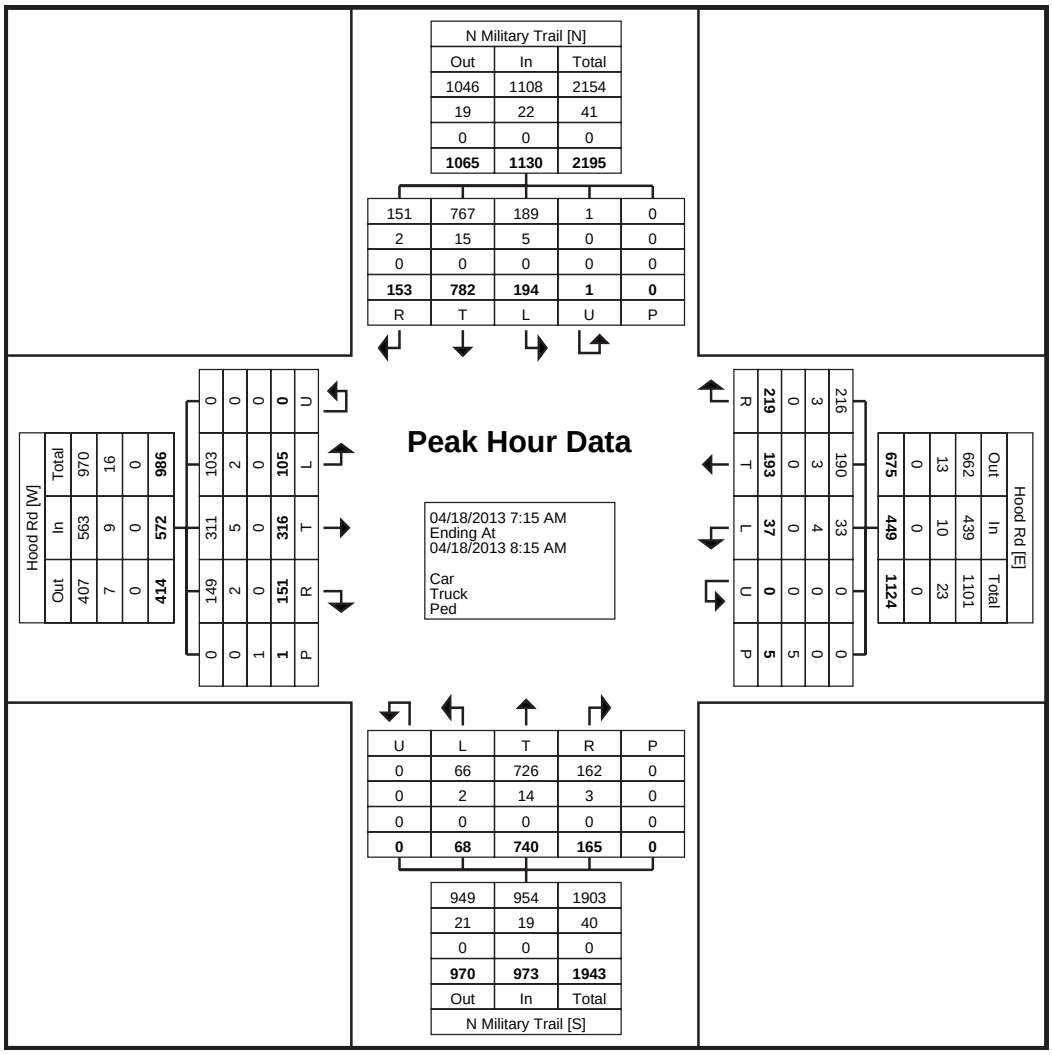
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: Military Trail at Hood Rd
Site Code:
Start Date: 04/18/2013
Page No: 4



Turning Movement Peak Hour Data Plot (7:15 AM)

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: Military Trail at Hood Rd
Site Code:
Start Date: 04/18/2013
Page No: 5

Turning Movement Peak Hour Data (12:00 PM)

Start Time	N Military Trail Northbound						N Military Trail Southbound						Hood Rd Eastbound						Hood Rd Westbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
12:00 PM	0	17	131	25	0	173	0	33	181	4	0	218	0	8	46	23	0	77	0	18	26	33	1	77	545
12:15 PM	0	20	120	29	0	169	0	44	167	12	0	223	1	8	50	17	0	76	0	31	60	25	0	116	584
12:30 PM	1	10	161	29	0	201	0	33	163	11	1	207	0	10	55	23	2	88	0	26	40	35	0	101	597
12:45 PM	1	26	155	33	0	215	0	42	159	11	0	212	0	11	63	22	0	96	0	31	51	40	0	122	645
Total	2	73	567	116	0	758	0	152	670	38	1	860	1	37	214	85	2	337	0	106	177	133	1	416	2371
Approach %	0.3	9.6	74.8	15.3	-	-	0.0	17.7	77.9	4.4	-	-	0.3	11.0	63.5	25.2	-	-	0.0	25.5	42.5	32.0	-	-	-
Total %	0.1	3.1	23.9	4.9	-	32.0	0.0	6.4	28.3	1.6	-	36.3	0.0	1.6	9.0	3.6	-	14.2	0.0	4.5	7.5	5.6	-	17.5	-
PHF	0.500	0.702	0.880	0.879	-	0.881	0.000	0.864	0.925	0.792	-	0.964	0.250	0.841	0.849	0.924	-	0.878	0.000	0.855	0.738	0.831	-	0.852	0.919
Car	2	71	557	113	-	743	0	150	664	35	-	849	1	32	211	80	-	324	0	105	175	131	-	411	2327
% Car	100.0	97.3	98.2	97.4	-	98.0	-	98.7	99.1	92.1	-	98.7	100.0	86.5	98.6	94.1	-	96.1	-	99.1	98.9	98.5	-	98.8	98.1
Truck	0	2	10	3	-	15	0	2	6	3	-	11	0	5	3	5	-	13	0	1	2	2	-	5	44
% Truck	0.0	2.7	1.8	2.6	-	2.0	-	1.3	0.9	7.9	-	1.3	0.0	13.5	1.4	5.9	-	3.9	-	0.9	1.1	1.5	-	1.2	1.9
Ped	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	2	-	-	-	-	-	1	-	-
% Ped	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

FTE (Florida Transportation Engineering)
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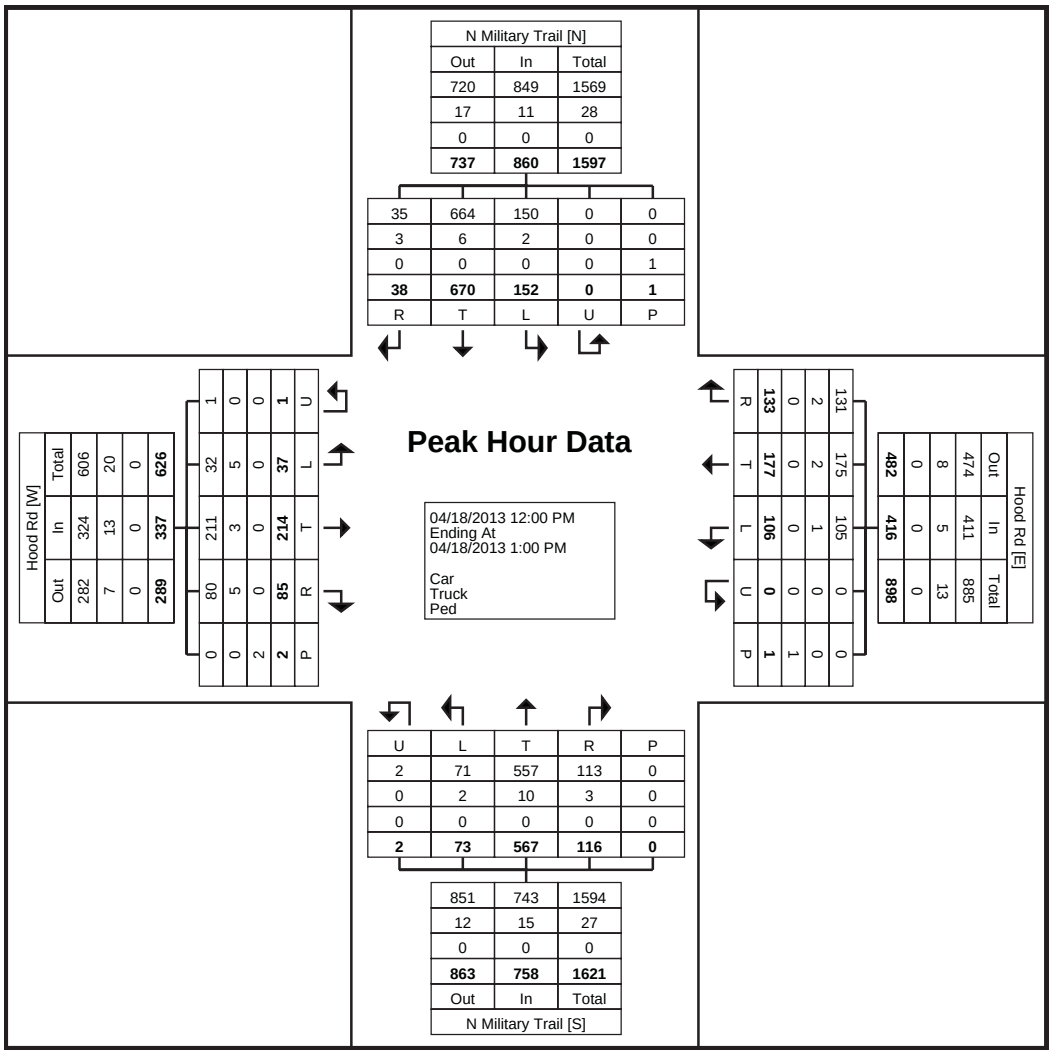
Count Name: Military Trail at Hood Rd
Site Code:
Start Date: 04/18/2013
Page No: 6



Turning Movement Peak Hour Data Plot (12:00 PM)

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

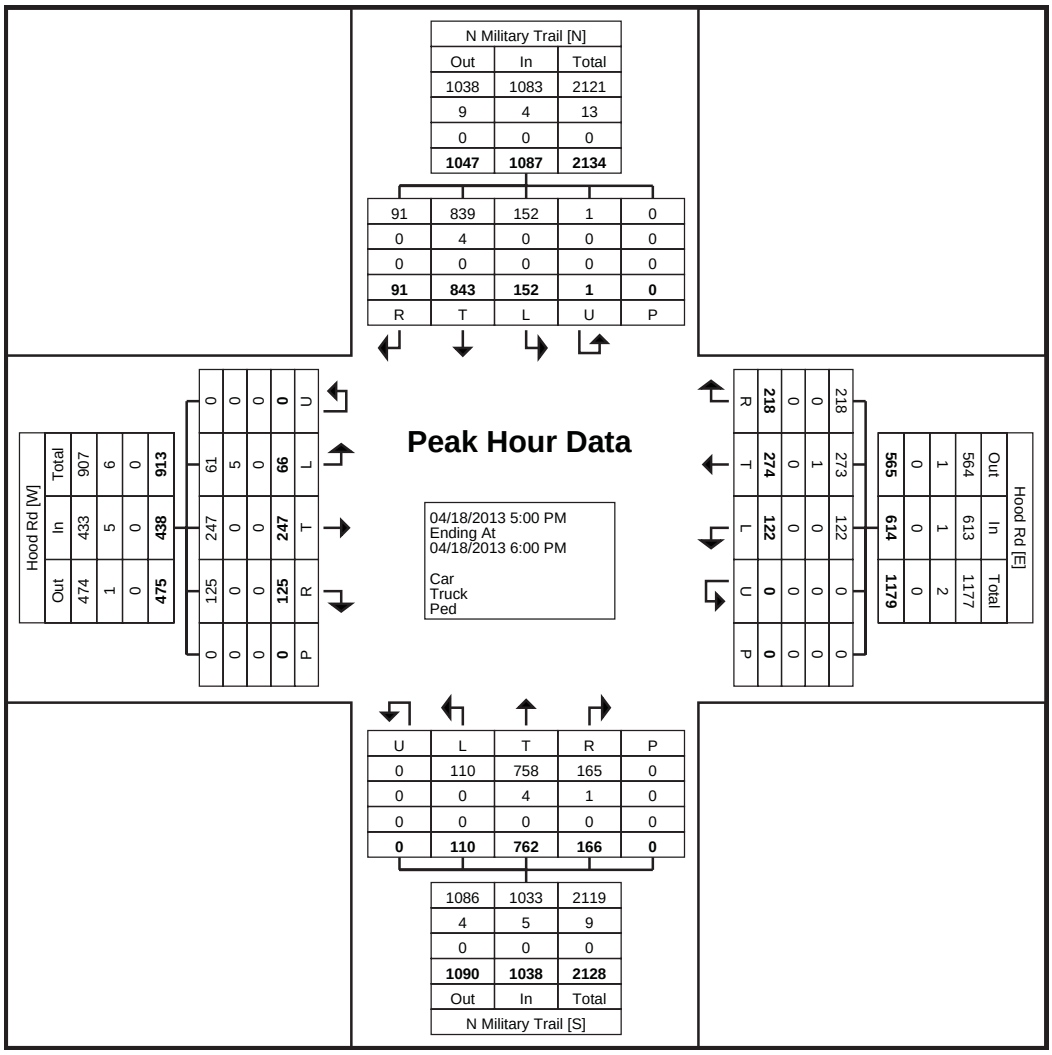
Count Name: Military Trail at Hood Rd
Site Code:
Start Date: 04/18/2013
Page No: 7

Turning Movement Peak Hour Data (5:00 PM)

Start Time	N Military Trail Northbound						N Military Trail Southbound						Hood Rd Eastbound						Hood Rd Westbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
5:00 PM	0	25	170	48	0	243	0	38	226	23	0	287	0	8	58	36	0	102	0	22	63	50	0	135	767
5:15 PM	0	26	187	44	0	257	0	35	230	29	0	294	0	22	77	24	0	123	0	49	88	50	0	187	861
5:30 PM	0	35	192	34	0	261	1	40	201	27	0	269	0	17	50	32	0	99	0	22	48	52	0	122	751
5:45 PM	0	24	213	40	0	277	0	39	186	12	0	237	0	19	62	33	0	114	0	29	75	66	0	170	798
Total	0	110	762	166	0	1038	1	152	843	91	0	1087	0	66	247	125	0	438	0	122	274	218	0	614	3177
Approach %	0.0	10.6	73.4	16.0	-	-	0.1	14.0	77.6	8.4	-	-	0.0	15.1	56.4	28.5	-	-	0.0	19.9	44.6	35.5	-	-	-
Total %	0.0	3.5	24.0	5.2	-	32.7	0.0	4.8	26.5	2.9	-	34.2	0.0	2.1	7.8	3.9	-	13.8	0.0	3.8	8.6	6.9	-	19.3	-
PHF	0.000	0.786	0.894	0.865	-	0.937	0.250	0.950	0.916	0.784	-	0.924	0.000	0.750	0.802	0.868	-	0.890	0.000	0.622	0.778	0.826	-	0.821	0.922
Car	0	110	758	165	-	1033	1	152	839	91	-	1083	0	61	247	125	-	433	0	122	273	218	-	613	3162
% Car	-	100.0	99.5	99.4	-	99.5	100.0	100.0	99.5	100.0	-	99.6	-	92.4	100.0	100.0	-	98.9	-	100.0	99.6	100.0	-	99.8	99.5
Truck	0	0	4	1	-	5	0	0	4	0	-	4	0	5	0	0	-	5	0	0	1	0	-	1	15
% Truck	-	0.0	0.5	0.6	-	0.5	0.0	0.0	0.5	0.0	-	0.4	-	7.6	0.0	0.0	-	1.1	-	0.0	0.4	0.0	-	0.2	0.5
Ped	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Ped	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: Military Trail at Hood Rd
Site Code:
Start Date: 04/18/2013
Page No: 8



Turning Movement Peak Hour Data Plot (5:00 PM)

Appendix B - Data Collection

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: Keating Dr at Northlake Blvd
Site Code:
Start Date: 04/30/2013

Turning Movement Data

Start Time	Keating Dr Northbound						Keating Dr Southbound						Northlake Blvd Eastbound						Northlake Blvd Westbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
7:00 AM	0	2	0	6	4	8	0	34	2	4	1	40	0	1	347	8	0	356	8	7	208	10	0	233	637
7:15 AM	0	3	0	12	0	15	0	23	2	6	1	31	1	1	419	9	1	430	5	9	208	9	0	231	707
7:30 AM	0	5	1	8	0	14	0	26	1	9	0	36	1	2	515	4	0	522	10	12	200	8	0	230	802
7:45 AM	0	6	0	10	3	16	0	28	2	8	0	38	0	3	573	18	0	594	11	6	322	14	0	353	1001
Hourly Total	0	16	1	36	7	53	0	111	7	27	2	145	2	7	1854	39	1	1902	34	34	938	41	0	1047	3147
8:00 AM	0	8	3	16	3	27	0	31	3	8	1	42	2	6	451	18	1	477	7	20	292	17	0	336	882
8:15 AM	0	14	0	20	1	34	0	28	2	6	0	36	1	5	475	16	1	497	15	18	319	18	0	370	937
8:30 AM	0	15	1	16	0	32	0	29	5	3	1	37	1	8	483	20	2	512	11	16	294	14	1	335	916
8:45 AM	0	14	1	14	2	29	0	32	2	8	0	42	0	3	424	20	0	447	9	23	314	16	0	362	880
Hourly Total	0	51	5	66	6	122	0	120	12	25	2	157	4	22	1833	74	4	1933	42	77	1219	65	1	1403	3615
9:00 AM	0	13	1	18	1	32	0	22	5	2	2	29	3	10	384	23	0	420	14	19	305	13	0	351	832
9:15 AM	0	15	2	23	1	40	0	20	2	6	0	28	1	10	361	20	0	392	12	25	237	18	0	292	752
9:30 AM	0	16	8	19	1	43	0	23	3	7	3	33	7	14	357	25	0	403	12	22	224	10	0	268	747
9:45 AM	0	31	4	27	2	62	0	16	5	10	1	31	4	8	334	28	1	374	21	25	261	9	0	316	783
Hourly Total	0	75	15	87	5	177	0	81	15	25	6	121	15	42	1436	96	1	1589	59	91	1027	50	0	1227	3114
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM	0	38	10	45	4	93	0	23	3	12	2	38	5	8	335	34	0	382	11	41	269	23	1	344	857
11:15 AM	0	39	0	37	2	76	0	23	4	14	0	41	2	14	343	49	1	408	14	43	274	28	0	359	884
11:30 AM	0	34	3	44	0	81	0	22	8	9	2	39	0	9	338	54	0	401	9	51	301	16	0	377	898
11:45 AM	0	51	6	53	0	110	0	28	6	9	0	43	5	7	392	61	0	465	10	57	295	27	0	389	1007
Hourly Total	0	162	19	179	6	360	0	96	21	44	4	161	12	38	1408	198	1	1656	44	192	1139	94	1	1469	3646
12:00 PM	0	40	4	45	1	89	0	20	12	5	0	37	0	13	379	78	0	470	7	58	329	34	0	428	1024
12:15 PM	0	65	5	79	0	149	0	35	7	11	0	53	5	17	330	52	0	404	10	78	359	21	0	468	1074
12:30 PM	0	43	6	72	0	121	0	30	4	14	0	48	4	6	289	35	0	334	9	48	367	23	0	447	950
12:45 PM	0	49	6	49	0	104	0	24	3	9	0	36	3	8	346	53	0	410	10	59	349	24	0	442	992
Hourly Total	0	197	21	245	1	463	0	109	26	39	0	174	12	44	1344	218	0	1618	36	243	1404	102	0	1785	4040
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00 PM	0	30	3	22	0	55	0	26	5	0	0	31	1	8	281	17	0	307	15	30	356	31	0	432	825
3:15 PM	0	29	3	43	1	75	0	22	4	4	0	30	3	13	289	26	0	331	14	32	320	29	0	395	831
3:30 PM	0	33	4	29	1	66	0	27	6	5	0	38	1	8	391	35	0	435	17	29	337	27	1	410	949
3:45 PM	0	32	2	41	4	75	0	31	10	5	0	46	2	18	325	45	0	390	8	40	365	26	0	439	950
Hourly Total	0	124	12	135	6	271	0	106	25	14	0	145	7	47	1286	123	0	1463	54	131	1378	113	1	1676	3555
4:00 PM	0	34	10	41	1	85	0	21	6	9	0	36	5	9	279	30	0	323	14	40	388	27	0	469	913
4:15 PM	0	34	8	45	0	87	0	38	3	12	0	53	3	12	317	46	0	378	16	62	354	33	0	465	983
4:30 PM	1	57	9	50	3	117	0	28	7	19	2	54	3	5	348	48	2	404	13	46	411	38	0	508	1083
4:45 PM	0	45	6	38	3	89	0	24	6	19	1	49	4	10	365	50	1	429	10	53	385	40	0	488	1055
Hourly Total	1	170	33	174	7	378	0	111	22	59	3	192	15	36	1309	174	3	1534	53	201	1538	138	0	1930	4034
5:00 PM	0	62	4	52	1	118	0	43	6	16	2	65	2	10	359	46	0	417	11	64	376	49	0	500	1100
5:15 PM	0	54	8	55	3	117	0	47	9	6	0	62	1	13	364	60	1	438	9	61	482	49	0	601	1218
5:30 PM	0	58	9	48	2	115	0	28	6	17	3	51	1	8	395	68	2	472	7	59	478	44	2	588	1226
5:45 PM	0	83	8	59	3	150	0	32	8	22	0	62	3	8	326	49	0	386	18	54	426	41	0	539	1137
Hourly Total	0	257	29	214	9	500	0	150	29	61	5	240	7	39	1444	223	3	1713	45	238	1762	183	2	2228	4681
Grand Total	1	1052	135	1136	47	2324	0	884	157	294	22	1335	74	275	11914	1145	13	13408	367	1207	10405	786	5	12765	29832
Approach %	0.0	45.3	5.8	48.9	-	-	0.0	66.2	11.8	22.0	-	-	0.6	2.1	88.9	8.5	-	-	2.9	9.5	81.5	6.2	-	-	-
Total %	0.0	3.5	0.5	3.8	-	7.8	0.0	3.0	0.5	1.0	-	4.5	0.2	0.9	39.9	3.8	-	44.9	1.2	4.0	34.9	2.6	-	42.8	-
Car	1	1034	133	1111	-	2279	0	858	152	289	-	1299	74	272	11662	1134	-	13142	362	1187	10107	770	-	12426	29146
% Car	100.0	98.3	98.5	97.8	-	98.1	-	97.1	96.8	98.3	-	97.3	100.0	98.9	97.9	99.0	-	98.0	98.6	98.3	97.1	98.0	-	97.3	97.7
Truck	0	18	2	25	-	45	0	26	5	5	-	36	0	3	252	11	-	266	5	20	298	16	-	339	686
% Truck	0.0	1.7	1.5	2.2	-	1.9	-	2.9	3.2	1.7	-	2.7	0.0	1.1	2.1	1.0	-	2.0	1.4	1.7	2.9	2.0	-	2.7	2.3
Ped	-	-	-	-	47	-	-	-	-	-	22	-	-	-	-	-	13	-	-	-	-	-	5	-	-
% Ped	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

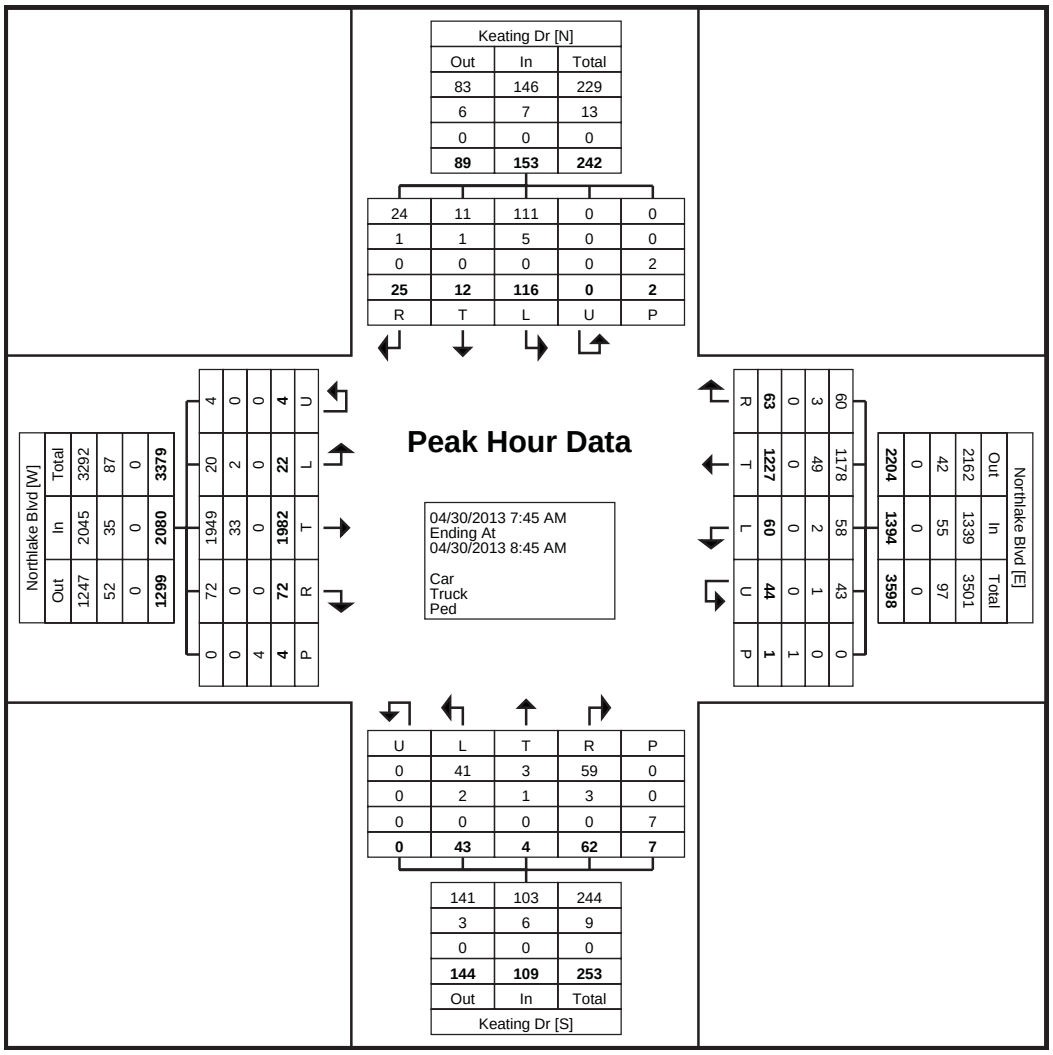
Count Name: Keating Dr at Northlake Blvd
Site Code:
Start Date: 04/30/2013
Page No: 3

Turning Movement Peak Hour Data (7:45 AM)

Start Time	Keating Dr Northbound						Keating Dr Southbound						Northlake Blvd Eastbound						Northlake Blvd Westbound						
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	Int. Total
7:45 AM	0	6	0	10	3	16	0	28	2	8	0	38	0	3	573	18	0	594	11	6	322	14	0	353	1001
8:00 AM	0	8	3	16	3	27	0	31	3	8	1	42	2	6	451	18	1	477	7	20	292	17	0	336	882
8:15 AM	0	14	0	20	1	34	0	28	2	6	0	36	1	5	475	16	1	497	15	18	319	18	0	370	937
8:30 AM	0	15	1	16	0	32	0	29	5	3	1	37	1	8	483	20	2	512	11	16	294	14	1	335	916
Total	0	43	4	62	7	109	0	116	12	25	2	153	4	22	1982	72	4	2080	44	60	1227	63	1	1394	3736
Approach %	0.0	39.4	3.7	56.9	-	-	0.0	75.8	7.8	16.3	-	-	0.2	1.1	95.3	3.5	-	-	3.2	4.3	88.0	4.5	-	-	-
Total %	0.0	1.2	0.1	1.7	-	2.9	0.0	3.1	0.3	0.7	-	4.1	0.1	0.6	53.1	1.9	-	55.7	1.2	1.6	32.8	1.7	-	37.3	-
PHF	0.000	0.717	0.333	0.775	-	0.801	0.000	0.935	0.600	0.781	-	0.911	0.500	0.688	0.865	0.900	-	0.875	0.733	0.750	0.953	0.875	-	0.942	0.933
Car	0	41	3	59	-	103	0	111	11	24	-	146	4	20	1949	72	-	2045	43	58	1178	60	-	1339	3633
% Car	-	95.3	75.0	95.2	-	94.5	-	95.7	91.7	96.0	-	95.4	100.0	90.9	98.3	100.0	-	98.3	97.7	96.7	96.0	95.2	-	96.1	97.2
Truck	0	2	1	3	-	6	0	5	1	1	-	7	0	2	33	0	-	35	1	2	49	3	-	55	103
% Truck	-	4.7	25.0	4.8	-	5.5	-	4.3	8.3	4.0	-	4.6	0.0	9.1	1.7	0.0	-	1.7	2.3	3.3	4.0	4.8	-	3.9	2.8
Ped	-	-	-	-	7	-	-	-	-	-	2	-	-	-	-	-	4	-	-	-	-	-	1	-	-
% Ped	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: Keating Dr at Northlake Blvd
Site Code:
Start Date: 04/30/2013



Turning Movement Peak Hour Data Plot (7:45 AM)

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

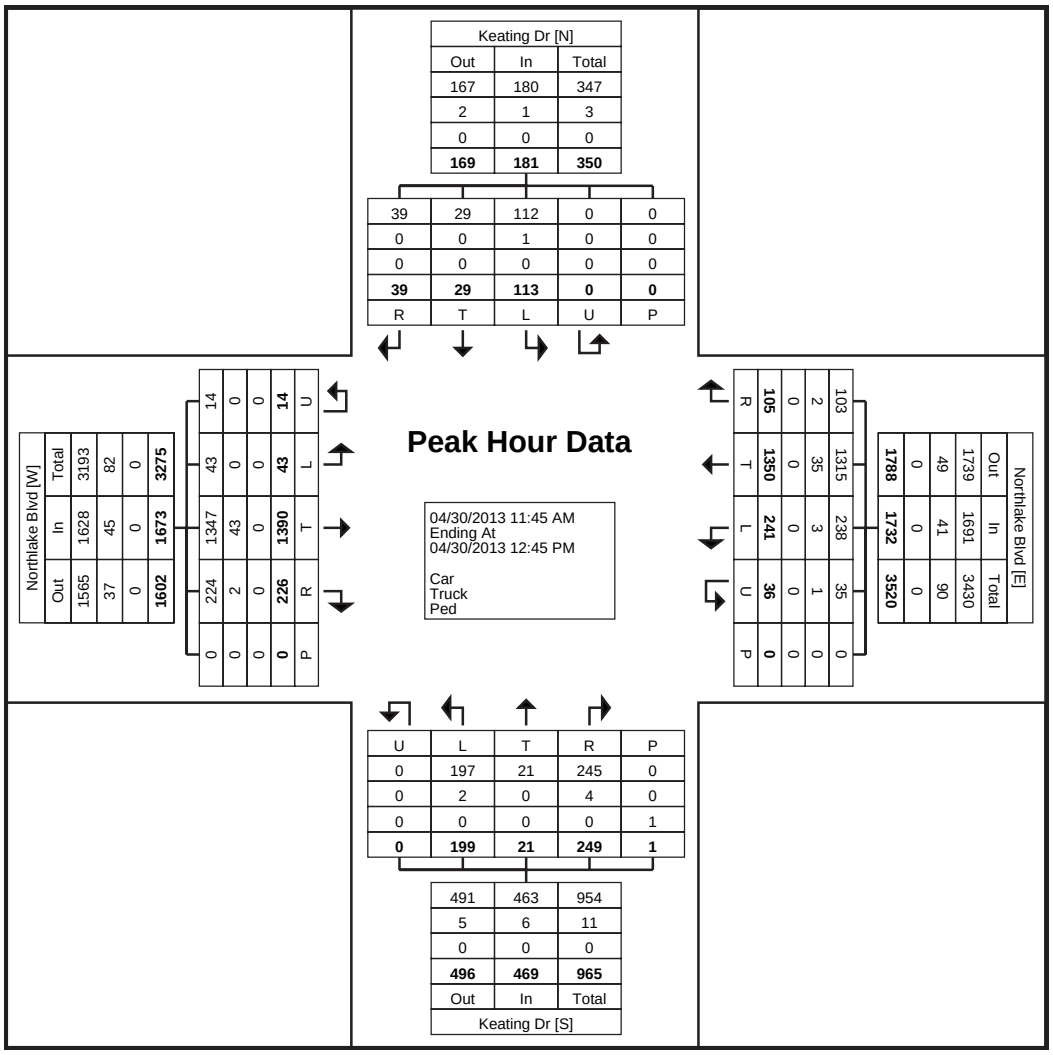
Count Name: Keating Dr at Northlake Blvd
Site Code:
Start Date: 04/30/2013
Page No: 5

Turning Movement Peak Hour Data (11:45 AM)

Start Time	Keating Dr Northbound						Keating Dr Southbound						Northlake Blvd Eastbound						Northlake Blvd Westbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
11:45 AM	0	51	6	53	0	110	0	28	6	9	0	43	5	7	392	61	0	465	10	57	295	27	0	389	1007
12:00 PM	0	40	4	45	1	89	0	20	12	5	0	37	0	13	379	78	0	470	7	58	329	34	0	428	1024
12:15 PM	0	65	5	79	0	149	0	35	7	11	0	53	5	17	330	52	0	404	10	78	359	21	0	468	1074
12:30 PM	0	43	6	72	0	121	0	30	4	14	0	48	4	6	289	35	0	334	9	48	367	23	0	447	950
Total	0	199	21	249	1	469	0	113	29	39	0	181	14	43	1390	226	0	1673	36	241	1350	105	0	1732	4055
Approach %	0.0	42.4	4.5	53.1	-	-	0.0	62.4	16.0	21.5	-	-	0.8	2.6	83.1	13.5	-	-	2.1	13.9	77.9	6.1	-	-	-
Total %	0.0	4.9	0.5	6.1	-	11.6	0.0	2.8	0.7	1.0	-	4.5	0.3	1.1	34.3	5.6	-	41.3	0.9	5.9	33.3	2.6	-	42.7	-
PHF	0.000	0.765	0.875	0.788	-	0.787	0.000	0.807	0.604	0.696	-	0.854	0.700	0.632	0.886	0.724	-	0.890	0.900	0.772	0.920	0.772	-	0.925	0.944
Car	0	197	21	245	-	463	0	112	29	39	-	180	14	43	1347	224	-	1628	35	238	1315	103	-	1691	3962
% Car	-	99.0	100.0	98.4	-	98.7	-	99.1	100.0	100.0	-	99.4	100.0	100.0	96.9	99.1	-	97.3	97.2	98.8	97.4	98.1	-	97.6	97.7
Truck	0	2	0	4	-	6	0	1	0	0	-	1	0	0	43	2	-	45	1	3	35	2	-	41	93
% Truck	-	1.0	0.0	1.6	-	1.3	-	0.9	0.0	0.0	-	0.6	0.0	0.0	3.1	0.9	-	2.7	2.8	1.2	2.6	1.9	-	2.4	2.3
Ped	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Ped	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: Keating Dr at Northlake Blvd
Site Code:
Start Date: 04/30/2013



Turning Movement Peak Hour Data Plot (11:45 AM)

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

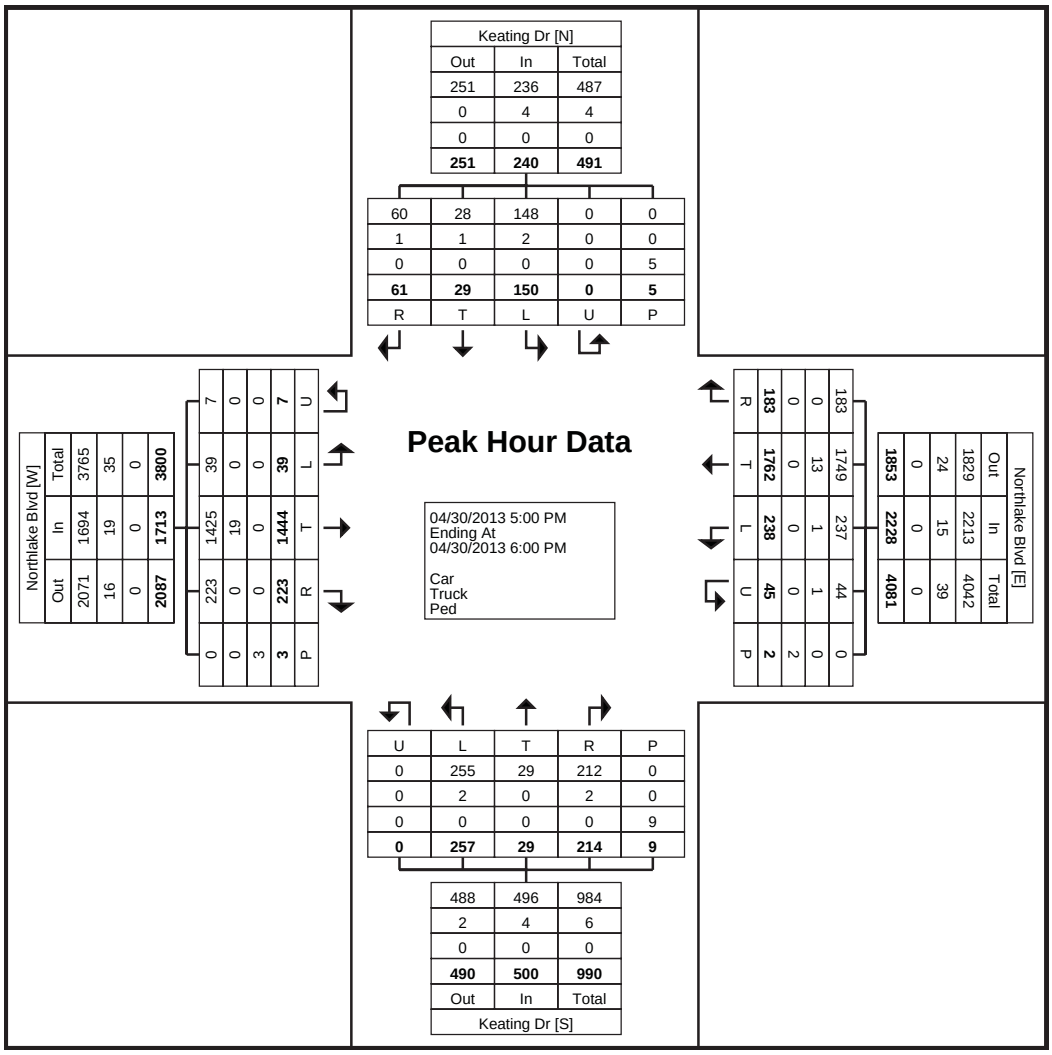
Count Name: Keating Dr at Northlake Blvd
Site Code:
Start Date: 04/30/2013
Page No: 7

Turning Movement Peak Hour Data (5:00 PM)

Start Time	Keating Dr Northbound						Keating Dr Southbound						Northlake Blvd Eastbound						Northlake Blvd Westbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
5:00 PM	0	62	4	52	1	118	0	43	6	16	2	65	2	10	359	46	0	417	11	64	376	49	0	500	1100
5:15 PM	0	54	8	55	3	117	0	47	9	6	0	62	1	13	364	60	1	438	9	61	482	49	0	601	1218
5:30 PM	0	58	9	48	2	115	0	28	6	17	3	51	1	8	395	68	2	472	7	59	478	44	2	588	1226
5:45 PM	0	83	8	59	3	150	0	32	8	22	0	62	3	8	326	49	0	386	18	54	426	41	0	539	1137
Total	0	257	29	214	9	500	0	150	29	61	5	240	7	39	1444	223	3	1713	45	238	1762	183	2	2228	4681
Approach %	0.0	51.4	5.8	42.8	-	-	0.0	62.5	12.1	25.4	-	-	0.4	2.3	84.3	13.0	-	-	2.0	10.7	79.1	8.2	-	-	-
Total %	0.0	5.5	0.6	4.6	-	10.7	0.0	3.2	0.6	1.3	-	5.1	0.1	0.8	30.8	4.8	-	36.6	1.0	5.1	37.6	3.9	-	47.6	-
PHF	0.000	0.774	0.806	0.907	-	0.833	0.000	0.798	0.806	0.693	-	0.923	0.583	0.750	0.914	0.820	-	0.907	0.625	0.930	0.914	0.934	-	0.927	0.955
Car	0	255	29	212	-	496	0	148	28	60	-	236	7	39	1425	223	-	1694	44	237	1749	183	-	2213	4639
% Car	-	99.2	100.0	99.1	-	99.2	-	98.7	96.6	98.4	-	98.3	100.0	100.0	98.7	100.0	-	98.9	97.8	99.6	99.3	100.0	-	99.3	99.1
Truck	0	2	0	2	-	4	0	2	1	1	-	4	0	0	19	0	-	19	1	1	13	0	-	15	42
% Truck	-	0.8	0.0	0.9	-	0.8	-	1.3	3.4	1.6	-	1.7	0.0	0.0	1.3	0.0	-	1.1	2.2	0.4	0.7	0.0	-	0.7	0.9
Ped	-	-	-	-	9	-	-	-	-	-	5	-	-	-	-	-	3	-	-	-	-	-	2	-	-
% Ped	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: Keating Dr at Northlake Blvd
Site Code:
Start Date: 04/30/2013
Page No: 8



Turning Movement Peak Hour Data Plot (5:00 PM)

Appendix B - Data Collection

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: Northlake Blvd and Sandtree Ln
Site Code:
Start Date: 04/30/2013
Page No: 1

Turning Movement Data

Start Time	Sandtree Ln Northbound						Sunrise dr Southbound						Northlake Blvd Eastbound						Northlake Blvd Westbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
7:00 AM	0	22	0	13	1	35	0	21	4	4	3	29	0	2	295	18	1	315	0	3	263	6	0	272	651
7:15 AM	0	35	0	18	0	53	0	27	0	13	1	40	5	8	353	30	0	396	1	12	240	6	0	259	748
7:30 AM	0	66	0	19	3	85	0	28	3	8	3	39	1	7	475	28	0	511	0	22	310	8	2	340	975
7:45 AM	0	49	1	13	3	63	0	33	6	10	1	49	2	5	553	39	1	599	0	26	385	6	0	417	1128
Hourly Total	0	172	1	63	7	236	0	109	13	35	8	157	8	22	1676	115	2	1821	1	63	1198	26	2	1288	3502
8:00 AM	0	54	7	34	1	95	0	39	5	8	0	52	0	8	471	32	0	511	1	33	404	6	1	444	1102
8:15 AM	0	64	0	22	0	86	0	16	5	7	3	28	8	10	399	38	1	455	0	25	307	5	0	337	906
8:30 AM	0	56	3	23	0	82	0	25	6	14	0	45	2	13	464	35	2	514	0	29	313	5	1	347	988
8:45 AM	0	68	1	36	1	105	0	25	5	17	1	47	8	9	520	45	0	582	1	33	349	9	0	392	1126
Hourly Total	0	242	11	115	2	368	0	105	21	46	4	172	18	40	1854	150	3	2062	2	120	1373	25	2	1520	4122
9:00 AM	0	76	3	37	1	116	0	28	2	7	2	37	2	8	359	27	1	396	0	41	278	5	0	324	873
9:15 AM	0	56	0	48	2	104	0	13	3	4	0	20	4	7	325	34	2	370	0	45	265	2	0	312	806
9:30 AM	0	50	0	38	2	88	0	18	2	5	1	25	2	11	402	31	2	446	1	29	294	8	1	332	891
9:45 AM	0	64	0	39	1	103	0	20	4	8	0	32	3	7	349	46	1	405	0	47	287	11	0	345	885
Hourly Total	0	246	3	162	6	411	0	79	11	24	3	114	11	33	1435	138	6	1617	1	162	1124	26	1	1313	3455
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM	0	97	3	64	4	164	0	13	3	17	2	33	10	9	389	37	0	445	2	59	394	8	0	463	1105
11:15 AM	0	93	1	59	0	153	0	28	2	10	7	40	12	6	371	44	1	433	0	46	344	7	5	397	1023
11:30 AM	0	79	6	73	2	158	0	19	9	8	2	36	11	9	346	43	1	409	1	64	382	9	0	456	1059
11:45 AM	0	120	1	52	2	173	0	14	4	13	1	31	18	10	420	46	1	494	2	70	412	7	1	491	1189
Hourly Total	0	389	11	248	8	648	0	74	18	48	12	140	51	34	1526	170	3	1781	5	239	1532	31	6	1807	4376
12:00 PM	1	103	6	97	0	207	0	19	6	17	0	42	9	16	402	54	0	481	0	78	371	6	0	455	1185
12:15 PM	0	100	5	93	2	198	0	22	4	11	0	37	12	3	424	65	0	504	1	77	431	11	0	520	1259
12:30 PM	0	124	2	67	1	193	0	11	1	14	0	26	13	13	408	53	1	487	0	71	426	16	4	513	1219
12:45 PM	0	123	3	91	1	217	0	18	8	11	2	37	8	5	417	49	0	479	2	74	434	11	1	521	1254
Hourly Total	1	450	16	348	4	815	0	70	19	53	2	142	42	37	1651	221	1	1951	3	300	1662	44	5	2009	4917
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00 PM	0	96	0	56	0	152	0	29	5	8	0	42	8	13	328	34	0	383	0	34	374	10	0	418	995
3:15 PM	0	63	1	53	1	117	0	28	5	10	0	43	11	11	438	45	0	505	0	36	442	5	0	483	1148
3:30 PM	0	85	2	51	0	138	0	16	8	8	0	32	9	14	380	47	0	450	0	36	411	6	0	453	1073
3:45 PM	0	99	5	58	2	162	0	23	0	17	1	40	7	16	387	38	1	448	0	53	382	4	1	439	1089
Hourly Total	0	343	8	218	3	569	0	96	18	43	1	157	35	54	1533	164	1	1786	0	159	1609	25	1	1793	4305
4:00 PM	0	71	1	54	5	126	0	23	6	13	0	42	8	8	433	44	0	493	2	35	471	10	0	518	1179
4:15 PM	0	78	0	55	1	133	0	21	12	19	0	52	10	18	459	33	0	520	4	43	475	8	0	530	1235
4:30 PM	0	92	3	57	3	152	0	23	5	12	0	40	9	21	396	51	1	477	0	65	479	9	0	553	1222
4:45 PM	0	101	5	44	6	150	0	26	8	8	0	42	13	8	420	38	0	479	1	47	432	3	0	483	1154
Hourly Total	0	342	9	210	15	561	0	93	31	52	0	176	40	55	1708	166	1	1969	7	190	1857	30	0	2084	4790
5:00 PM	0	117	1	56	1	174	0	17	2	12	3	31	17	9	406	38	0	470	0	46	529	10	0	585	1260
5:15 PM	0	117	5	53	0	175	0	23	4	14	1	41	9	13	454	39	3	515	0	42	598	11	0	651	1382
5:30 PM	0	122	4	53	1	179	0	24	3	6	1	33	15	14	467	48	0	544	0	46	509	12	1	567	1323
5:45 PM	0	99	3	38	0	140	0	17	5	6	1	28	10	19	456	26	0	511	0	53	503	6	0	562	1241
Hourly Total	0	455	13	200	2	668	0	81	14	38	6	133	51	55	1783	151	3	2040	0	187	2139	39	1	2365	5206
Grand Total	1	2639	72	1564	47	4276	0	707	145	339	36	1191	256	330	13166	1275	20	15027	19	1420	12494	246	18	14179	34673
Approach %	0.0	61.7	1.7	36.6	-	-	0.0	59.4	12.2	28.5	-	-	1.7	2.2	87.6	8.5	-	-	0.1	10.0	88.1	1.7	-	-	-
Total %	0.0	7.6	0.2	4.5	-	12.3	0.0	2.0	0.4	1.0	-	3.4	0.7	1.0	38.0	3.7	-	43.3	0.1	4.1	36.0	0.7	-	40.9	-
Car	1	2583	69	1535	-	4188	0	695	142	333	-	1170	255	325	12882	1223	-	14685	19	1406	12189	243	-	13857	33900
% Car	100.0	97.9	95.8	98.1	-	97.9	-	98.3	97.9	98.2	-	98.2	99.6	98.5	97.8	95.9	-	97.7	100.0	99.0	97.6	98.8	-	97.7	97.8
Truck	0	56	3	29	-	88	0	12	3	6	-	21	1	5	284	52	-	342	0	14	305	3	-	322	773
% Truck	0.0	2.1	4.2	1.9	-	2.1	-	1.7	2.1	1.8	-	1.8	0.4	1.5	2.2	4.1	-	2.3	0.0	1.0	2.4	1.2	-	2.3	2.2
Ped	-	-	-	-	47	-	-	-	-	-	36	-	-	-	-	-	20	-	-	-	-	-	18	-	-
% Ped	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

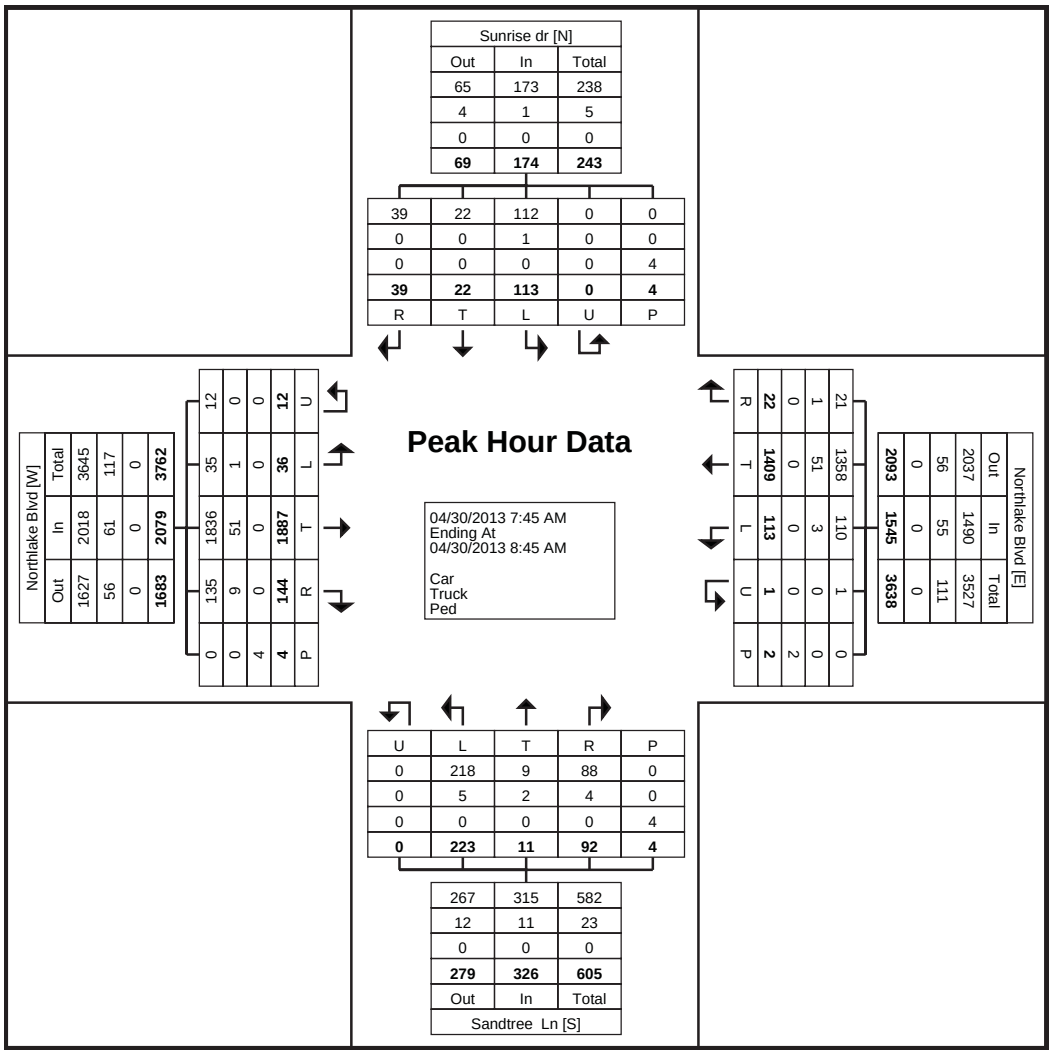
Count Name: Northlake Blvd and Sandtree Ln
Site Code:
Start Date: 04/30/2013
Page No: 3

Turning Movement Peak Hour Data (7:45 AM)

Start Time	Sandtree Ln Northbound						Sunrise dr Southbound						Northlake Blvd Eastbound						Northlake Blvd Westbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
7:45 AM	0	49	1	13	3	63	0	33	6	10	1	49	2	5	553	39	1	599	0	26	385	6	0	417	1128
8:00 AM	0	54	7	34	1	95	0	39	5	8	0	52	0	8	471	32	0	511	1	33	404	6	1	444	1102
8:15 AM	0	64	0	22	0	86	0	16	5	7	3	28	8	10	399	38	1	455	0	25	307	5	0	337	906
8:30 AM	0	56	3	23	0	82	0	25	6	14	0	45	2	13	464	35	2	514	0	29	313	5	1	347	988
Total	0	223	11	92	4	326	0	113	22	39	4	174	12	36	1887	144	4	2079	1	113	1409	22	2	1545	4124
Approach %	0.0	68.4	3.4	28.2	-	-	0.0	64.9	12.6	22.4	-	-	0.6	1.7	90.8	6.9	-	-	0.1	7.3	91.2	1.4	-	-	-
Total %	0.0	5.4	0.3	2.2	-	7.9	0.0	2.7	0.5	0.9	-	4.2	0.3	0.9	45.8	3.5	-	50.4	0.0	2.7	34.2	0.5	-	37.5	-
PHF	0.000	0.871	0.393	0.676	-	0.858	0.000	0.724	0.917	0.696	-	0.837	0.375	0.692	0.853	0.923	-	0.868	0.250	0.856	0.872	0.917	-	0.870	0.914
Car	0	218	9	88	-	315	0	112	22	39	-	173	12	35	1836	135	-	2018	1	110	1358	21	-	1490	3996
% Car	-	97.8	81.8	95.7	-	96.6	-	99.1	100.0	100.0	-	99.4	100.0	97.2	97.3	93.8	-	97.1	100.0	97.3	96.4	95.5	-	96.4	96.9
Truck	0	5	2	4	-	11	0	1	0	0	-	1	0	1	51	9	-	61	0	3	51	1	-	55	128
% Truck	-	2.2	18.2	4.3	-	3.4	-	0.9	0.0	0.0	-	0.6	0.0	2.8	2.7	6.3	-	2.9	0.0	2.7	3.6	4.5	-	3.6	3.1
Ped	-	-	-	-	4	-	-	-	-	-	4	-	-	-	-	-	4	-	-	-	-	-	2	-	-
% Ped	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: Northlake Blvd and Sandtree Ln
Site Code:
Start Date: 04/30/2013



Turning Movement Peak Hour Data Plot (7:45 AM)

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

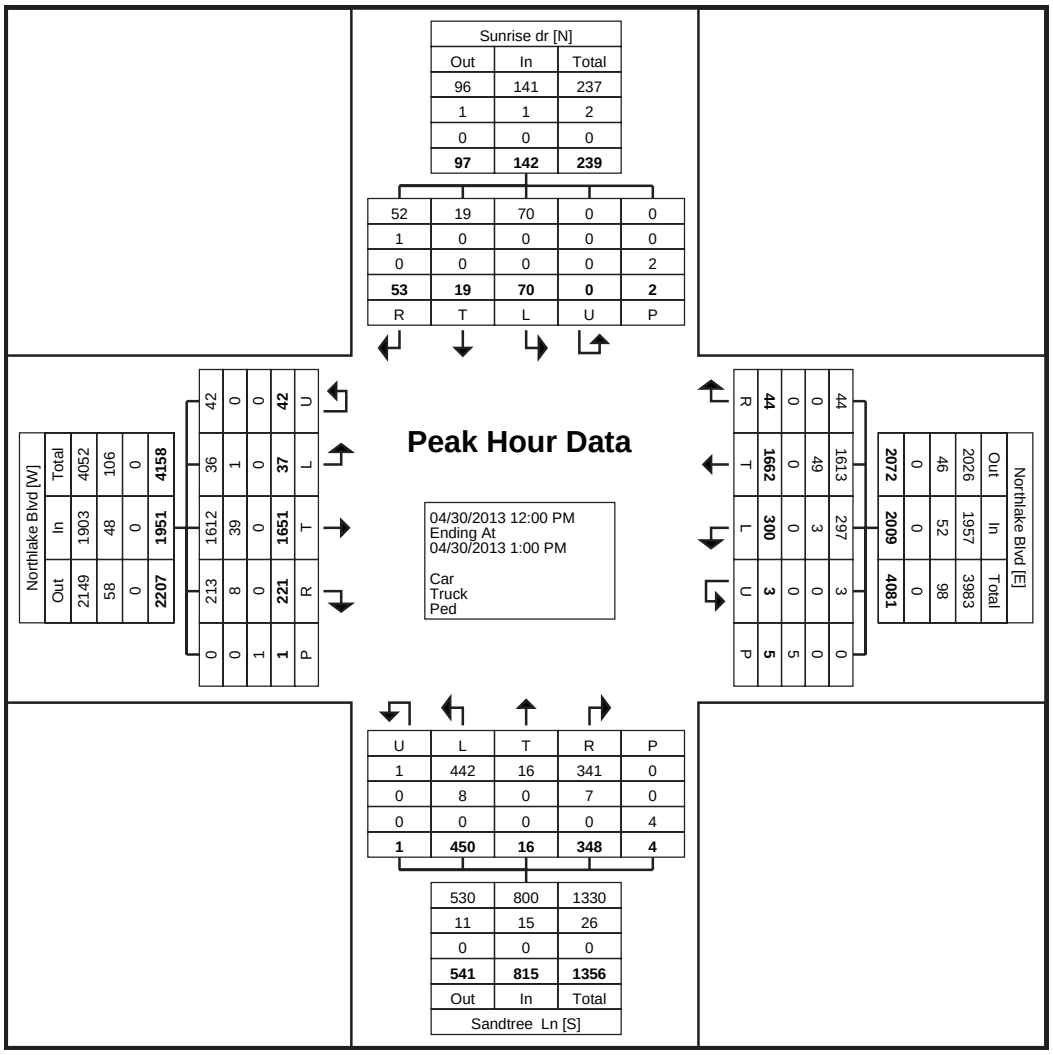
Count Name: Northlake Blvd and Sandtree Ln
Site Code:
Start Date: 04/30/2013
Page No: 5

Turning Movement Peak Hour Data (12:00 PM)

Start Time	Sandtree Ln Northbound						Sunrise dr Southbound						Northlake Blvd Eastbound						Northlake Blvd Westbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
12:00 PM	1	103	6	97	0	207	0	19	6	17	0	42	9	16	402	54	0	481	0	78	371	6	0	455	1185
12:15 PM	0	100	5	93	2	198	0	22	4	11	0	37	12	3	424	65	0	504	1	77	431	11	0	520	1259
12:30 PM	0	124	2	67	1	193	0	11	1	14	0	26	13	13	408	53	1	487	0	71	426	16	4	513	1219
12:45 PM	0	123	3	91	1	217	0	18	8	11	2	37	8	5	417	49	0	479	2	74	434	11	1	521	1254
Total	1	450	16	348	4	815	0	70	19	53	2	142	42	37	1651	221	1	1951	3	300	1662	44	5	2009	4917
Approach %	0.1	55.2	2.0	42.7	-	-	0.0	49.3	13.4	37.3	-	-	2.2	1.9	84.6	11.3	-	-	0.1	14.9	82.7	2.2	-	-	-
Total %	0.0	9.2	0.3	7.1	-	16.6	0.0	1.4	0.4	1.1	-	2.9	0.9	0.8	33.6	4.5	-	39.7	0.1	6.1	33.8	0.9	-	40.9	-
PHF	0.250	0.907	0.667	0.897	-	0.939	0.000	0.795	0.594	0.779	-	0.845	0.808	0.578	0.973	0.850	-	0.968	0.375	0.962	0.957	0.688	-	0.964	0.976
Car	1	442	16	341	-	800	0	70	19	52	-	141	42	36	1612	213	-	1903	3	297	1613	44	-	1957	4801
% Car	100.0	98.2	100.0	98.0	-	98.2	-	100.0	100.0	98.1	-	99.3	100.0	97.3	97.6	96.4	-	97.5	100.0	99.0	97.1	100.0	-	97.4	97.6
Truck	0	8	0	7	-	15	0	0	0	1	-	1	0	1	39	8	-	48	0	3	49	0	-	52	116
% Truck	0.0	1.8	0.0	2.0	-	1.8	-	0.0	0.0	1.9	-	0.7	0.0	2.7	2.4	3.6	-	2.5	0.0	1.0	2.9	0.0	-	2.6	2.4
Ped	-	-	-	-	4	-	-	-	-	-	2	-	-	-	-	-	1	-	-	-	-	-	5	-	-
% Ped	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: Northlake Blvd and Sandtree Ln
Site Code:
Start Date: 04/30/2013



Turning Movement Peak Hour Data Plot (12:00 PM)

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

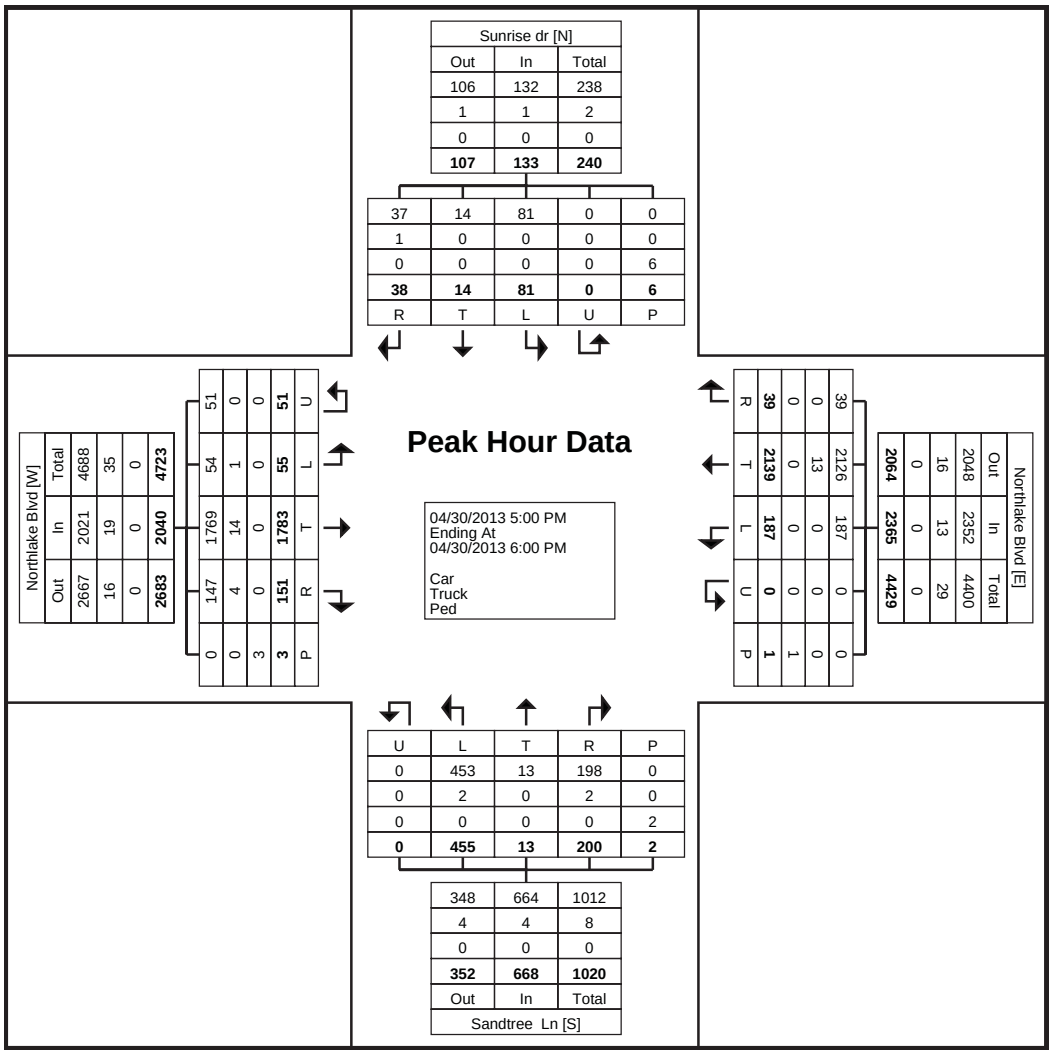
Count Name: Northlake Blvd and Sandtree Ln
Site Code:
Start Date: 04/30/2013
Page No: 7

Turning Movement Peak Hour Data (5:00 PM)

Start Time	Sandtree Ln Northbound						Sunrise dr Southbound						Northlake Blvd Eastbound						Northlake Blvd Westbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
5:00 PM	0	117	1	56	1	174	0	17	2	12	3	31	17	9	406	38	0	470	0	46	529	10	0	585	1260
5:15 PM	0	117	5	53	0	175	0	23	4	14	1	41	9	13	454	39	3	515	0	42	598	11	0	651	1382
5:30 PM	0	122	4	53	1	179	0	24	3	6	1	33	15	14	467	48	0	544	0	46	509	12	1	567	1323
5:45 PM	0	99	3	38	0	140	0	17	5	6	1	28	10	19	456	26	0	511	0	53	503	6	0	562	1241
Total	0	455	13	200	2	668	0	81	14	38	6	133	51	55	1783	151	3	2040	0	187	2139	39	1	2365	5206
Approach %	0.0	68.1	1.9	29.9	-	-	0.0	60.9	10.5	28.6	-	-	2.5	2.7	87.4	7.4	-	-	0.0	7.9	90.4	1.6	-	-	-
Total %	0.0	8.7	0.2	3.8	-	12.8	0.0	1.6	0.3	0.7	-	2.6	1.0	1.1	34.2	2.9	-	39.2	0.0	3.6	41.1	0.7	-	45.4	-
PHF	0.000	0.932	0.650	0.893	-	0.933	0.000	0.844	0.700	0.679	-	0.811	0.750	0.724	0.954	0.786	-	0.938	0.000	0.882	0.894	0.813	-	0.908	0.942
Car	0	453	13	198	-	664	0	81	14	37	-	132	51	54	1769	147	-	2021	0	187	2126	39	-	2352	5169
% Car	-	99.6	100.0	99.0	-	99.4	-	100.0	100.0	97.4	-	99.2	100.0	98.2	99.2	97.4	-	99.1	-	100.0	99.4	100.0	-	99.5	99.3
Truck	0	2	0	2	-	4	0	0	0	1	-	1	0	1	14	4	-	19	0	0	13	0	-	13	37
% Truck	-	0.4	0.0	1.0	-	0.6	-	0.0	0.0	2.6	-	0.8	0.0	1.8	0.8	2.6	-	0.9	-	0.0	0.6	0.0	-	0.5	0.7
Ped	-	-	-	-	2	-	-	-	-	-	6	-	-	-	-	-	3	-	-	-	-	-	1	-	-
% Ped	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: Northlake Blvd and Sandtree Ln
Site Code:
Start Date: 04/30/2013
Page No: 8



Turning Movement Peak Hour Data Plot (5:00 PM)

Appendix B - Data Collection

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: Lake Victoria at PGA Blvd
Site Code:
Start Date: 04/24/2013
Page No: 1

SB Bear Right traffic is going onto PGA Pass WB

Turning Movement Data

Start Time	Lake Victoria Gardens Northbound					Lake Victoria Gardens Southbound						PGA Blvd Eastbound						PGA Blvd Westbound					
	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Bear Right	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	Int. Total
7:00 AM	30	2	7	0	39	0	0	2	9	0	11	14	38	301	46	0	399	0	174	0	0	174	623
7:15 AM	43	0	10	1	53	0	0	5	10	0	15	10	41	421	83	0	555	0	175	0	0	175	798
7:30 AM	48	0	17	0	65	0	0	0	10	0	10	16	42	521	96	0	675	0	198	1	0	199	949
7:45 AM	62	0	12	0	74	0	0	4	9	0	13	11	95	745	93	0	944	0	246	0	0	246	1277
Hourly Total	183	2	46	1	231	0	0	11	38	0	49	51	216	1988	318	0	2573	0	793	1	0	794	3647
8:00 AM	65	0	23	3	88	0	0	3	20	0	23	22	99	703	90	0	914	0	257	0	4	257	1282
8:15 AM	53	0	22	0	75	0	0	6	6	0	12	19	74	739	96	0	928	0	234	0	0	234	1249
8:30 AM	62	0	20	1	82	0	0	1	14	0	15	21	81	600	86	0	788	0	229	0	0	229	1114
8:45 AM	35	1	21	0	57	0	0	1	21	0	22	13	95	814	96	0	1018	0	218	0	0	218	1315
Hourly Total	215	1	86	4	302	0	0	11	61	0	72	75	349	2856	368	0	3648	0	938	0	4	938	4960
9:00 AM	30	0	29	0	59	0	0	9	17	0	26	9	71	641	56	0	777	0	232	0	0	232	1094
9:15 AM	33	0	43	0	76	0	0	3	15	0	18	17	47	603	58	0	725	0	267	0	0	267	1086
9:30 AM	22	0	30	0	52	0	0	4	19	0	23	19	59	516	49	0	643	0	230	0	1	230	948
9:45 AM	23	1	39	0	63	1	0	5	14	0	20	16	61	521	44	0	642	0	245	0	1	245	970
Hourly Total	108	1	141	0	250	1	0	21	65	0	87	61	238	2281	207	0	2787	0	974	0	2	974	4098
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM	31	0	33	1	64	0	0	5	22	0	27	13	64	503	52	0	632	0	359	0	0	359	1082
11:15 AM	40	0	42	2	82	0	0	8	35	1	43	16	54	456	58	0	584	0	390	0	1	390	1099
11:30 AM	33	0	26	0	59	1	0	8	44	0	53	14	66	509	49	0	638	1	365	0	0	366	1116
11:45 AM	26	0	36	0	62	1	0	13	46	1	60	18	76	516	52	0	662	0	408	0	0	408	1192
Hourly Total	130	0	137	3	267	2	0	34	147	2	183	61	260	1984	211	0	2516	1	1522	0	1	1523	4489
12:00 PM	41	0	43	1	84	0	0	6	34	0	40	20	79	511	57	0	667	0	416	0	2	416	1207
12:15 PM	25	0	42	2	67	0	0	10	36	0	46	14	67	627	60	0	768	0	449	0	0	449	1330
12:30 PM	42	0	35	4	77	1	0	7	28	0	36	25	57	517	46	0	645	0	419	0	0	419	1177
12:45 PM	24	0	37	1	61	0	0	5	52	0	57	14	77	546	57	0	694	0	408	0	1	408	1220
Hourly Total	132	0	157	8	289	1	0	28	150	0	179	73	280	2201	220	0	2774	0	1692	0	3	1692	4934
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00 PM	47	0	50	2	97	0	0	9	66	0	75	18	60	464	57	0	599	0	470	0	0	470	1241
3:15 PM	57	1	39	1	97	0	0	13	45	0	58	21	51	447	58	0	577	0	603	0	0	603	1335
3:30 PM	63	0	32	2	95	0	0	19	49	1	68	15	71	498	86	0	670	0	497	0	0	497	1330
3:45 PM	58	0	43	1	101	0	0	12	57	1	69	22	68	525	67	0	682	0	472	0	0	472	1324
Hourly Total	225	1	164	6	390	0	0	53	217	2	270	76	250	1934	268	0	2528	0	2042	0	0	2042	5230
4:00 PM	54	0	40	3	94	0	0	12	69	0	81	27	41	442	88	0	598	1	555	1	2	557	1330
4:15 PM	44	0	33	0	77	0	0	5	53	0	58	22	59	496	91	0	668	0	543	0	0	543	1346
4:30 PM	64	0	28	2	92	0	0	7	48	0	55	32	64	468	93	0	657	0	585	0	0	585	1389
4:45 PM	57	0	36	0	93	0	0	7	32	0	39	36	71	593	81	0	781	0	585	0	0	585	1498
Hourly Total	219	0	137	5	356	0	0	31	202	0	233	117	235	1999	353	0	2704	1	2268	1	2	2270	5563
5:00 PM	78	0	30	0	108	0	0	20	75	0	95	45	86	471	90	0	692	0	572	0	0	572	1467
5:15 PM	82	0	33	0	115	0	0	14	66	0	80	26	85	610	101	0	822	0	638	0	1	638	1655
5:30 PM	83	0	30	1	113	0	0	6	57	0	63	41	117	574	101	0	833	0	615	0	0	615	1624
5:45 PM	74	0	33	1	107	0	0	9	51	0	60	36	95	514	87	0	732	0	569	0	0	569	1468
Hourly Total	317	0	126	2	443	0	0	49	249	0	298	148	383	2169	379	0	3079	0	2394	0	1	2394	6214
Grand Total	1529	5	994	29	2528	4	0	238	1129	4	1371	662	2211	17412	2324	0	22609	2	12623	2	13	12627	39135
Approach %	60.5	0.2	39.3	-	-	0.3	0.0	17.4	82.3	-	-	2.9	9.8	77.0	10.3	-	-	0.0	100.0	0.0	-	-	-
Total %	3.9	0.0	2.5	-	6.5	0.0	0.0	0.6	2.9	-	3.5	1.7	5.6	44.5	5.9	-	57.8	0.0	32.3	0.0	-	32.3	-
Car	1510	5	979	-	2494	4	0	231	1115	-	1350	653	2184	17098	2252	-	22187	2	12378	1	-	12381	38412
% Car	98.8	100.0	98.5	-	98.7	100.0	-	97.1	98.8	-	98.5	98.6	98.8	98.2	96.9	-	98.1	100.0	98.1	50.0	-	98.1	98.2
Truck	19	0	15	-	34	0	0	7	14	-	21	9	27	314	72	-	422	0	245	1	-	246	723
% Truck	1.2	0.0	1.5	-	1.3	0.0	-	2.9	1.2	-	1.5	1.4	1.2	1.8	3.1	-	1.9	0.0	1.9	50.0	-	1.9	1.8
Ped	-	-	-	29	-	-	-	-	-	4	-	-	-	-	-	0	-	-	-	-	13	-	-
% Ped	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	100.0	-	-

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: Lake Victoria at PGA Blvd
Site Code:
Start Date: 04/24/2013

Turning Movement Peak Hour Data (8:00 AM)

Start Time	Lake Victoria Gardens Northbound					Lake Victoria Gardens Southbound						PGA Blvd Eastbound						PGA Blvd Westbound					
	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	Int. Total
8:00 AM	65	0	23	3	88	0	0	3	20	0	23	22	99	703	90	0	914	0	257	0	4	257	1282
8:15 AM	53	0	22	0	75	0	0	6	6	0	12	19	74	739	96	0	928	0	234	0	0	234	1249
8:30 AM	62	0	20	1	82	0	0	1	14	0	15	21	81	600	86	0	788	0	229	0	0	229	1114
8:45 AM	35	1	21	0	57	0	0	1	21	0	22	13	95	814	96	0	1018	0	218	0	0	218	1315
Total	215	1	86	4	302	0	0	11	61	0	72	75	349	2856	368	0	3648	0	938	0	4	938	4960
Approach %	71.2	0.3	28.5	-	-	0.0	0.0	15.3	84.7	-	-	2.1	9.6	78.3	10.1	-	-	0.0	100.0	0.0	-	-	-
Total %	4.3	0.0	1.7	-	6.1	0.0	0.0	0.2	1.2	-	1.5	1.5	7.0	57.6	7.4	-	73.5	0.0	18.9	0.0	-	18.9	-
PHF	0.827	0.250	0.935	-	0.858	0.000	0.000	0.458	0.726	-	0.783	0.852	0.881	0.877	0.958	-	0.896	0.000	0.912	0.000	-	0.912	0.943
Car	211	1	81	-	293	0	0	10	61	-	71	74	349	2800	351	-	3574	0	906	0	-	906	4844
% Car	98.1	100.0	94.2	-	97.0	-	-	90.9	100.0	-	98.6	98.7	100.0	98.0	95.4	-	98.0	-	96.6	-	-	96.6	97.7
Truck	4	0	5	-	9	0	0	1	0	-	1	1	0	56	17	-	74	0	32	0	-	32	116
% Truck	1.9	0.0	5.8	-	3.0	-	-	9.1	0.0	-	1.4	1.3	0.0	2.0	4.6	-	2.0	-	3.4	-	-	3.4	2.3
Ped	-	-	-	4	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	4	-	-
% Ped	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

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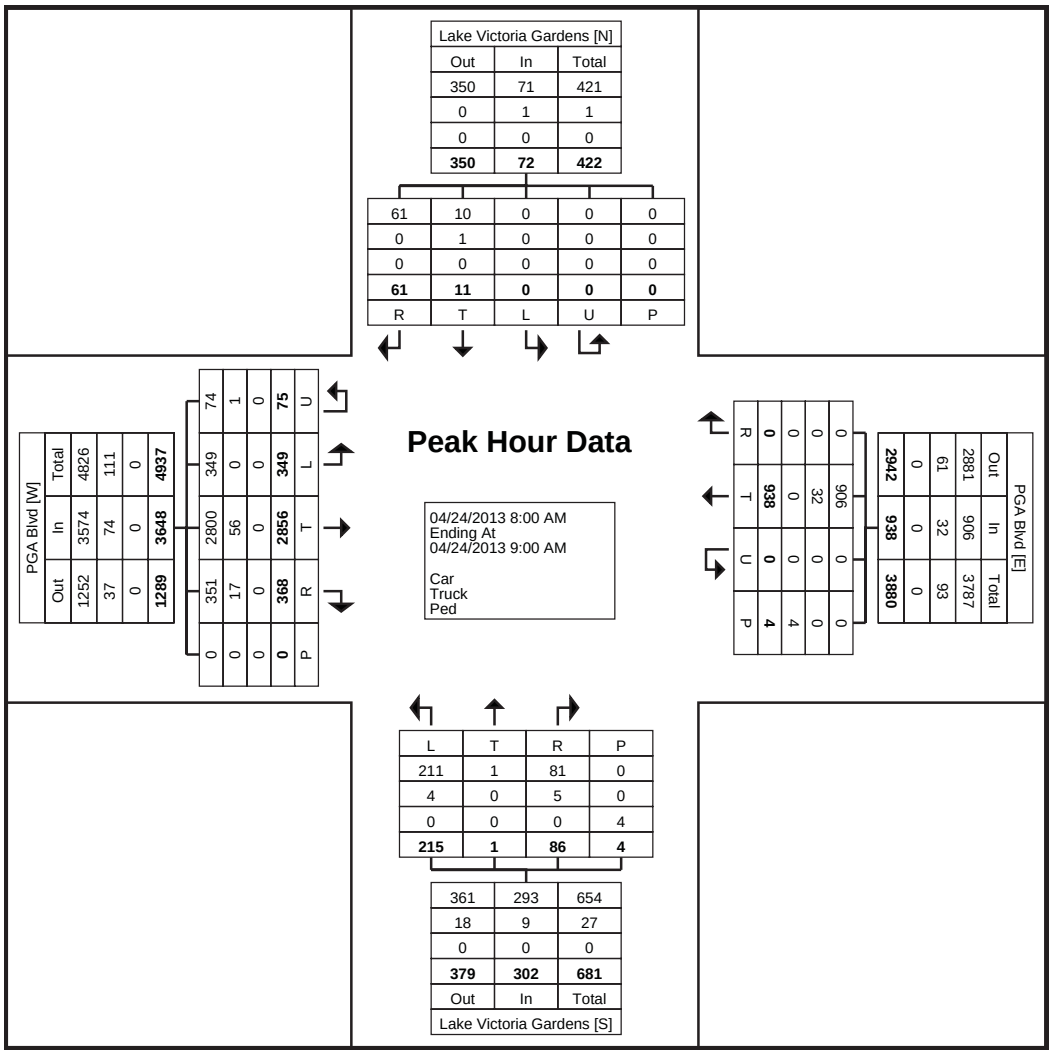
Count Name: Lake Victoria at PGA Blvd
Site Code:
Start Date: 04/24/2013



Turning Movement Peak Hour Data Plot (8:00 AM)

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: Lake Victoria at PGA Blvd
Site Code:
Start Date: 04/24/2013
Page No: 5

Turning Movement Peak Hour Data (12:00 PM)

Start Time	Lake Victoria Gardens Northbound					Lake Victoria Gardens Southbound					PGA Blvd Eastbound						PGA Blvd Westbound					
	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	Int. Total
12:00 PM	41	0	43	1	84	0	0	6	34	0	40	20	79	511	57	0	667	0	416	0	2	416	1207
12:15 PM	25	0	42	2	67	0	0	10	36	0	46	14	67	627	60	0	768	0	449	0	0	449	1330
12:30 PM	42	0	35	4	77	1	0	7	28	0	36	25	57	517	46	0	645	0	419	0	0	419	1177
12:45 PM	24	0	37	1	61	0	0	5	52	0	57	14	77	546	57	0	694	0	408	0	1	408	1220
Total	132	0	157	8	289	1	0	28	150	0	179	73	280	2201	220	0	2774	0	1692	0	3	1692	4934
Approach %	45.7	0.0	54.3	-	-	0.6	0.0	15.6	83.8	-	-	2.6	10.1	79.3	7.9	-	-	0.0	100.0	0.0	-	-	-
Total %	2.7	0.0	3.2	-	5.9	0.0	0.0	0.6	3.0	-	3.6	1.5	5.7	44.6	4.5	-	56.2	0.0	34.3	0.0	-	34.3	-
PHF	0.786	0.000	0.913	-	0.860	0.250	0.000	0.700	0.721	-	0.785	0.730	0.886	0.878	0.917	-	0.903	0.000	0.942	0.000	-	0.942	0.927
Car	131	0	156	-	287	1	0	27	146	-	174	72	278	2147	210	-	2707	0	1652	0	-	1652	4820
% Car	99.2	-	99.4	-	99.3	100.0	-	96.4	97.3	-	97.2	98.6	99.3	97.5	95.5	-	97.6	-	97.6	-	-	97.6	97.7
Truck	1	0	1	-	2	0	0	1	4	-	5	1	2	54	10	-	67	0	40	0	-	40	114
% Truck	0.8	-	0.6	-	0.7	0.0	-	3.6	2.7	-	2.8	1.4	0.7	2.5	4.5	-	2.4	-	2.4	-	-	2.4	2.3
Ped	-	-	-	8	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	3	-	-
% Ped	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

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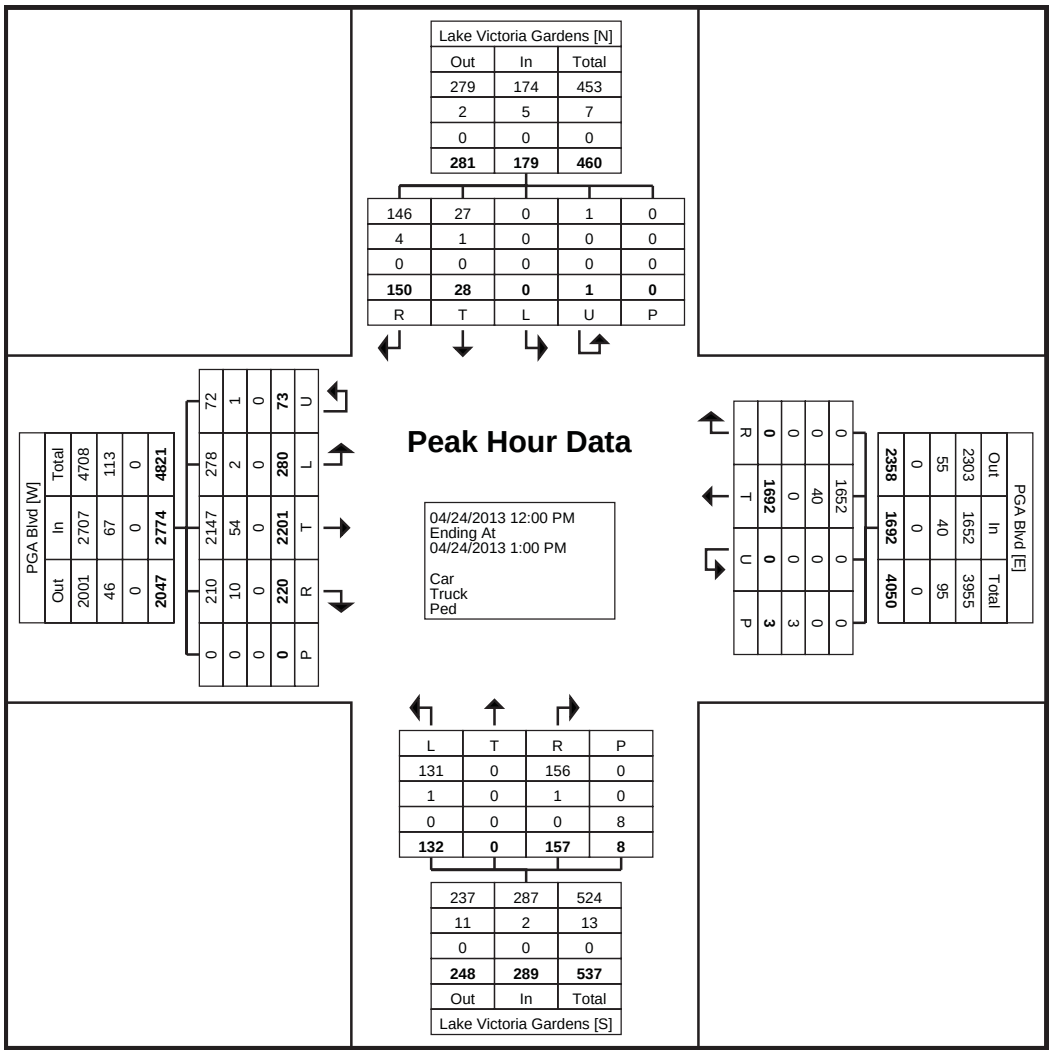
Count Name: Lake Victoria at PGA Blvd
Site Code:
Start Date: 04/24/2013



Turning Movement Peak Hour Data Plot (12:00 PM)

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: Lake Victoria at PGA Blvd
Site Code:
Start Date: 04/24/2013

Turning Movement Peak Hour Data (4:45 PM)

Start Time	Lake Victoria Gardens Northbound					Lake Victoria Gardens Southbound					PGA Blvd Eastbound						PGA Blvd Westbound					
	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	Int. Total
4:45 PM	57	0	36	0	93	0	0	7	32	0	39	36	71	593	81	0	781	0	585	0	0	585	1498
5:00 PM	78	0	30	0	108	0	0	20	75	0	95	45	86	471	90	0	692	0	572	0	0	572	1467
5:15 PM	82	0	33	0	115	0	0	14	66	0	80	26	85	610	101	0	822	0	638	0	1	638	1655
5:30 PM	83	0	30	1	113	0	0	6	57	0	63	41	117	574	101	0	833	0	615	0	0	615	1624
Total	300	0	129	1	429	0	0	47	230	0	277	148	359	2248	373	0	3128	0	2410	0	1	2410	6244
Approach %	69.9	0.0	30.1	-	-	0.0	0.0	17.0	83.0	-	-	4.7	11.5	71.9	11.9	-	-	0.0	100.0	0.0	-	-	-
Total %	4.8	0.0	2.1	-	6.9	0.0	0.0	0.8	3.7	-	4.4	2.4	5.7	36.0	6.0	-	50.1	0.0	38.6	0.0	-	38.6	-
PHF	0.904	0.000	0.896	-	0.933	0.000	0.000	0.588	0.767	-	0.729	0.822	0.767	0.921	0.923	-	0.939	0.000	0.944	0.000	-	0.944	0.943
Car	300	0	129	-	429	0	0	47	228	-	275	148	355	2235	366	-	3104	0	2379	0	-	2379	6187
% Car	100.0	-	100.0	-	100.0	-	-	100.0	99.1	-	99.3	100.0	98.9	99.4	98.1	-	99.2	-	98.7	-	-	98.7	99.1
Truck	0	0	0	-	0	0	0	0	2	-	2	0	4	13	7	-	24	0	31	0	-	31	57
% Truck	0.0	-	0.0	-	0.0	-	-	0.0	0.9	-	0.7	0.0	1.1	0.6	1.9	-	0.8	-	1.3	-	-	1.3	0.9
Ped	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	1	-	-
% Ped	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

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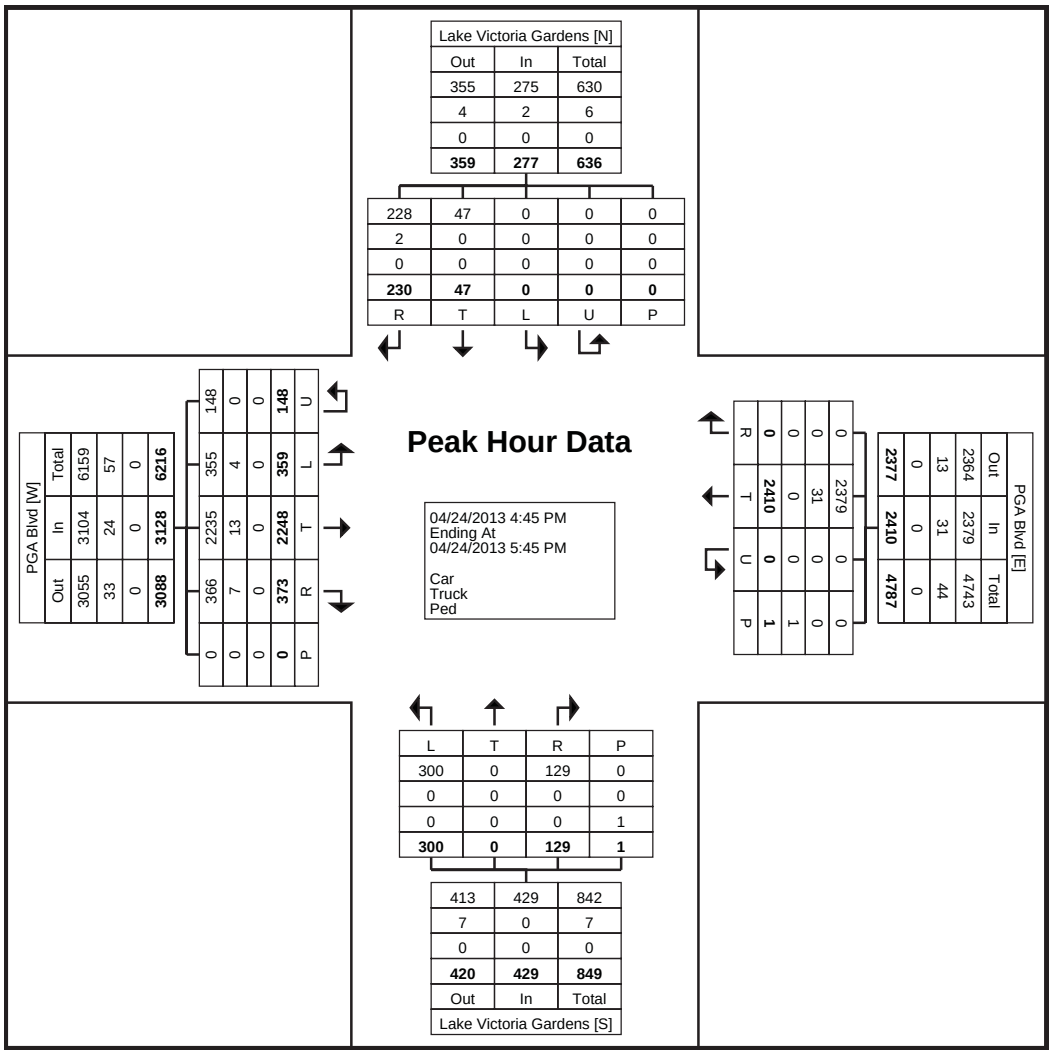
Count Name: Lake Victoria at PGA Blvd
Site Code:
Start Date: 04/24/2013



Turning Movement Peak Hour Data Plot (4:45 PM)

Appendix B - Data Collection

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: Central Blvd at PGA Blvd
Site Code:
Start Date: 04/23/2013

Turning Movement Data

Start Time	Central Blvd Northbound						Central Blvd Southbound						PGA Blvd Eastbound						PGA Blvd Westbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
7:00 AM	0	1	2	5	0	8	0	13	0	52	1	65	0	82	231	2	0	315	0	2	173	38	0	213	601
7:15 AM	0	1	3	8	0	12	0	30	0	86	1	116	0	87	275	4	0	366	0	2	201	87	0	290	784
7:30 AM	0	1	4	3	0	8	0	121	0	144	0	265	0	139	414	3	0	556	0	3	229	179	0	411	1240
7:45 AM	0	4	4	8	0	16	0	159	2	165	0	326	0	128	429	6	0	563	0	3	263	108	0	374	1279
Hourly Total	0	7	13	24	0	44	0	323	2	447	2	772	0	436	1349	15	0	1800	0	10	866	412	0	1288	3904
8:00 AM	0	1	3	6	1	10	0	79	0	157	0	236	1	99	377	2	0	479	1	7	275	68	1	351	1076
8:15 AM	0	2	7	9	1	18	0	32	1	100	0	133	2	100	431	1	0	534	0	3	299	49	0	351	1036
8:30 AM	0	4	3	11	0	18	0	49	3	78	0	130	0	98	369	4	0	471	0	5	233	77	0	315	934
8:45 AM	0	6	4	14	1	24	0	63	2	102	0	167	0	107	343	3	1	453	0	9	217	80	1	306	950
Hourly Total	0	13	17	40	3	70	0	223	6	437	0	666	3	404	1520	10	1	1937	1	24	1024	274	2	1323	3996
9:00 AM	0	6	3	15	0	24	0	106	3	83	0	192	0	111	373	8	0	492	1	7	242	68	0	318	1026
9:15 AM	0	8	4	9	1	21	1	91	6	73	0	171	1	87	283	3	0	374	0	6	213	41	0	260	826
9:30 AM	0	7	0	11	0	18	0	28	0	58	0	86	3	69	298	7	0	377	0	6	195	33	1	234	715
9:45 AM	0	5	2	14	0	21	0	29	3	64	0	96	2	71	302	5	0	380	0	6	282	31	0	319	816
Hourly Total	0	26	9	49	1	84	1	254	12	278	0	545	6	338	1256	23	0	1623	1	25	932	173	1	1131	3383
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM	0	7	1	9	2	17	0	20	3	52	0	75	4	52	253	1	0	310	0	12	199	26	1	237	639
11:15 AM	0	10	1	12	3	23	0	26	1	71	0	98	1	46	269	4	0	320	0	9	202	26	0	237	678
11:30 AM	0	10	4	8	0	22	1	27	1	52	0	81	5	56	290	3	0	354	0	10	232	29	0	271	728
11:45 AM	0	3	2	12	1	17	1	39	1	78	0	119	4	45	322	5	0	376	1	11	208	23	0	243	755
Hourly Total	0	30	8	41	6	79	2	112	6	253	0	373	14	199	1134	13	0	1360	1	42	841	104	1	988	2800
12:00 PM	0	5	3	12	2	20	0	37	1	60	0	98	3	57	314	4	0	378	4	16	241	28	0	289	785
12:15 PM	0	4	0	6	0	10	0	32	0	53	0	85	7	55	300	4	0	366	1	10	207	35	0	253	714
12:30 PM	0	11	0	10	2	21	0	37	0	62	0	99	7	49	317	7	0	380	2	13	233	28	1	276	776
12:45 PM	0	5	0	8	2	13	0	38	2	54	0	94	2	53	294	5	0	354	2	8	303	26	0	339	800
Hourly Total	0	25	3	36	6	64	0	144	3	229	0	376	19	214	1225	20	0	1478	9	47	984	117	1	1157	3075
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00 PM	0	2	3	11	0	16	1	66	3	75	0	145	2	64	261	3	0	330	0	9	273	38	0	320	811
3:15 PM	0	6	2	11	1	19	0	54	2	98	0	154	2	74	265	5	0	346	1	13	268	33	0	315	834
3:30 PM	0	6	5	16	0	27	0	35	5	77	0	117	5	60	303	3	0	371	0	18	314	73	0	405	920
3:45 PM	0	5	0	10	0	15	0	46	2	84	0	132	1	87	287	2	0	377	0	12	297	105	0	414	938
Hourly Total	0	19	10	48	1	77	1	201	12	334	0	548	10	285	1116	13	0	1424	1	52	1152	249	0	1454	3503
4:00 PM	0	4	2	5	0	11	0	117	1	96	0	214	1	66	293	2	0	362	0	7	314	53	0	374	961
4:15 PM	0	6	3	6	0	15	0	103	1	105	0	209	1	63	267	1	0	332	1	8	388	57	1	454	1010
4:30 PM	0	4	4	5	1	13	0	62	5	83	1	150	4	88	317	2	0	411	1	10	335	46	4	392	966
4:45 PM	0	5	4	10	0	19	0	54	2	95	0	151	1	83	310	3	0	397	0	8	377	48	0	433	1000
Hourly Total	0	19	13	26	1	58	0	336	9	379	1	724	7	300	1187	8	0	1502	2	33	1414	204	5	1653	3937
5:00 PM	0	3	2	11	1	16	0	63	2	113	0	178	2	88	398	6	0	494	0	12	404	57	0	473	1161
5:15 PM	0	9	4	8	2	21	0	60	0	116	0	176	6	75	396	8	0	485	1	12	438	60	1	511	1193
5:30 PM	0	9	3	8	2	20	0	57	3	131	1	191	3	81	374	6	0	464	0	15	470	78	0	563	1238
5:45 PM	0	7	2	4	3	13	0	67	1	114	0	182	2	93	397	6	0	498	0	8	401	46	0	455	1148
Hourly Total	0	28	11	31	8	70	0	247	6	474	1	727	13	337	1565	26	0	1941	1	47	1713	241	1	2002	4740
Grand Total	0	167	84	295	26	546	4	1840	56	2831	4	4731	72	2513	10352	128	1	13065	16	280	8926	1774	11	10996	29338
Approach %	0.0	30.6	15.4	54.0	-	-	0.1	38.9	1.2	59.8	-	-	0.6	19.2	79.2	1.0	-	-	0.1	2.5	81.2	16.1	-	-	-
Total %	0.0	0.6	0.3	1.0	-	1.9	0.0	6.3	0.2	9.6	-	16.1	0.2	8.6	35.3	0.4	-	44.5	0.1	1.0	30.4	6.0	-	37.5	-
Car	0	164	83	285	-	532	4	1773	55	2716	-	4548	69	2389	10138	123	-	12719	16	276	8742	1709	-	10743	28542
% Car	-	98.2	98.8	96.6	-	97.4	100.0	96.4	98.2	95.9	-	96.1	95.8	95.1	97.9	96.1	-	97.4	100.0	98.6	97.9	96.3	-	97.7	97.3
Truck	0	3	1	10	-	14	0	67	1	115	-	183	3	124	214	5	-	346	0	4	184	65	-	253	796
% Truck	-	1.8	1.2	3.4	-	2.6	0.0	3.6	1.8	4.1	-	3.9	4.2	4.9	2.1	3.9	-	2.6	0.0	1.4	2.1	3.7	-	2.3	2.7
Ped	-	-	-	-	26	-	-	-	-	-	4	-	-	-	-	-	1	-	-	-	-	-	11	-	-
% Ped	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

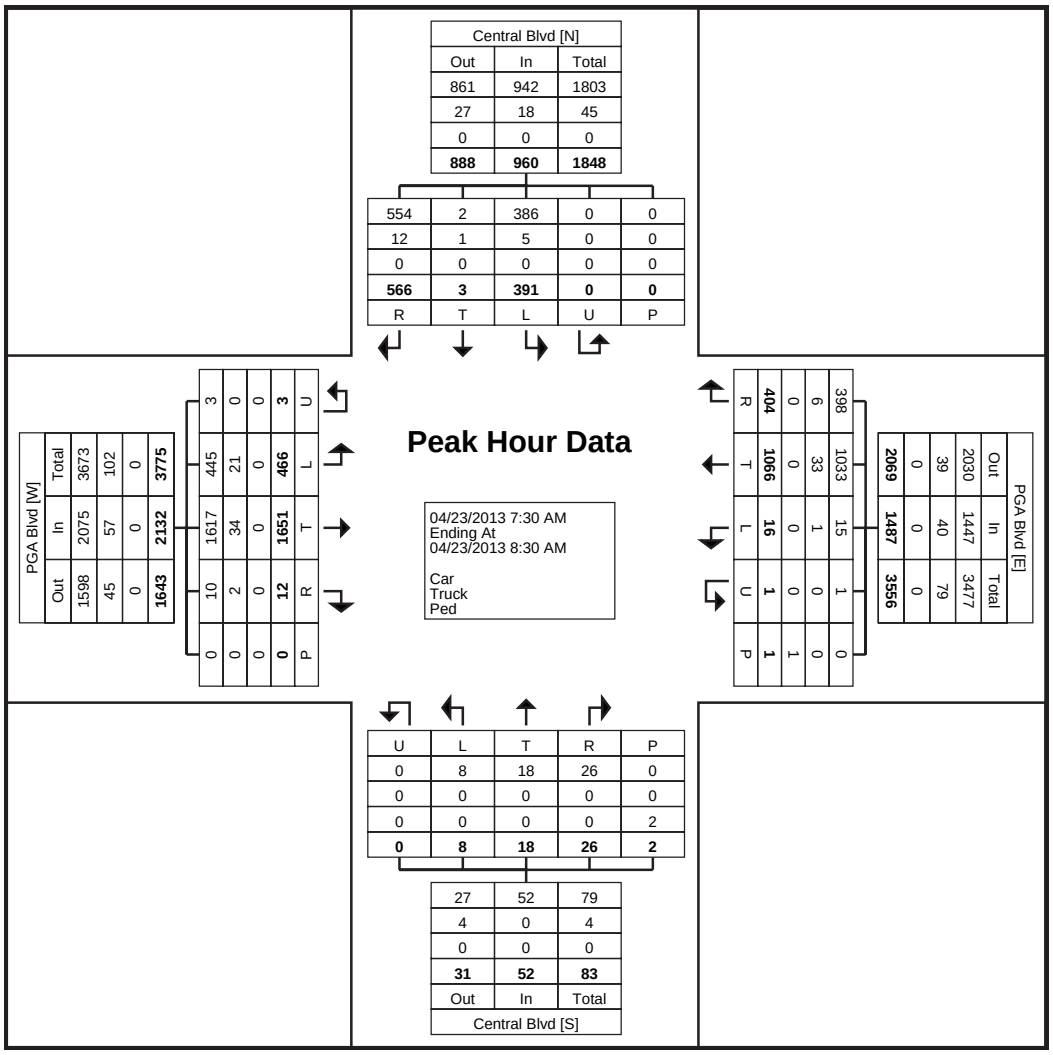
Count Name: Central Blvd at PGA Blvd
Site Code:
Start Date: 04/23/2013
Page No: 3

Turning Movement Peak Hour Data (7:30 AM)

Start Time	Central Blvd Northbound						Central Blvd Southbound						PGA Blvd Eastbound						PGA Blvd Westbound						
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	Int. Total
7:30 AM	0	1	4	3	0	8	0	121	0	144	0	265	0	139	414	3	0	556	0	3	229	179	0	411	1240
7:45 AM	0	4	4	8	0	16	0	159	2	165	0	326	0	128	429	6	0	563	0	3	263	108	0	374	1279
8:00 AM	0	1	3	6	1	10	0	79	0	157	0	236	1	99	377	2	0	479	1	7	275	68	1	351	1076
8:15 AM	0	2	7	9	1	18	0	32	1	100	0	133	2	100	431	1	0	534	0	3	299	49	0	351	1036
Total	0	8	18	26	2	52	0	391	3	566	0	960	3	466	1651	12	0	2132	1	16	1066	404	1	1487	4631
Approach %	0.0	15.4	34.6	50.0	-	-	0.0	40.7	0.3	59.0	-	-	0.1	21.9	77.4	0.6	-	-	0.1	1.1	71.7	27.2	-	-	-
Total %	0.0	0.2	0.4	0.6	-	1.1	0.0	8.4	0.1	12.2	-	20.7	0.1	10.1	35.7	0.3	-	46.0	0.0	0.3	23.0	8.7	-	32.1	-
PHF	0.000	0.500	0.643	0.722	-	0.722	0.000	0.615	0.375	0.858	-	0.736	0.375	0.838	0.958	0.500	-	0.947	0.250	0.571	0.891	0.564	-	0.905	0.905
Car	0	8	18	26	-	52	0	386	2	554	-	942	3	445	1617	10	-	2075	1	15	1033	398	-	1447	4516
% Car	-	100.0	100.0	100.0	-	100.0	-	98.7	66.7	97.9	-	98.1	100.0	95.5	97.9	83.3	-	97.3	100.0	93.8	96.9	98.5	-	97.3	97.5
Truck	0	0	0	0	-	0	0	5	1	12	-	18	0	21	34	2	-	57	0	1	33	6	-	40	115
% Truck	-	0.0	0.0	0.0	-	0.0	-	1.3	33.3	2.1	-	1.9	0.0	4.5	2.1	16.7	-	2.7	0.0	6.3	3.1	1.5	-	2.7	2.5
Ped	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-
% Ped	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: Central Blvd at PGA Blvd
Site Code:
Start Date: 04/23/2013



Turning Movement Peak Hour Data Plot (7:30 AM)

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

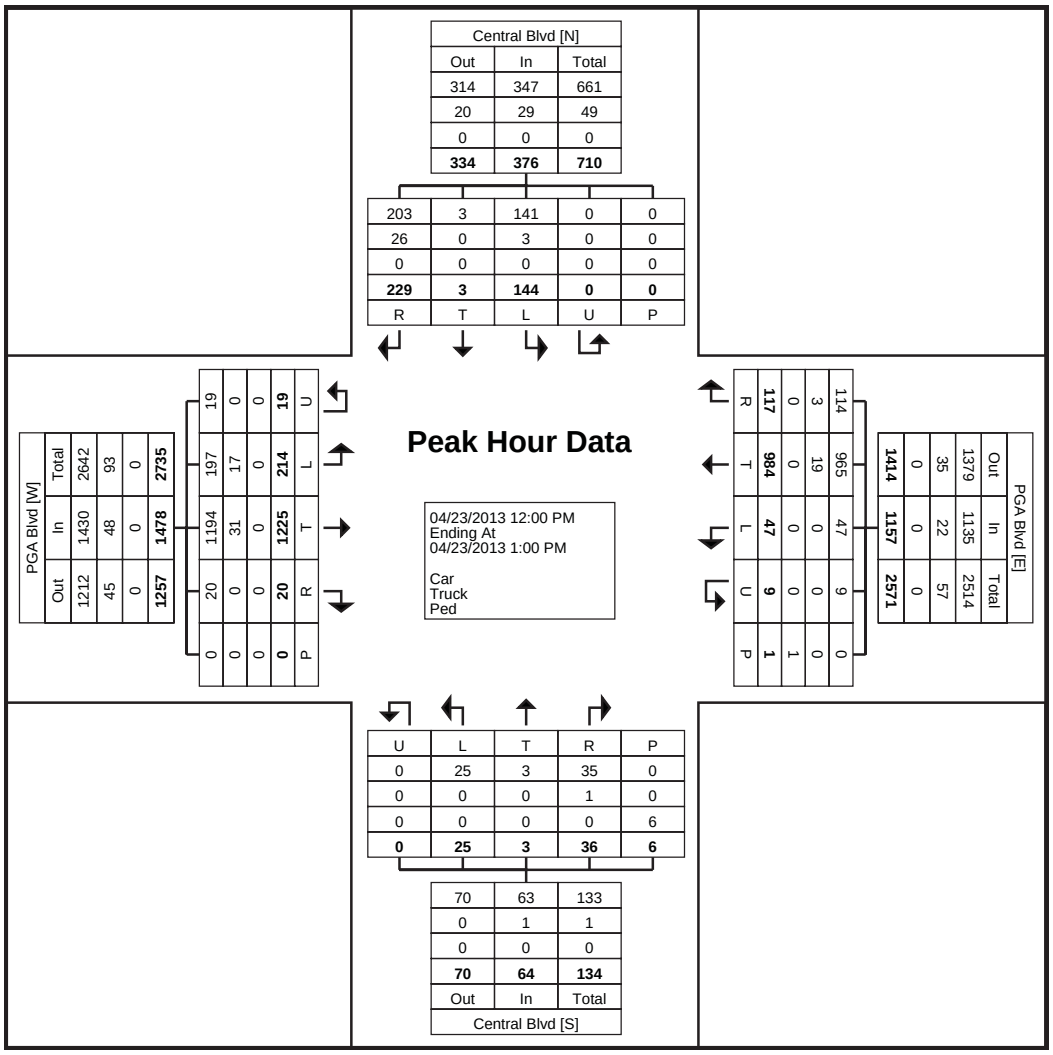
Count Name: Central Blvd at PGA Blvd
Site Code:
Start Date: 04/23/2013
Page No: 5

Turning Movement Peak Hour Data (12:00 PM)

Start Time	Central Blvd Northbound						Central Blvd Southbound						PGA Blvd Eastbound						PGA Blvd Westbound						
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	Int. Total
12:00 PM	0	5	3	12	2	20	0	37	1	60	0	98	3	57	314	4	0	378	4	16	241	28	0	289	785
12:15 PM	0	4	0	6	0	10	0	32	0	53	0	85	7	55	300	4	0	366	1	10	207	35	0	253	714
12:30 PM	0	11	0	10	2	21	0	37	0	62	0	99	7	49	317	7	0	380	2	13	233	28	1	276	776
12:45 PM	0	5	0	8	2	13	0	38	2	54	0	94	2	53	294	5	0	354	2	8	303	26	0	339	800
Total	0	25	3	36	6	64	0	144	3	229	0	376	19	214	1225	20	0	1478	9	47	984	117	1	1157	3075
Approach %	0.0	39.1	4.7	56.3	-	-	0.0	38.3	0.8	60.9	-	-	1.3	14.5	82.9	1.4	-	-	0.8	4.1	85.0	10.1	-	-	-
Total %	0.0	0.8	0.1	1.2	-	2.1	0.0	4.7	0.1	7.4	-	12.2	0.6	7.0	39.8	0.7	-	48.1	0.3	1.5	32.0	3.8	-	37.6	-
PHF	0.000	0.568	0.250	0.750	-	0.762	0.000	0.947	0.375	0.923	-	0.949	0.679	0.939	0.966	0.714	-	0.972	0.563	0.734	0.812	0.836	-	0.853	0.961
Car	0	25	3	35	-	63	0	141	3	203	-	347	19	197	1194	20	-	1430	9	47	965	114	-	1135	2975
% Car	-	100.0	100.0	97.2	-	98.4	-	97.9	100.0	88.6	-	92.3	100.0	92.1	97.5	100.0	-	96.8	100.0	100.0	98.1	97.4	-	98.1	96.7
Truck	0	0	0	1	-	1	0	3	0	26	-	29	0	17	31	0	-	48	0	0	19	3	-	22	100
% Truck	-	0.0	0.0	2.8	-	1.6	-	2.1	0.0	11.4	-	7.7	0.0	7.9	2.5	0.0	-	3.2	0.0	0.0	1.9	2.6	-	1.9	3.3
Ped	-	-	-	-	6	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-
% Ped	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: Central Blvd at PGA Blvd
Site Code:
Start Date: 04/23/2013



Turning Movement Peak Hour Data Plot (12:00 PM)

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

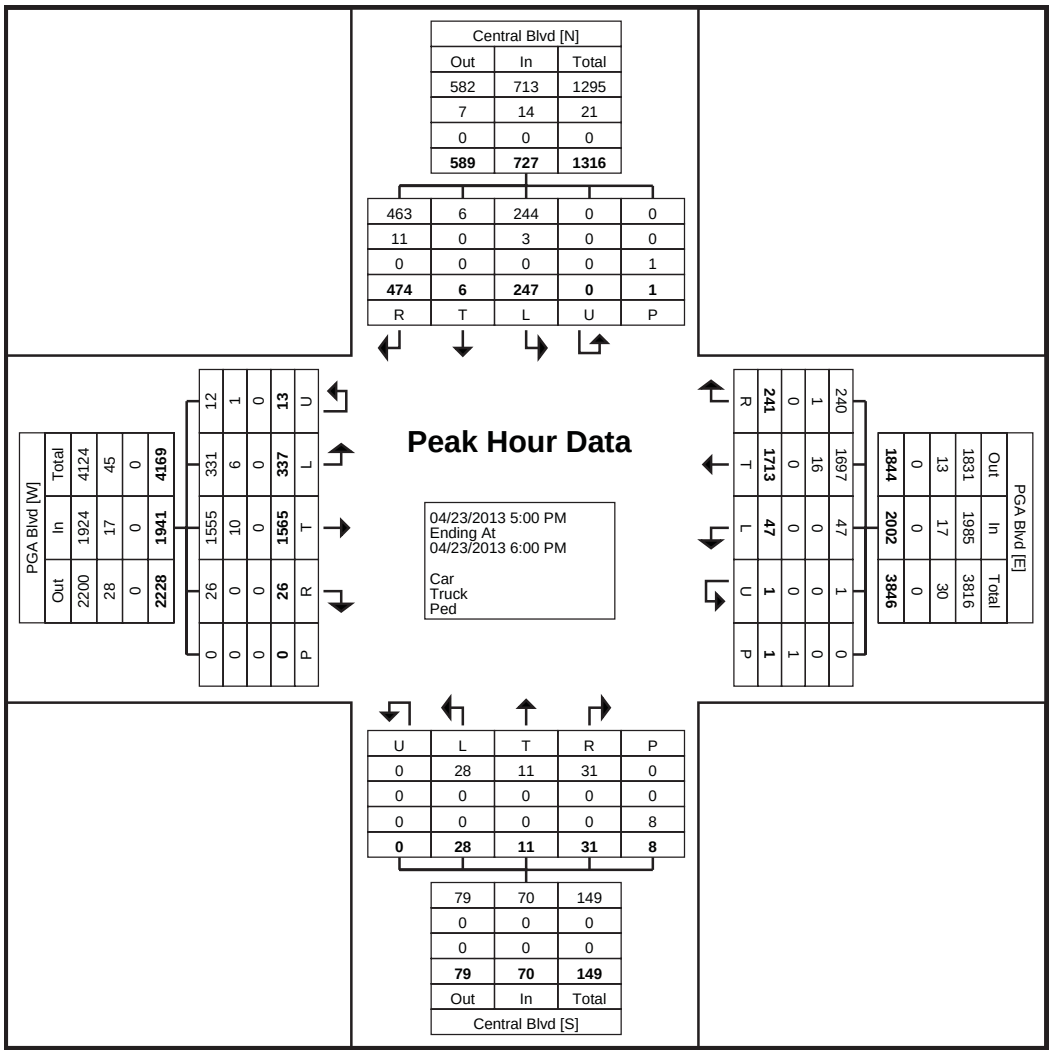
Count Name: Central Blvd at PGA Blvd
Site Code:
Start Date: 04/23/2013

Turning Movement Peak Hour Data (5:00 PM)

Start Time	Central Blvd Northbound						Central Blvd Southbound						PGA Blvd Eastbound						PGA Blvd Westbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
5:00 PM	0	3	2	11	1	16	0	63	2	113	0	178	2	88	398	6	0	494	0	12	404	57	0	473	1161
5:15 PM	0	9	4	8	2	21	0	60	0	116	0	176	6	75	396	8	0	485	1	12	438	60	1	511	1193
5:30 PM	0	9	3	8	2	20	0	57	3	131	1	191	3	81	374	6	0	464	0	15	470	78	0	563	1238
5:45 PM	0	7	2	4	3	13	0	67	1	114	0	182	2	93	397	6	0	498	0	8	401	46	0	455	1148
Total	0	28	11	31	8	70	0	247	6	474	1	727	13	337	1565	26	0	1941	1	47	1713	241	1	2002	4740
Approach %	0.0	40.0	15.7	44.3	-	-	0.0	34.0	0.8	65.2	-	-	0.7	17.4	80.6	1.3	-	-	0.0	2.3	85.6	12.0	-	-	-
Total %	0.0	0.6	0.2	0.7	-	1.5	0.0	5.2	0.1	10.0	-	15.3	0.3	7.1	33.0	0.5	-	40.9	0.0	1.0	36.1	5.1	-	42.2	-
PHF	0.000	0.778	0.688	0.705	-	0.833	0.000	0.922	0.500	0.905	-	0.952	0.542	0.906	0.983	0.813	-	0.974	0.250	0.783	0.911	0.772	-	0.889	0.957
Car	0	28	11	31	-	70	0	244	6	463	-	713	12	331	1555	26	-	1924	1	47	1697	240	-	1985	4692
% Car	-	100.0	100.0	100.0	-	100.0	-	98.8	100.0	97.7	-	98.1	92.3	98.2	99.4	100.0	-	99.1	100.0	100.0	99.1	99.6	-	99.2	99.0
Truck	0	0	0	0	-	0	0	3	0	11	-	14	1	6	10	0	-	17	0	0	16	1	-	17	48
% Truck	-	0.0	0.0	0.0	-	0.0	-	1.2	0.0	2.3	-	1.9	7.7	1.8	0.6	0.0	-	0.9	0.0	0.0	0.9	0.4	-	0.8	1.0
Ped	-	-	-	-	8	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	1	-	-
% Ped	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: Central Blvd at PGA Blvd
Site Code:
Start Date: 04/23/2013



Turning Movement Peak Hour Data Plot (5:00 PM)

Appendix B - Data Collection

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: Fl Turnpike at PGA Blvd
Site Code:
Start Date: 04/23/2013

Turning Movement Data

Start Time	FL Turnpike Northbound						FL Turnpike Southbound						PGA Blvd Eastbound						PGA Blvd Westbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
7:00 AM	0	6	11	72	0	89	0	131	11	18	0	160	0	25	92	8	0	125	1	32	93	92	0	218	592
7:15 AM	0	4	17	84	0	105	0	130	21	23	0	174	0	19	139	15	0	173	0	44	115	110	0	269	721
7:30 AM	0	11	18	132	0	161	0	245	30	33	0	308	0	36	205	9	0	250	0	51	148	126	0	325	1044
7:45 AM	0	6	19	117	1	142	0	233	30	24	0	287	2	33	193	14	0	242	4	73	180	148	0	405	1076
Hourly Total	0	27	65	405	1	497	0	739	92	98	0	929	2	113	629	46	0	790	5	200	536	476	0	1217	3433
8:00 AM	0	8	17	82	0	107	0	207	45	23	0	275	0	39	159	9	0	207	1	104	221	129	1	455	1044
8:15 AM	1	14	12	112	0	139	0	264	43	13	0	320	1	30	159	16	0	206	1	96	162	104	0	363	1028
8:30 AM	0	12	16	104	0	132	0	269	36	8	0	313	0	29	138	15	0	182	0	87	136	93	0	316	943
8:45 AM	0	11	17	124	0	152	0	226	24	9	0	259	0	18	140	18	0	176	0	87	145	84	0	316	903
Hourly Total	1	45	62	422	0	530	0	966	148	53	0	1167	1	116	596	58	0	771	2	374	664	410	1	1450	3918
9:00 AM	0	9	17	104	0	130	0	175	21	42	0	238	1	11	149	16	0	177	1	62	151	85	0	299	844
9:15 AM	0	15	11	91	0	117	0	139	24	20	0	183	2	25	133	21	0	181	1	80	112	75	0	268	749
9:30 AM	0	9	19	100	0	128	0	121	18	24	0	163	1	13	104	12	0	130	0	63	115	71	0	249	670
9:45 AM	0	13	14	103	0	130	0	119	17	23	0	159	0	19	115	15	0	149	1	68	105	57	0	231	669
Hourly Total	0	46	61	398	0	505	0	554	80	109	0	743	4	68	501	64	0	637	3	273	483	288	0	1047	2932
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM	0	10	14	93	0	117	0	73	11	16	0	100	0	25	129	18	0	172	1	44	118	65	0	228	617
11:15 AM	0	20	13	83	0	116	0	72	7	22	0	101	5	18	127	15	0	165	0	58	124	75	1	257	639
11:30 AM	0	16	11	126	0	153	0	74	11	12	0	97	3	18	125	16	0	162	0	79	128	74	0	281	693
11:45 AM	0	12	10	120	0	142	0	77	8	19	0	104	1	11	154	20	0	186	1	68	156	62	0	287	719
Hourly Total	0	58	48	422	0	528	0	296	37	69	0	402	9	72	535	69	0	685	2	249	526	276	1	1053	2668
12:00 PM	0	31	14	139	0	184	0	75	6	13	0	94	3	14	146	34	0	197	1	77	154	64	0	296	771
12:15 PM	1	21	25	122	0	169	0	86	12	17	0	115	0	19	134	19	0	172	0	72	117	59	0	248	704
12:30 PM	0	20	20	124	0	164	0	64	14	21	0	99	0	17	144	23	0	184	0	85	146	72	0	303	750
12:45 PM	1	16	17	119	0	153	0	69	10	21	0	100	0	23	129	15	0	167	0	76	157	70	0	303	723
Hourly Total	2	88	76	504	0	670	0	294	42	72	0	408	3	73	553	91	0	720	1	310	574	265	0	1150	2948
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00 PM	0	12	18	100	1	130	0	73	8	27	0	108	0	25	116	9	0	150	0	60	175	102	0	337	725
3:15 PM	0	14	24	85	1	123	0	112	8	31	0	151	0	25	140	14	0	179	0	76	187	100	0	363	816
3:30 PM	0	12	17	94	0	123	0	101	13	30	0	144	0	29	136	11	0	176	0	70	173	110	0	353	796
3:45 PM	0	16	21	108	0	145	0	86	10	34	0	130	0	18	146	17	0	181	2	83	192	109	0	386	842
Hourly Total	0	54	80	387	2	521	0	372	39	122	0	533	0	97	538	51	0	686	2	289	727	421	0	1439	3179
4:00 PM	2	13	31	102	0	148	0	111	9	28	0	148	3	26	134	17	0	180	1	63	145	144	0	353	829
4:15 PM	0	19	28	100	0	147	0	85	10	39	0	134	0	32	123	12	0	167	0	90	228	189	0	507	955
4:30 PM	0	11	45	114	0	170	0	108	14	40	0	162	0	30	130	11	0	171	0	60	186	152	2	398	901
4:45 PM	0	17	48	139	0	204	0	116	17	35	0	168	4	31	118	12	0	165	0	91	226	165	0	482	1019
Hourly Total	2	60	152	455	0	669	0	420	50	142	0	612	7	119	505	52	0	683	1	304	785	650	2	1740	3704
5:00 PM	0	17	56	203	0	276	0	103	11	36	0	150	0	35	155	13	0	203	0	77	214	212	0	503	1132
5:15 PM	1	11	42	148	0	202	0	132	11	34	0	177	1	35	168	15	0	219	1	99	248	234	0	582	1180
5:30 PM	0	16	44	139	0	199	0	129	19	33	0	181	4	40	171	15	0	230	2	104	224	252	0	582	1192
5:45 PM	0	8	41	149	1	198	0	136	10	42	0	188	1	27	147	19	0	194	1	96	262	220	0	579	1159
Hourly Total	1	52	183	639	1	875	0	500	51	145	0	696	6	137	641	62	0	846	4	376	948	918	0	2246	4663
Grand Total	6	430	727	3632	4	4795	0	4141	539	810	0	5490	32	795	4498	493	0	5818	20	2375	5243	3704	4	11342	27445
Approach %	0.1	9.0	15.2	75.7	-	-	0.0	75.4	9.8	14.8	-	-	0.6	13.7	77.3	8.5	-	-	0.2	20.9	46.2	32.7	-	-	-
Total %	0.0	1.6	2.6	13.2	-	17.5	0.0	15.1	2.0	3.0	-	20.0	0.1	2.9	16.4	1.8	-	21.2	0.1	8.7	19.1	13.5	-	41.3	-
Car	6	422	714	3587	-	4729	0	3958	527	790	-	5275	30	762	4391	485	-	5668	20	2347	5121	3545	-	11033	26705
% Car	100.0	98.1	98.2	98.8	-	98.6	-	95.6	97.8	97.5	-	96.1	93.8	95.8	97.6	98.4	-	97.4	100.0	98.8	97.7	95.7	-	97.3	97.3
Truck	0	8	13	45	-	66	0	183	12	20	-	215	2	33	107	8	-	150	0	28	122	159	-	309	740
% Truck	0.0	1.9	1.8	1.2	-	1.4	-	4.4	2.2	2.5	-	3.9	6.3	4.2	2.4	1.6	-	2.6	0.0	1.2	2.3	4.3	-	2.7	2.7
Ped	-	-	-	-	4	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	4	-	-
% Ped	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: Fl Turnpike at PGA Blvd
Site Code:
Start Date: 04/23/2013
Page No: 3

Turning Movement Peak Hour Data (7:30 AM)

Start Time	FL Turnpike Northbound						FL Turnpike Southbound						PGA Blvd Eastbound						PGA Blvd Westbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
7:30 AM	0	11	18	132	0	161	0	245	30	33	0	308	0	36	205	9	0	250	0	51	148	126	0	325	1044
7:45 AM	0	6	19	117	1	142	0	233	30	24	0	287	2	33	193	14	0	242	4	73	180	148	0	405	1076
8:00 AM	0	8	17	82	0	107	0	207	45	23	0	275	0	39	159	9	0	207	1	104	221	129	1	455	1044
8:15 AM	1	14	12	112	0	139	0	264	43	13	0	320	1	30	159	16	0	206	1	96	162	104	0	363	1028
Total	1	39	66	443	1	549	0	949	148	93	0	1190	3	138	716	48	0	905	6	324	711	507	1	1548	4192
Approach %	0.2	7.1	12.0	80.7	-	-	0.0	79.7	12.4	7.8	-	-	0.3	15.2	79.1	5.3	-	-	0.4	20.9	45.9	32.8	-	-	-
Total %	0.0	0.9	1.6	10.6	-	13.1	0.0	22.6	3.5	2.2	-	28.4	0.1	3.3	17.1	1.1	-	21.6	0.1	7.7	17.0	12.1	-	36.9	-
PHF	0.250	0.696	0.868	0.839	-	0.852	0.000	0.899	0.822	0.705	-	0.930	0.375	0.885	0.873	0.750	-	0.905	0.375	0.779	0.804	0.856	-	0.851	0.974
Car	1	38	65	440	-	544	0	907	147	93	-	1147	3	134	699	45	-	881	6	319	688	488	-	1501	4073
% Car	100.0	97.4	98.5	99.3	-	99.1	-	95.6	99.3	100.0	-	96.4	100.0	97.1	97.6	93.8	-	97.3	100.0	98.5	96.8	96.3	-	97.0	97.2
Truck	0	1	1	3	-	5	0	42	1	0	-	43	0	4	17	3	-	24	0	5	23	19	-	47	119
% Truck	0.0	2.6	1.5	0.7	-	0.9	-	4.4	0.7	0.0	-	3.6	0.0	2.9	2.4	6.3	-	2.7	0.0	1.5	3.2	3.7	-	3.0	2.8
Ped	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-
% Ped	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

FTE (Florida Transportation Engineering)
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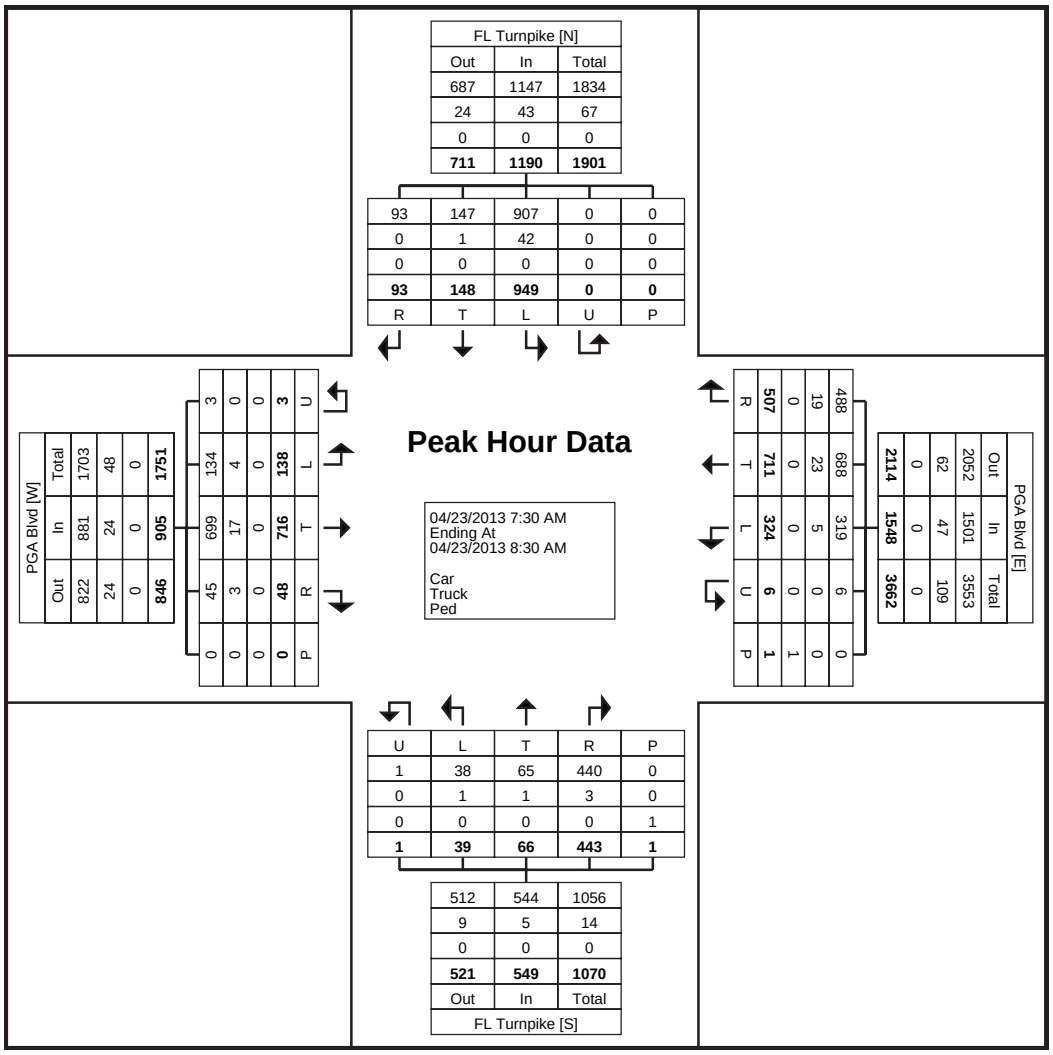
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: Fl Turnpike at PGA Blvd
Site Code:
Start Date: 04/23/2013



Turning Movement Peak Hour Data Plot (7:30 AM)

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

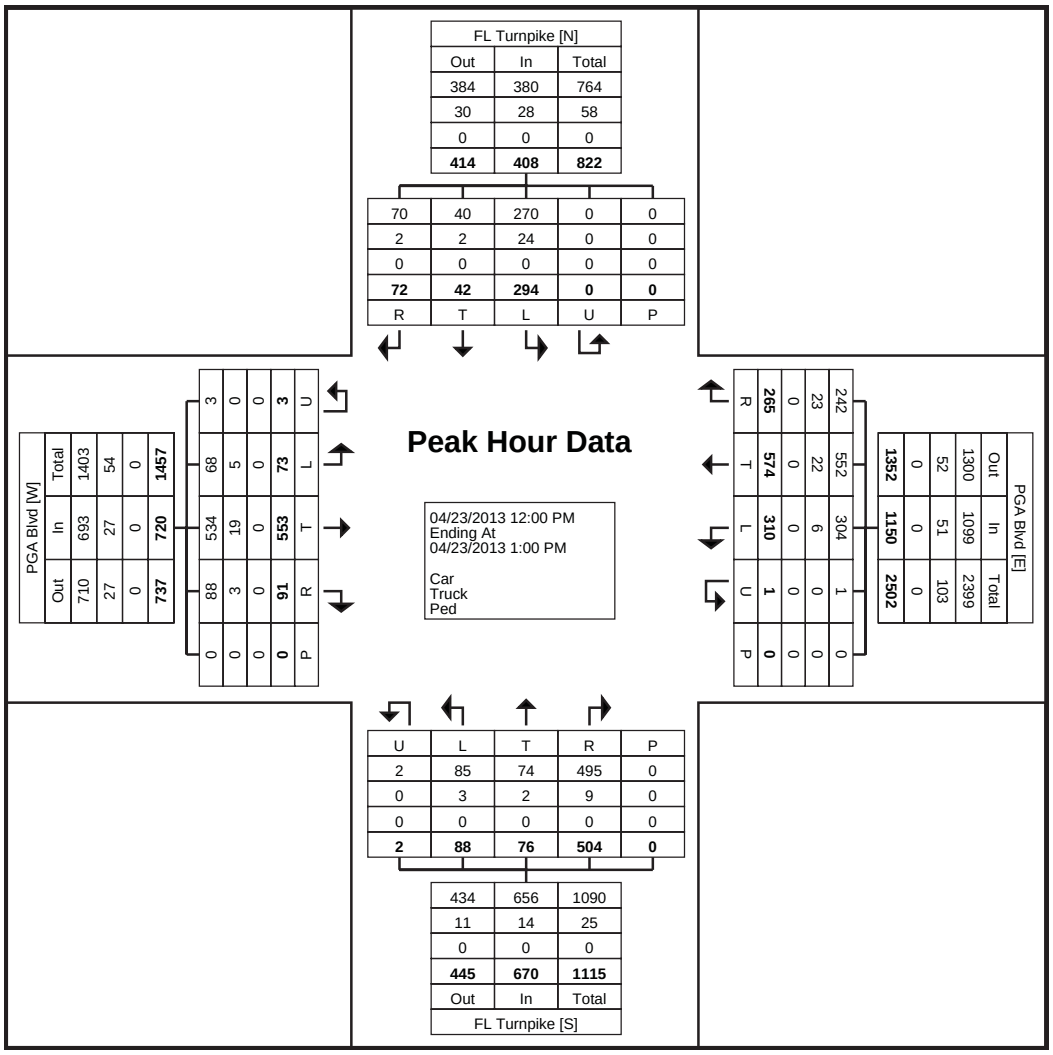
Count Name: Fl Turnpike at PGA Blvd
Site Code:
Start Date: 04/23/2013
Page No: 5

Turning Movement Peak Hour Data (12:00 PM)

Start Time	FL Turnpike Northbound						FL Turnpike Southbound						PGA Blvd Eastbound						PGA Blvd Westbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
12:00 PM	0	31	14	139	0	184	0	75	6	13	0	94	3	14	146	34	0	197	1	77	154	64	0	296	771
12:15 PM	1	21	25	122	0	169	0	86	12	17	0	115	0	19	134	19	0	172	0	72	117	59	0	248	704
12:30 PM	0	20	20	124	0	164	0	64	14	21	0	99	0	17	144	23	0	184	0	85	146	72	0	303	750
12:45 PM	1	16	17	119	0	153	0	69	10	21	0	100	0	23	129	15	0	167	0	76	157	70	0	303	723
Total	2	88	76	504	0	670	0	294	42	72	0	408	3	73	553	91	0	720	1	310	574	265	0	1150	2948
Approach %	0.3	13.1	11.3	75.2	-	-	0.0	72.1	10.3	17.6	-	-	0.4	10.1	76.8	12.6	-	-	0.1	27.0	49.9	23.0	-	-	-
Total %	0.1	3.0	2.6	17.1	-	22.7	0.0	10.0	1.4	2.4	-	13.8	0.1	2.5	18.8	3.1	-	24.4	0.0	10.5	19.5	9.0	-	39.0	-
PHF	0.500	0.710	0.760	0.906	-	0.910	0.000	0.855	0.750	0.857	-	0.887	0.250	0.793	0.947	0.669	-	0.914	0.250	0.912	0.914	0.920	-	0.949	0.956
Car	2	85	74	495	-	656	0	270	40	70	-	380	3	68	534	88	-	693	1	304	552	242	-	1099	2828
% Car	100.0	96.6	97.4	98.2	-	97.9	-	91.8	95.2	97.2	-	93.1	100.0	93.2	96.6	96.7	-	96.3	100.0	98.1	96.2	91.3	-	95.6	95.9
Truck	0	3	2	9	-	14	0	24	2	2	-	28	0	5	19	3	-	27	0	6	22	23	-	51	120
% Truck	0.0	3.4	2.6	1.8	-	2.1	-	8.2	4.8	2.8	-	6.9	0.0	6.8	3.4	3.3	-	3.8	0.0	1.9	3.8	8.7	-	4.4	4.1
Ped	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Ped	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: Fl Turnpike at PGA Blvd
Site Code:
Start Date: 04/23/2013



Turning Movement Peak Hour Data Plot (12:00 PM)

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

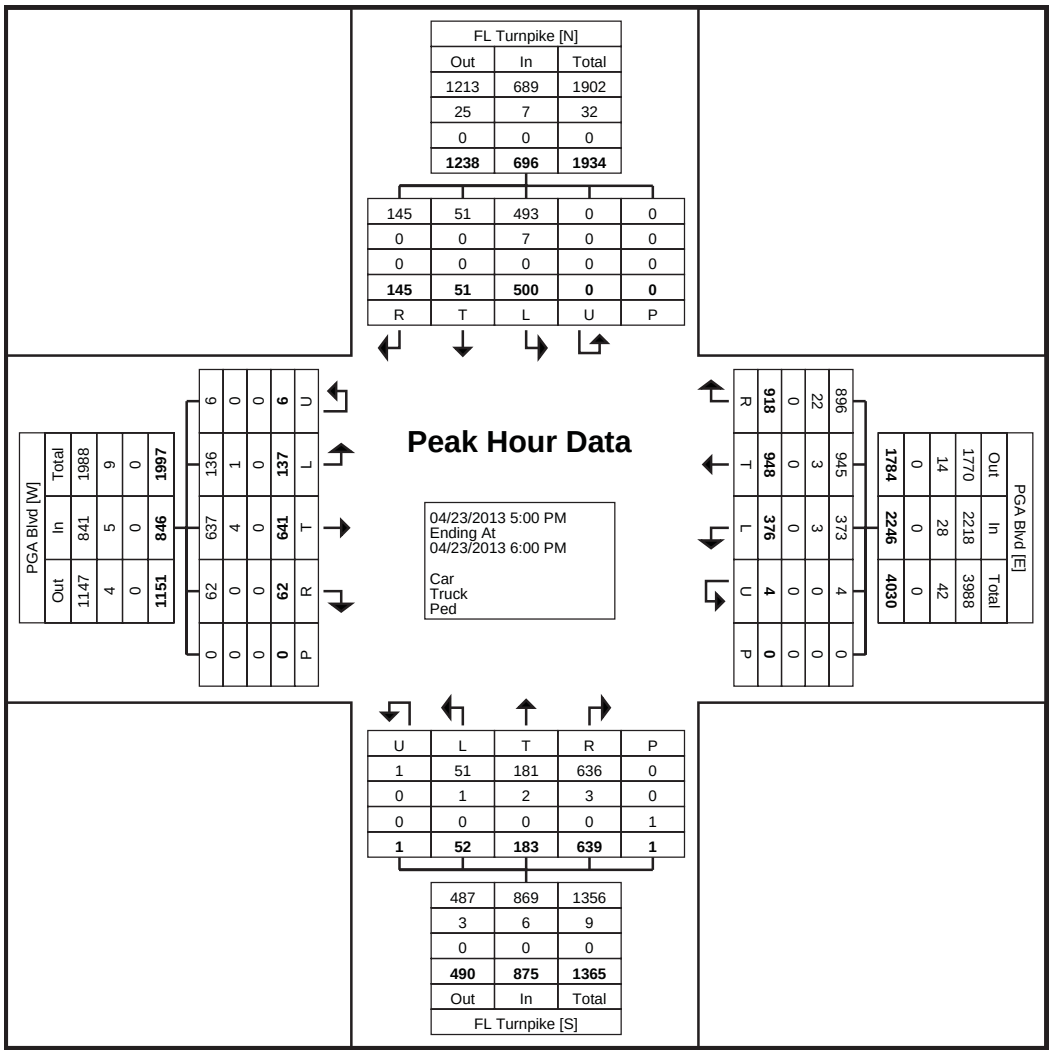
Count Name: Fl Turnpike at PGA Blvd
Site Code:
Start Date: 04/23/2013
Page No: 7

Turning Movement Peak Hour Data (5:00 PM)

Start Time	FL Turnpike Northbound						FL Turnpike Southbound						PGA Blvd Eastbound						PGA Blvd Westbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
5:00 PM	0	17	56	203	0	276	0	103	11	36	0	150	0	35	155	13	0	203	0	77	214	212	0	503	1132
5:15 PM	1	11	42	148	0	202	0	132	11	34	0	177	1	35	168	15	0	219	1	99	248	234	0	582	1180
5:30 PM	0	16	44	139	0	199	0	129	19	33	0	181	4	40	171	15	0	230	2	104	224	252	0	582	1192
5:45 PM	0	8	41	149	1	198	0	136	10	42	0	188	1	27	147	19	0	194	1	96	262	220	0	579	1159
Total	1	52	183	639	1	875	0	500	51	145	0	696	6	137	641	62	0	846	4	376	948	918	0	2246	4663
Approach %	0.1	5.9	20.9	73.0	-	-	0.0	71.8	7.3	20.8	-	-	0.7	16.2	75.8	7.3	-	-	0.2	16.7	42.2	40.9	-	-	-
Total %	0.0	1.1	3.9	13.7	-	18.8	0.0	10.7	1.1	3.1	-	14.9	0.1	2.9	13.7	1.3	-	18.1	0.1	8.1	20.3	19.7	-	48.2	-
PHF	0.250	0.765	0.817	0.787	-	0.793	0.000	0.919	0.671	0.863	-	0.926	0.375	0.856	0.937	0.816	-	0.920	0.500	0.904	0.905	0.911	-	0.965	0.978
Car	1	51	181	636	-	869	0	493	51	145	-	689	6	136	637	62	-	841	4	373	945	896	-	2218	4617
% Car	100.0	98.1	98.9	99.5	-	99.3	-	98.6	100.0	100.0	-	99.0	100.0	99.3	99.4	100.0	-	99.4	100.0	99.2	99.7	97.6	-	98.8	99.0
Truck	0	1	2	3	-	6	0	7	0	0	-	7	0	1	4	0	-	5	0	3	3	22	-	28	46
% Truck	0.0	1.9	1.1	0.5	-	0.7	-	1.4	0.0	0.0	-	1.0	0.0	0.7	0.6	0.0	-	0.6	0.0	0.8	0.3	2.4	-	1.2	1.0
Ped	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Ped	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: Fl Turnpike at PGA Blvd
Site Code:
Start Date: 04/23/2013



Turning Movement Peak Hour Data Plot (5:00 PM)

Appendix B - Data Collection

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: RCA at PGA Blvd
Site Code:
Start Date: 04/25/2013
Page No: 1

Turning Movement Data

Start Time	RCA Blvd Northbound			PGA Blvd Eastbound				PGA Blvd Westbound					
	Right	Peds	App. Total	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	Int. Total
7:00 AM	13	0	13	319	88	0	407	0	2	94	0	96	516
7:15 AM	13	0	13	555	155	0	710	0	2	136	0	138	861
7:30 AM	27	1	27	701	155	0	856	0	5	155	0	160	1043
7:45 AM	19	0	19	881	244	0	1125	0	5	143	0	148	1292
Hourly Total	72	1	72	2456	642	0	3098	0	14	528	0	542	3712
8:00 AM	28	0	28	833	207	0	1040	0	6	181	0	187	1255
8:15 AM	27	0	27	818	193	0	1011	0	4	164	0	168	1206
8:30 AM	20	1	20	847	204	0	1051	0	7	161	0	168	1239
8:45 AM	25	0	25	895	186	0	1081	0	10	151	0	161	1267
Hourly Total	100	1	100	3393	790	0	4183	0	27	657	0	684	4967
9:00 AM	16	0	16	721	146	0	867	0	10	155	0	165	1048
9:15 AM	25	0	25	761	87	0	848	2	6	168	0	176	1049
9:30 AM	21	0	21	583	78	0	661	0	9	136	0	145	827
9:45 AM	19	0	19	611	88	0	699	0	9	148	0	157	875
Hourly Total	81	0	81	2676	399	0	3075	2	34	607	0	643	3799
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM	30	0	30	552	55	0	607	3	9	233	0	245	882
11:15 AM	28	0	28	577	50	0	627	6	7	213	0	226	881
11:30 AM	21	0	21	709	64	0	773	7	9	215	0	231	1025
11:45 AM	35	0	35	689	51	0	740	11	14	284	0	309	1084
Hourly Total	114	0	114	2527	220	0	2747	27	39	945	0	1011	3872
12:00 PM	42	0	42	595	54	0	649	2	7	254	0	263	954
12:15 PM	31	0	31	659	43	0	702	2	6	293	0	301	1034
12:30 PM	29	0	29	661	50	0	711	5	8	302	0	315	1055
12:45 PM	25	0	25	663	77	0	740	7	13	292	0	312	1077
Hourly Total	127	0	127	2578	224	0	2802	16	34	1141	0	1191	4120
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00 PM	28	0	28	623	75	0	698	8	11	337	0	356	1082
3:15 PM	25	2	25	605	80	0	685	8	17	420	0	445	1155
3:30 PM	32	1	32	625	82	0	707	5	12	358	0	375	1114
3:45 PM	7	2	7	627	67	0	694	7	1	384	0	392	1093
Hourly Total	92	5	92	2480	304	0	2784	28	41	1499	0	1568	4444
4:00 PM	32	0	32	615	62	0	677	3	11	382	0	396	1105
4:15 PM	28	0	28	600	63	0	663	3	19	402	0	424	1115
4:30 PM	42	1	42	632	87	0	719	5	7	364	0	376	1137
4:45 PM	45	4	45	745	82	0	827	6	12	410	0	428	1300
Hourly Total	147	5	147	2592	294	0	2886	17	49	1558	0	1624	4657
5:00 PM	54	1	54	614	60	0	674	8	13	480	0	501	1229
5:15 PM	36	2	36	701	94	0	795	4	16	495	0	515	1346
5:30 PM	55	0	55	656	80	0	736	10	13	457	0	480	1271
5:45 PM	51	0	51	738	72	0	810	8	6	436	0	450	1311
Hourly Total	196	3	196	2709	306	0	3015	30	48	1868	0	1946	5157
Grand Total	929	15	929	21411	3179	0	24590	120	286	8803	0	9209	34728
Approach %	100.0	-	-	87.1	12.9	-	-	1.3	3.1	95.6	-	-	-
Total %	2.7	-	2.7	61.7	9.2	-	70.8	0.3	0.8	25.3	-	26.5	-
Car	918	-	918	21076	3122	-	24198	119	281	8673	-	9073	34189
% Car	98.8	-	98.8	98.4	98.2	-	98.4	99.2	98.3	98.5	-	98.5	98.4
Truck	11	-	11	335	57	-	392	1	5	130	-	136	539
% Truck	1.2	-	1.2	1.6	1.8	-	1.6	0.8	1.7	1.5	-	1.5	1.6
Ped	-	15	-	-	-	0	-	-	-	-	0	-	-
% Ped	-	100.0	-	-	-	-	-	-	-	-	-	-	-

FTE (Florida Transportation Engineering)
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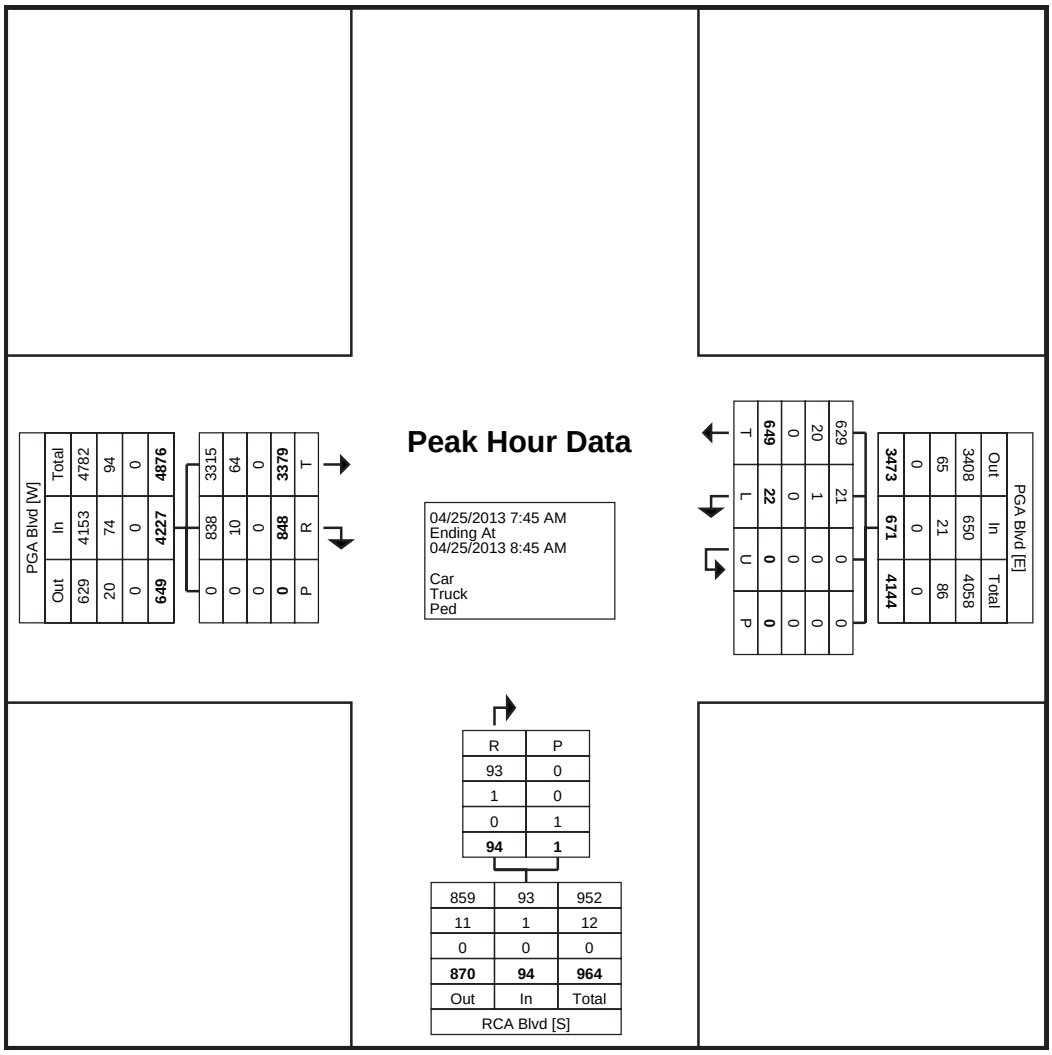
Count Name: RCA at PGA Blvd
Site Code:
Start Date: 04/25/2013
Page No: 3

Turning Movement Peak Hour Data (7:45 AM)

Start Time	RCA Blvd Northbound			PGA Blvd Eastbound				PGA Blvd Westbound					
	Right	Peds	App. Total	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	Int. Total
7:45 AM	19	0	19	881	244	0	1125	0	5	143	0	148	1292
8:00 AM	28	0	28	833	207	0	1040	0	6	181	0	187	1255
8:15 AM	27	0	27	818	193	0	1011	0	4	164	0	168	1206
8:30 AM	20	1	20	847	204	0	1051	0	7	161	0	168	1239
Total	94	1	94	3379	848	0	4227	0	22	649	0	671	4992
Approach %	100.0	-	-	79.9	20.1	-	-	0.0	3.3	96.7	-	-	-
Total %	1.9	-	1.9	67.7	17.0	-	84.7	0.0	0.4	13.0	-	13.4	-
PHF	0.839	-	0.839	0.959	0.869	-	0.939	0.000	0.786	0.896	-	0.897	0.966
Car	93	-	93	3315	838	-	4153	0	21	629	-	650	4896
% Car	98.9	-	98.9	98.1	98.8	-	98.2	-	95.5	96.9	-	96.9	98.1
Truck	1	-	1	64	10	-	74	0	1	20	-	21	96
% Truck	1.1	-	1.1	1.9	1.2	-	1.8	-	4.5	3.1	-	3.1	1.9
Ped	-	1	-	-	-	0	-	-	-	-	0	-	-
% Ped	-	100.0	-	-	-	-	-	-	-	-	-	-	-

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: RCA at PGA Blvd
Site Code:
Start Date: 04/25/2013
Page No: 4



Turning Movement Peak Hour Data Plot (7:45 AM)

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: RCA at PGA Blvd
Site Code:
Start Date: 04/25/2013
Page No: 5

Turning Movement Peak Hour Data (11:45 AM)

Start Time	RCA Blvd Northbound			PGA Blvd Eastbound				PGA Blvd Westbound					
	Right	Peds	App. Total	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	Int. Total
11:45 AM	35	0	35	689	51	0	740	11	14	284	0	309	1084
12:00 PM	42	0	42	595	54	0	649	2	7	254	0	263	954
12:15 PM	31	0	31	659	43	0	702	2	6	293	0	301	1034
12:30 PM	29	0	29	661	50	0	711	5	8	302	0	315	1055
Total	137	0	137	2604	198	0	2802	20	35	1133	0	1188	4127
Approach %	100.0	-	-	92.9	7.1	-	-	1.7	2.9	95.4	-	-	-
Total %	3.3	-	3.3	63.1	4.8	-	67.9	0.5	0.8	27.5	-	28.8	-
PHF	0.815	-	0.815	0.945	0.917	-	0.947	0.455	0.625	0.938	-	0.943	0.952
Car	133	-	133	2558	195	-	2753	20	33	1112	-	1165	4051
% Car	97.1	-	97.1	98.2	98.5	-	98.3	100.0	94.3	98.1	-	98.1	98.2
Truck	4	-	4	46	3	-	49	0	2	21	-	23	76
% Truck	2.9	-	2.9	1.8	1.5	-	1.7	0.0	5.7	1.9	-	1.9	1.8
Ped	-	0	-	-	-	0	-	-	-	-	0	-	-
% Ped	-	-	-	-	-	-	-	-	-	-	-	-	-

FTE (Florida Transportation Engineering)
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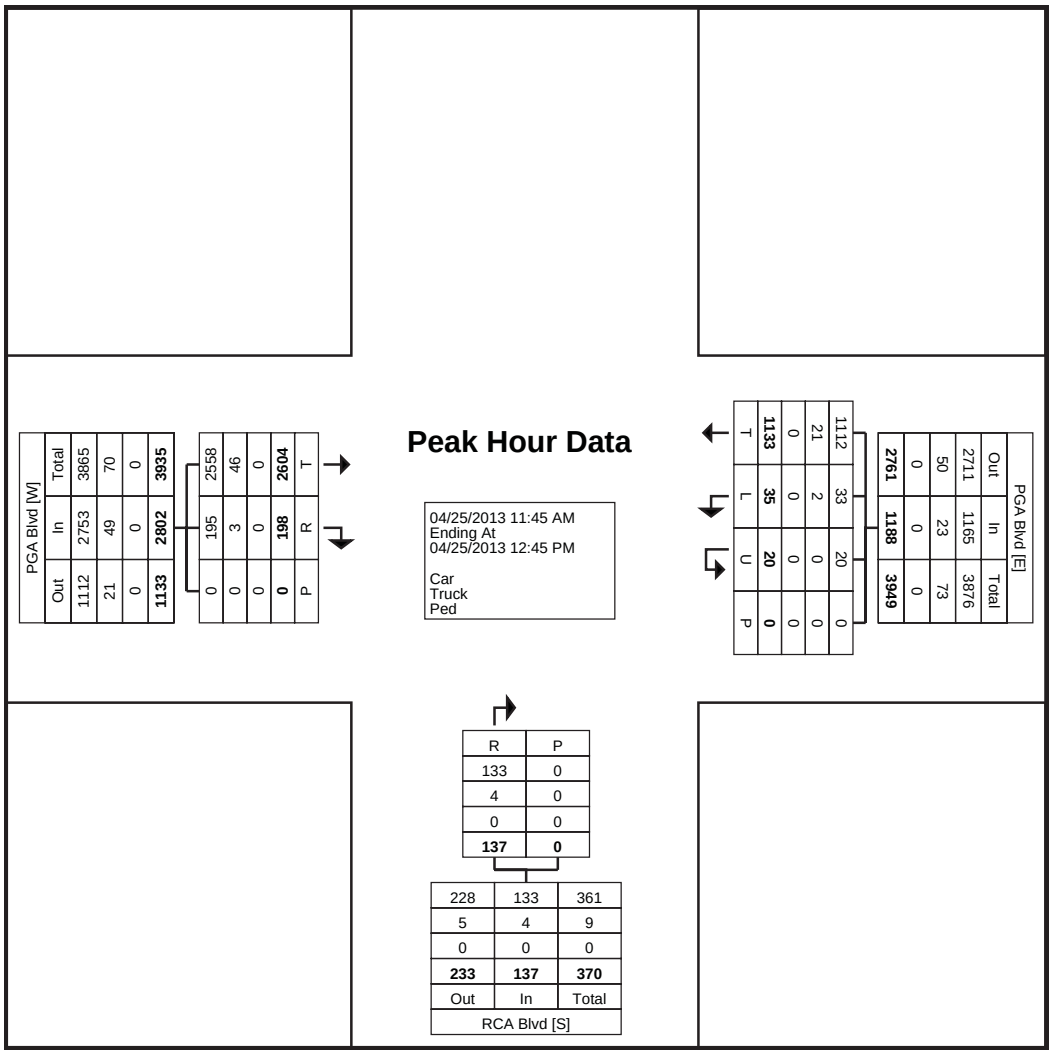
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: RCA at PGA Blvd
Site Code:
Start Date: 04/25/2013



Turning Movement Peak Hour Data Plot (11:45 AM)

FTE (Florida Transportation Engineering)
Fax# (941) 639-4851
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: RCA at PGA Blvd
Site Code:
Start Date: 04/25/2013
Page No: 7

Turning Movement Peak Hour Data (5:00 PM)

Start Time	RCA Blvd Northbound			PGA Blvd Eastbound				PGA Blvd Westbound					
	Right	Peds	App. Total	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	Int. Total
5:00 PM	54	1	54	614	60	0	674	8	13	480	0	501	1229
5:15 PM	36	2	36	701	94	0	795	4	16	495	0	515	1346
5:30 PM	55	0	55	656	80	0	736	10	13	457	0	480	1271
5:45 PM	51	0	51	738	72	0	810	8	6	436	0	450	1311
Total	196	3	196	2709	306	0	3015	30	48	1868	0	1946	5157
Approach %	100.0	-	-	89.9	10.1	-	-	1.5	2.5	96.0	-	-	-
Total %	3.8	-	3.8	52.5	5.9	-	58.5	0.6	0.9	36.2	-	37.7	-
PHF	0.891	-	0.891	0.918	0.814	-	0.931	0.750	0.750	0.943	-	0.945	0.958
Car	196	-	196	2689	302	-	2991	30	47	1858	-	1935	5122
% Car	100.0	-	100.0	99.3	98.7	-	99.2	100.0	97.9	99.5	-	99.4	99.3
Truck	0	-	0	20	4	-	24	0	1	10	-	11	35
% Truck	0.0	-	0.0	0.7	1.3	-	0.8	0.0	2.1	0.5	-	0.6	0.7
Ped	-	3	-	-	-	0	-	-	-	-	0	-	-
% Ped	-	100.0	-	-	-	-	-	-	-	-	-	-	-

FTE (Florida Transportation Engineering)
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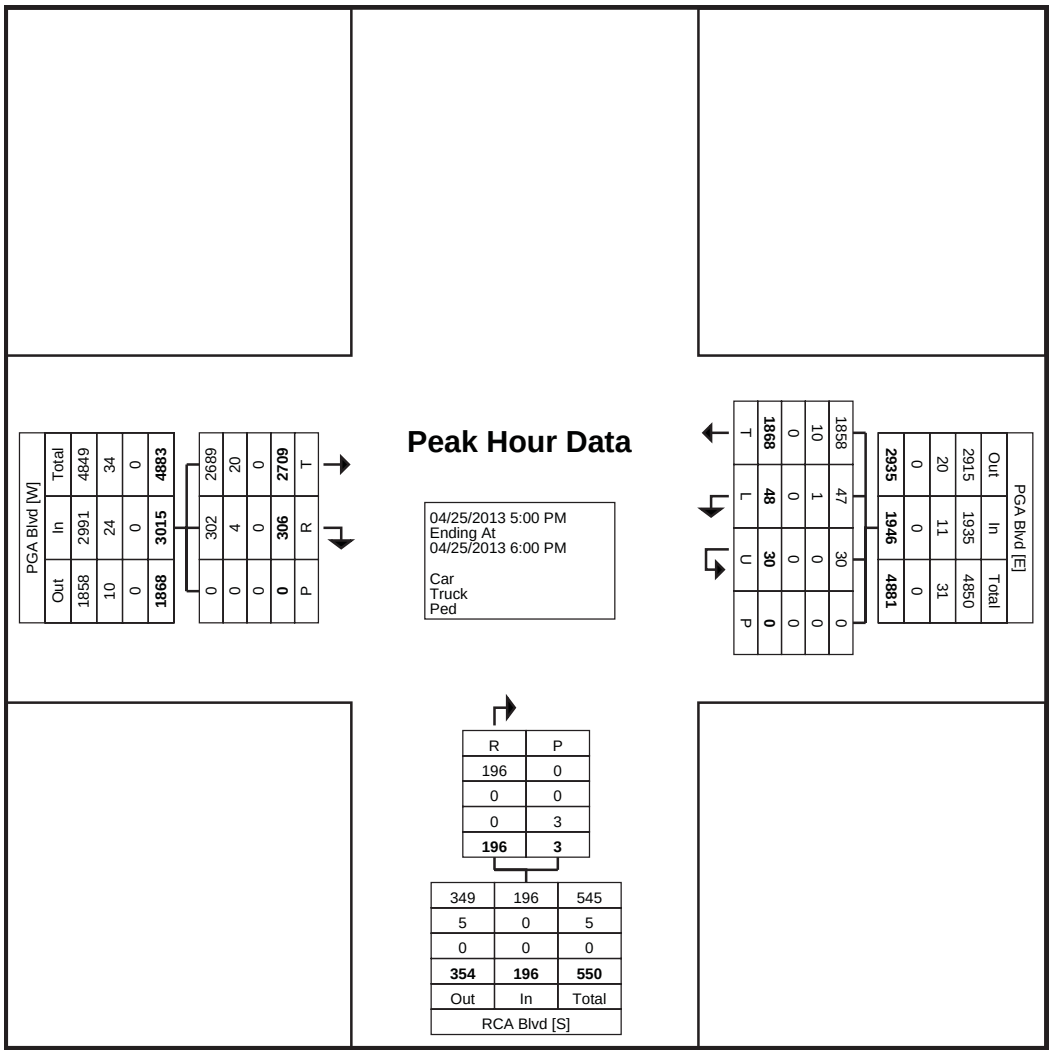
8250 Pascal Drive
Punta Gorda, Florida, United States 33950
Ph# (800) 639-4851

Count Name: RCA at PGA Blvd
Site Code:
Start Date: 04/25/2013



Turning Movement Peak Hour Data Plot (5:00 PM)

SIGNAL TIMING SHEETS

Appendix B - Data Collection

Palm Beach County **Signal Timing Sheet** **10/24/2012**

14300 : 435 - PGA Bl and FL Trunpike (Standard File)

Phase [1.1.1]

	1 (EL)	2 (WT)	3 (ST)	4 (NT)	5 (WL)	6 (ET)	7	8	9	10	11	12	13	14	15	16
Walk				7		7										
Ped Clearance				30		31										
Min Green	4	15	4	6	4	15										
Passage	2	4	4	2	2	4										
Max1	25	45	55	30	35	45										
Max2																
Yellow	4	4.5	4	4	4	4.5	4	4	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red	3	3.5	3.5	3.5	3.5	3										

Phase Option [1.1.2]

	1 (EL)	2 (WT)	3 (ST)	4 (NT)	5 (WL)	6 (ET)	7	8	9	10	11	12	13	14	15	16
Enable	ON	ON	ON	ON	ON	ON										
Auto Entry			ON													
Auto Exit		ON				ON										
Non Act1																
Non Act2																
Lock Call		ON				ON										
Min Recall		ON				ON										
Max Recall																
Ped Recall																
Dual Entry		ON		ON		ON		ON								
SimGap Enable																
Rest In Walk																

Detector, Vehicle Parameters 1-16 [5.1]

	1 (EBL1)	2 (WBT1)	3 (WBT2)	4 (SBL1)	5 (SBL2)	6 (SBT1)	7 (NBL1)	8 (NBT1)	9 (NBT2)	10 (WBL1)	11 (EBT1)	12 (EBT2)	13 (EBT3)	14	15	16
Call Phase	1	2	2	3	3	3	4	4	4	5	6	6	6	3		
Switch Phase										2						
Delay Time																

Detector, Vehicle Parameters 17-32 [5.1]

	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Call Phase																
Switch Phase																
Delay Time																

Detector, Vehicle Parameters 33-48 [5.1]

	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
Call Phase																
Switch Phase																
Delay Time																

Detector, Vehicle Parameters 49-64 [5.1]

	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
Call Phase																
Switch Phase																
Delay Time																

Appendix B - Data Collection

Approved By: Stephen Shreve **Date:** _____

Palm Beach County **System Timing Sheet** **10/24/2012**

14300 : 435 - PGA Bl and FL Trunpike (Standard File)

TB Coor, Day Plan [4.4]

Day Plan Table 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		6	9	16	20											
Minute		30														
Action	100	2	1	3	4											

Day Plan Table 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action	100															

Day Plan Table 3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action	100															

Coordination, Pattern 1-16 [2.1]/Coordination, Alt Tables+[2.6]

Pattern	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Cycle Time	110	170	180	100	110	120										
Offset Time	9	63	174	22	83	94										
Split Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Seq Number	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Ph Opt Alt																
Ph Time Alt																

Coordination, Splits [2.7.1]

Split Table 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	22	30	32	26	22	30		58								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	24	46	55	45	27	43		100								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	32	58	45	45	35	55		90								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	14	36	25	25	19	31		50								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	23	30	35	22	24	29		57								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

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Split Table 6	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	24	31	40	25	25	30		65								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Approved By: Stephen Shreve **Date:** _____

Palm Beach County **Preempt & Overlap Timing Sheet** **10/24/2012**

14300 : 435 - PGA Bl and FL Trunpike (Standard File)

Preemption Times[3.1]/Phases[3.2]/Options[3.3]

Channel	1	2	3	4	5	6
Lock Input						
Override Flash						
Override Higher						
Flash Dwell						
Link						
Delay						
Min Duration						
Min Green						
Min Walk						
Ped Clear						
Track Green						
Min Dwell						
Max Presence						
Track R1						
Track R2						
Track R3						
Track R4						
Dwell P1						
Dwell P2						
Dwell P3						
Dwell P4						
Dwell P5						
Dwell P6						
Dwell P7						
Dwell P8						
Dwell P9						
Dwell P10						
Dwell P11						
Dwell P12						
Dwell Ped1						
Dwell Ped2						
Dwell Ped3						
Dwell Ped4						
Dwell Ped5						
Dwell Ped6						
Dwell Ped7						
Dwell Ped8						
Exit R1						
Exit R2						
Exit R3						
Exit R4						

Preemption Times+[3.4]/Overlaps+[3.5]/Options+[3.6]

Preempt	1	2	3	4	5	6
Enable						
Type	EMERG	EMERG	EMERG	EMERG	EMERG	EMERG
Skip Track						
Volt Mon Flash						
Coord in Preempt						
Max2	ON					
Return Max/Min	MAX	MAX	MAX	MAX	MAX	MAX
Extend Dwell						
Pattern						
Output Mode	TS2	TS2	TS2	TS2	TS2	TS2
Track Over 1						
Track Over 2						
Track Over 3						
Track Over 4						
Track Over 5						
Track Over 6						
Track Over 7						
Track Over 8						
Track Over 9						
Track Over 10						
Track Over 11						
Track Over 12						
Dwell Over 1						
Dwell Over 2						
Dwell Over 3						
Dwell Over 4						
Dwell Over 5						
Dwell Over 6						
Dwell Over 7						
Dwell Over 8						
Dwell Over 9						
Dwell Over 10						
Dwell Over 11						
Dwell Over 12						
Ped Clear						
Yellow						
Red						
Return Min/Max						
Delay Inh						
Exit Time						
All Red B4						

Overlap Program Parameters [1.5.2.1]

Overlap	Included Phases	Modifer Phases	Type	Green	Yellow	Red
Overlap 1			NORMAL		3.5	1.5
Overlap 2	2		NORMAL	5	4	2
Overlap 3			NORMAL		3.5	1.5

Appendix B - Data Collection

Overlap 4																	NORMAL		3.5	1.5
Overlap 5																	NORMAL		3.5	1.5
Overlap 6																	NORMAL		3.5	1.5
Overlap 7																	NORMAL		3.5	1.5
Overlap 8																	NORMAL		3.5	1.5
Overlap 9																	NORMAL		3.5	1.5
Overlap 10																	NORMAL		3.5	1.5
Overlap 11	5																NORMAL		3.5	1.5
Overlap 12	2																NORMAL		4	2
Overlap 13																	NORMAL		3.5	1.5
Overlap 14																	NORMAL		3.5	1.5
Overlap 15																	NORMAL		3.5	1.5
Overlap 16																	NORMAL		3.5	1.5

Approved By: Stephen Shreve **Date:** _____

Palm Beach County **Alternate Timing Sheet** **10/24/2012**

14300 : 435 - PGA Bl and FL Trunpike (Standard File)

Alternate Phase Program 1, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5										
6										
7										
8										

Alternate Phase Program 2, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5										
6										
7										
8										

Alternate Phase Program 3, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5										
6										
7										
8										

Alternate Phase Program 4, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5										
6										
7										
8										

Alternate Phase Program 5, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5										
6										
7										
8										

TB Coor, Day Plan [4.4]

Day Plan Table 4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Hour																
Minute																
Action	100															

Day Plan Table 6	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Approved By: Stephen Shreve **Date:** _____

Palm Beach County **Special System Timing Sheet** **10/24/2012**

14300 : 435 - PGA Bl and FL Trunpike (Standard File)

Coordination, Splits [2.7.1]

Split Table 7	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 8	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 9	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 10	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 11	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 12	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 13	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 14	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 15	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Appendix B - Data Collection

Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 16	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Approved By: Stephen Shreve **Date:** _____

Appendix B - Data Collection

Palm Beach County **Signal Timing Sheet** **10/24/2012**

14301 : 450 - PGA Bl and Central Bl (Standard File)

Phase [1.1.1]

	1 (EL)	2 (WT)	3 (ST)	4 (NT)	5 (WL)	6 (ET)	7	8	9	10	11	12	13	14	15	16
Walk		7	7	7		7										
Ped Clearance		29	31	37		28										
Min Green	4	20	5	4	4	20										
Passage	2	4	3	2	2	4										
Max1	30	45	35	10	20	45										
Max2	25	45	20	15	15	45										
Yellow	4	4.5	4.5	4	4	4.5			3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red	3.5	2.5	4	4.5	3.5	2.5										

Phase Option [1.1.2]

	1 (EL)	2 (WT)	3 (ST)	4 (NT)	5 (WL)	6 (ET)	7	8	9	10	11	12	13	14	15	16
Enable	ON	ON	ON	ON	ON	ON										
Auto Entry				ON												
Auto Exit		ON				ON										
Non Act1																
Non Act2																
Lock Call		ON				ON										
Min Recall		ON				ON										
Max Recall																
Ped Recall																
Dual Entry		ON				ON										
SimGap Enable																
Rest In Walk																

Detector, Vehicle Parameters 1-16 [5.1]

	1 (EBL1)	2 (WBT1)	3 (SBT1)	4 (NBT1)	5 (WBL1)	6 (EBT1)	7	8	9	10	11	12	13	14	15	16
Call Phase	1	2	3	4	5	6	7	8								
Switch Phase																
Delay Time																

Detector, Vehicle Parameters 17-32 [5.1]

	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Call Phase																
Switch Phase																
Delay Time																

Detector, Vehicle Parameters 33-48 [5.1]

	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
Call Phase																
Switch Phase																
Delay Time																

Detector, Vehicle Parameters 49-64 [5.1]

	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
Call Phase																
Switch Phase																
Delay Time																

Appendix B - Data Collection

Approved By: Stephen Shreve **Date:** _____

Palm Beach County **System Timing Sheet** **10/24/2012**

14301 : 450 - PGA Bl and Central Bl (Standard File)

TB Coor, Day Plan [4.4]

Day Plan Table 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		6	9	16	20											
Minute		30														
Action	100	2	1	3	4											

Day Plan Table 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		8	11	19												
Minute																
Action	100	4	1	4												

Day Plan Table 3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		8	11	19												
Minute																
Action	100	4	1	4												

Coordination, Pattern 1-16 [2.1]/Coordination, Alt Tables+[2.6]

Pattern	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Cycle Time	110	170	180	100							140	150	140	130	110	120
Offset Time	57		140	71							73	137	68		43	46
Split Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Seq Number	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	3
Ph Opt Alt																
Ph Time Alt																

Coordination, Splits [2.7.1]

Split Table 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	28	32	31	19	18	42		50								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	32	42	45	51	18	56		96								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	24	56	47	53	18	62		100								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	18	35	28	19	18	35		47								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Appendix B - Data Collection

Split Table 6	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Approved By: Stephen Shreve **Date:** _____

Palm Beach County **Preempt & Overlap Timing Sheet** **10/24/2012**

14301 : 450 - PGA Bl and Central Bl (Standard File)

Preemption Times[3.1]/Phases[3.2]/Options[3.3]

Channel	1	2	3	4	5	6
Lock Input						
Override Flash						
Override Higher						
Flash Dwell						
Link						
Delay						
Min Duration						
Min Green						
Min Walk						
Ped Clear						
Track Green						
Min Dwell						
Max Presence						
Track R1						
Track R2						
Track R3						
Track R4						
Dwell P1						
Dwell P2						
Dwell P3						
Dwell P4						
Dwell P5						
Dwell P6						
Dwell P7						
Dwell P8						
Dwell P9						
Dwell P10						
Dwell P11						
Dwell P12						
Dwell Ped1						
Dwell Ped2						
Dwell Ped3						
Dwell Ped4						
Dwell Ped5						
Dwell Ped6						
Dwell Ped7						
Dwell Ped8						
Exit R1						
Exit R2						
Exit R3						
Exit R4						

Preemption Times+[3.4]/Overlaps+[3.5]/Options+[3.6]

Preempt	1	2	3	4	5	6
Enable						
Type	EMERG	EMERG	EMERG	EMERG	EMERG	EMERG
Skip Track						
Volt Mon Flash						
Coord in Preempt						
Max2	ON					
Return Max/Min	MAX	MAX	MAX	MAX	MAX	MAX
Extend Dwell						
Pattern						
Output Mode	TS2	TS2	TS2	TS2	TS2	TS2
Track Over 1						
Track Over 2						
Track Over 3						
Track Over 4						
Track Over 5						
Track Over 6						
Track Over 7						
Track Over 8						
Track Over 9						
Track Over 10						
Track Over 11						
Track Over 12						
Dwell Over 1						
Dwell Over 2						
Dwell Over 3						
Dwell Over 4						
Dwell Over 5						
Dwell Over 6						
Dwell Over 7						
Dwell Over 8						
Dwell Over 9						
Dwell Over 10						
Dwell Over 11						
Dwell Over 12						
Ped Clear						
Yellow						
Red						
Return Min/Max						
Delay Inh						
Exit Time						
All Red B4						

Overlap Program Parameters [1.5.2.1]

Overlap	Included Phases	Modifer Phases	Type	Green	Yellow	Red
Overlap 1			NORMAL		3.5	1.5
Overlap 2			NORMAL		3.5	1.5
Overlap 3			NORMAL		3.5	1.5

Appendix B - Data Collection

Overlap 4																NORMAL		3.5	1.5
Overlap 5																NORMAL		3.5	1.5
Overlap 6																NORMAL		3.5	1.5
Overlap 7																NORMAL		3.5	1.5
Overlap 8																NORMAL		3.5	1.5
Overlap 9																NORMAL		3.5	1.5
Overlap 10																NORMAL		3.5	1.5
Overlap 11																NORMAL		3.5	1.5
Overlap 12																NORMAL		3.5	1.5
Overlap 13																NORMAL		3.5	1.5
Overlap 14																NORMAL		3.5	1.5
Overlap 15																NORMAL		3.5	1.5
Overlap 16																NORMAL		3.5	1.5

Approved By: Stephen Shreve **Date:** _____

Palm Beach County **Alternate Timing Sheet** **10/24/2012**

14301 : 450 - PGA Bl and Central Bl (Standard File)

Alternate Phase Program 1, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5										
6										
7										
8										

Alternate Phase Program 2, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5										
6										
7										
8										

Alternate Phase Program 3, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5										
6										
7										
8										

Alternate Phase Program 4, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5										
6										
7										
8										

Alternate Phase Program 5, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5										
6										
7										
8										

TB Coor, Day Plan [4.4]

Day Plan Table 4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Appendix B - Data Collection

Hour																
Minute																
Action																

Day Plan Table 6	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Approved By: Stephen Shreve **Date:** _____

Palm Beach County **Special System Timing Sheet** **10/24/2012**

14301 : 450 - PGA Bl and Central Bl (Standard File)

Coordination, Splits [2.7.1]

Split Table 7	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 8	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 9	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 10	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 11	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	24	40	35	41	19	45		76								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 12	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	34	40	35	41	15	59		76								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 13	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	20	44	35	41	18	46		76								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 14	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	20	34	35	41	20	34		76								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 15	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Appendix B - Data Collection

Time	25	40	25	20	20	45		45								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 16	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Time	25	39	36	20	20	44		56								
Mode	MAX	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Approved By: Stephen Shreve **Date:** _____

Appendix B - Data Collection

Palm Beach County **Signal Timing Sheet** **10/24/2012**

14350 : 455 - PGA Bl and Military Trail (Standard File)

Phase [1.1.1]

	1 (EL)	2 (WT)	3 (SL)	4 (NT)	5 (WL)	6 (ET)	7 (NL)	8 (ST)	9	10	11	12	13	14	15	16
Walk		7		5		7		5								
Ped Clearance		32		33		38		42								
Min Green	4	20	4	10	4	20	4	10								
Passage	2	4	3	2	2	4	2	3								
Max1	20	45	45	45	25	45	35	40								
Max2	12	50	25	45	25	50	25	40								
Yellow	4	4.5	4	4.5	4.5	4.5	4	4.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red	4	3	4.5	3	4.5	3	4	3								

Phase Option [1.1.2]

	1 (EL)	2 (WT)	3 (SL)	4 (NT)	5 (WL)	6 (ET)	7 (NL)	8 (ST)	9	10	11	12	13	14	15	16
Enable	ON	ON	ON	ON	ON	ON	ON	ON								
Auto Entry				ON				ON								
Auto Exit		ON				ON										
Non Act1																
Non Act2																
Lock Call		ON				ON										
Min Recall		ON				ON										
Max Recall	ON	ON				ON										
Ped Recall																
Dual Entry		ON		ON		ON		ON								
SimGap Enable																
Rest In Walk																

Detector, Vehicle Parameters 1-16 [5.1]

	1 (EBL1)	2 (EBL2)	3	4 (WBT1)	5 (WBT2)	6 (WBT3)	7	8 (SBL1)	9 (SBL2)	10	11 (NBT1)	12 (NBT2)	13 (NBT3)	14	15 (WBL1)	16 (WBL2)
Call Phase	1	1		2	2	2		3	3		4	4	4		5	5
Switch Phase																
Delay Time																

Detector, Vehicle Parameters 17-32 [5.1]

	17	18 (EBT1)	19 (EBT2)	20 (EBT3)	21	22 (NBL1)	23 (NBL2)	24	25 (SBT1)	26 (SBT2)	27 (SBT3)	28	29	30	31	32
Call Phase		6	6	6		7	7		8	8	8					
Switch Phase																
Delay Time																

Detector, Vehicle Parameters 33-48 [5.1]

	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
Call Phase																
Switch Phase																
Delay Time																

Detector, Vehicle Parameters 49-64 [5.1]

	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
Call Phase																
Switch Phase																
Delay Time																

Appendix B - Data Collection

Approved By: Stephen Shreve **Date:** _____

Palm Beach County **System Timing Sheet** **10/24/2012**

14350 : 455 - PGA Bl and Military Trail (Standard File)

TB Coor, Day Plan [4.4]

Day Plan Table 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		6	9	16	20											
Minute		30														
Action	21	2	1	3	4											

Day Plan Table 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		8	11	19												
Minute																
Action	21	4	1	4												

Day Plan Table 3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		8	11	19												
Minute																
Action	21	4	1	4												

Coordination, Pattern 1-16 [2.1]/Coordination, Alt Tables+[2.6]

Pattern	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Cycle Time	160	170	180	100	120	120										
Offset Time	79	70	165	63	117	25										
Split Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Seq Number	2	6	2	2	2	2	1	1	1	1	1	1	1	1	1	1
Ph Opt Alt																
Ph Time Alt																

Coordination, Splits [2.7.1]

Split Table 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	18	52	35	55	28	42	35	55								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph						ON										

Split Table 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	20	47	52	51	20	47	48	55								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph						ON										

Split Table 3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	22	57	39	62	31	48	55	46								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph						ON										

Split Table 4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	18	36	21	25	21	33	20	26								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON

Appendix B - Data Collection

Coord-Ph						ON										

Split Table 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	20	43	30	27	22	41	27	30								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph						ON										

Split Table 6	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	26	45	23	26	19	52	23	26								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph						ON										

Approved By: Stephen Shreve **Date:** _____

Palm Beach County **Preempt & Overlap Timing Sheet** **10/24/2012**

14350 : 455 - PGA Bl and Military Trail (Standard File)

Preemption Times[3.1]/Phases[3.2]/Options[3.3]

Channel	1	2	3	4	5	6
Lock Input						
Override Flash						
Override Higher						
Flash Dwell						
Link						
Delay						
Min Duration						
Min Green						
Min Walk						
Ped Clear						
Track Green						
Min Dwell						
Max Presence						
Track R1						
Track R2						
Track R3						
Track R4						
Dwell P1						
Dwell P2						
Dwell P3						
Dwell P4						
Dwell P5						
Dwell P6						
Dwell P7						
Dwell P8						
Dwell P9						
Dwell P10						
Dwell P11						
Dwell P12						
Dwell Ped1						
Dwell Ped2						
Dwell Ped3						
Dwell Ped4						
Dwell Ped5						
Dwell Ped6						
Dwell Ped7						
Dwell Ped8						
Exit R1						
Exit R2						
Exit R3						
Exit R4						

Preemption Times+[3.4]/Overlaps+[3.5]/Options+[3.6]

Preempt	1	2	3	4	5	6
Enable						
Type	EMERG	EMERG	EMERG	EMERG	EMERG	EMERG
Skip Track						
Volt Mon Flash						
Coord in Preempt						
Max2	ON					
Return Max/Min	MAX	MAX	MAX	MAX	MAX	MAX
Extend Dwell						
Pattern						
Output Mode	TS2	TS2	TS2	TS2	TS2	TS2
Track Over 1						
Track Over 2						
Track Over 3						
Track Over 4						
Track Over 5						
Track Over 6						
Track Over 7						
Track Over 8						
Track Over 9						
Track Over 10						
Track Over 11						
Track Over 12						
Dwell Over 1						
Dwell Over 2						
Dwell Over 3						
Dwell Over 4						
Dwell Over 5						
Dwell Over 6						
Dwell Over 7						
Dwell Over 8						
Dwell Over 9						
Dwell Over 10						
Dwell Over 11						
Dwell Over 12						
Ped Clear						
Yellow						
Red						
Return Min/Max						
Delay Inh						
Exit Time						
All Red B4						

Appendix B - Data Collection

Overlap Program Parameters [1.5.2.1]

Overlap	Included Phases								Modifer Phases								Type	Green	Yellow	Red
Overlap 1																	NORMAL		3.5	1.5
Overlap 2																	NORMAL		3.5	1.5
Overlap 3																	NORMAL		3.5	1.5
Overlap 4																	NORMAL		3.5	1.5
Overlap 5																	NORMAL		3.5	1.5
Overlap 6																	NORMAL		3.5	1.5
Overlap 7																	NORMAL		3.5	1.5
Overlap 8																	NORMAL		3.5	1.5
Overlap 9																	NORMAL		3.5	1.5
Overlap 10																	NORMAL		3.5	1.5
Overlap 11																	NORMAL		3.5	1.5
Overlap 12																	NORMAL		3.5	1.5
Overlap 13																	NORMAL		3.5	1.5
Overlap 14																	NORMAL		3.5	1.5
Overlap 15																	NORMAL		3.5	1.5
Overlap 16																	NORMAL		3.5	1.5

Approved By: Stephen Shreve **Date:** _____

Palm Beach County **Alternate Timing Sheet** **10/24/2012**

14350 : 455 - PGA Bl and Military Trail (Standard File)

Alternate Phase Program 1, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5										
6										
7										
8										

Alternate Phase Program 2, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5										
6										
7										
8										

Alternate Phase Program 3, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5										
6										
7										
8										

Alternate Phase Program 4, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5										
6										
7										
8										

Alternate Phase Program 5, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5										
6										
7										
8										

TB Coor, Day Plan [4.4]

Appendix B - Data Collection

Day Plan Table 4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table 6	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Approved By: Stephen Shreve **Date:** _____

Palm Beach County **Special System Timing Sheet** **10/24/2012**

14350 : 455 - PGA Bl and Military Trail (Standard File)

Coordination, Splits [2.7.1]

Split Table 7	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 8	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 9	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 10	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 11	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	23	50	35	52	25	48	44	43								
Mode	NON	MAX	NON	NON	MAX	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph						ON										

Split Table 12	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	20	60	47	33	22	58	35	45								
Mode	NON	MAX	NON	NON	MAX	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph						ON										

Split Table 13	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	24	51	37	48	28	47	42	43								
Mode	NON	MAX	NON	NON	MAX	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph						ON										

Appendix B - Data Collection

Split Table 14	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	22	51	30	47	25	48	36	41								
Mode	NON	MAX	NON	NON	MAX	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph						ON										

Split Table 15	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	20	46	27	27	22	44	27	27								
Mode	NON	MAX	NON	NON	MAX	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph						ON										

Split Table 16	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	26	45	23	26	19	52	23	26								
Mode	NON	MAX	NON	NON	MAX	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph						ON										

Approved By: Stephen Shreve **Date:** _____

Palm Beach County **Signal Timing Sheet** **4/5/2012**

14352 : 460 - PGA Bl and I-95 (Standard File)

Phase [1.1.1]

	1 (NR)	2	3 (ET)	4	5	6	7	8	9	10	11	12	13	14	15	16
Walk			7													
Ped Clearance			10													
Min Green	4		20	5												
Passage	2.5	2	4	2												
Max1	30	6	40	10												
Max2																
Yellow	4	4	4	4												
Red	2	2	2	2												

Phase Option [1.1.2]

	1 (NR)	2	3 (ET)	4	5	6	7	8	9	10	11	12	13	14	15	16
Enable	ON		ON													
Auto Entry	ON															
Auto Exit			ON													
Non Act1																
Non Act2																
Lock Call			ON													
Min Recall			ON													
Max Recall			ON													
Ped Recall																
Dual Entry																
Sim Gap Enable									ON	ON	ON	ON	ON	ON	ON	ON
Rest In Walk																

Detector, Vehicle Parameters 1-16 [5.1]

	1 (NBR1)	2 (NBR2)	3 (NBR3)	4 (EBT1)	5 (EBT2)	6 (EBT3)	7 (NBR4)	8 (EBT4)	9	10	11	12	13	14	15	16
Call Phase	1	1	1	3	3	3	1	3	3							
Switch Phase																
Delay Time																

Detector, Vehicle Parameters 17-32 [5.1]

	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Call Phase	4	4	4	4												
Switch Phase																
Delay Time																

Detector, Vehicle Parameters 33-48 [5.1]

	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
Call Phase																
Switch Phase																
Delay Time																

Detector, Vehicle Parameters 49-64 [5.1]

	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
Call Phase																
Switch Phase																
Delay Time																

Approved By: Stephen Shreve **Date:** _____

Palm Beach County **System Timing Sheet** **4/5/2012**

14352 : 460 - PGA Bl and I-95 (Standard File)

TB Coor, Day Plan [4.4]

Day Plan Table 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		6	9	11	16	20										
Minute		30														
Action	15	12	14	11	13	15										

Day Plan Table 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		7	20													
Minute																
Action	15	16	15													

Day Plan Table 3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		7	20													
Minute																
Action	15	16	15													

Coordination, Pattern 1-16 [2.1]/Coordination, Alt Tables+[2.6]

Pattern	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Cycle Time	70	80	80	60	50						80	80	80	75	60	60
Offset Time	41	20	30	42	39						63	1	40	3	5	21
Split Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Seq Number	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Ph Opt Alt																
Ph Time Alt																

Coordination, Splits [2.7.1]

Split Table 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	25	6	39													
Mode	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph			ON													

Split Table 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	30	6	44													
Mode	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph			ON													

Split Table 3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	30	6	44													
Mode	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph			ON													

Split Table 4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	22		38													
Mode	NON	OMT	MAX	OMT	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph			ON													

Split Table 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	20		30													
Mode	NON	OMT	MAX	OMT	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph			ON													

Split Table 6	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Approved By: Stephen Shreve **Date:** _____

Palm Beach County **Preempt & Overlap Timing Sheet** **4/5/2012**

14352 : 460 - PGA Bl and I-95 (Standard File)

Preemption Times[3.1]/Phases[3.2]/Options[3.3]

Channel	1	2	3	4	5	6
Lock Input						
Override Flash						
Override Higher						
Flash Dwell						
Link						
Delay						
Min Duration						
Min Green						
Min Walk						
Ped Clear						
Track Green						
Min Dwell						
Max Presence						
Track R1						
Track R2						
Track R3						
Track R4						
Dwell P1						
Dwell P2						
Dwell P3						
Dwell P4						
Dwell P5						
Dwell P6						
Dwell P7						
Dwell P8						
Dwell P9						
Dwell P10						
Dwell P11						
Dwell P12						
Dwell Ped1						
Dwell Ped2						
Dwell Ped3						
Dwell Ped4						
Dwell Ped5						
Dwell Ped6						
Dwell Ped7						
Dwell Ped8						
Exit R1						
Exit R2						
Exit R3						
Exit R4						

Preemption Times+[3.4]/Overlaps+[3.5]/Options+[3.6]

Preempt	1	2	3	4	5	6
Enable						
Type	EMERG	EMERG	EMERG	EMERG	EMERG	EMERG
Skip Track						
Volt Mon Flash						
Coord in Preempt						
Max2						
Return Max/Min	MAX	MAX	MAX	MAX	MAX	MAX
Extend Dwell						
Pattern						
Output Mode	TS2	TS2	TS2	TS2	TS2	TS2
Track Over 1						
Track Over 2						
Track Over 3						
Track Over 4						
Track Over 5						
Track Over 6						
Track Over 7						
Track Over 8						
Track Over 9						
Track Over 10						
Track Over 11						
Track Over 12						
Dwell Over 1						
Dwell Over 2						
Dwell Over 3						
Dwell Over 4						
Dwell Over 5						
Dwell Over 6						
Dwell Over 7						
Dwell Over 8						
Dwell Over 9						
Dwell Over 10						
Dwell Over 11						
Dwell Over 12						
Ped Clear						
Yellow						
Red						
Max Green						

Overlap Program Parameters [1.5.2.1]

Overlap	Included Phases								Modifer Phases								Type	Green	Yellow	Red
Overlap 1																	NORMAL		3.5	1.5
Overlap 2	3																NORMAL		3.5	1.5
Overlap 3	1																NORMAL		3.5	1.5
Overlap 4	1																NORMAL		3.5	1.5
Overlap 5	3																NORMAL		3.5	1.5

Overlap 6																NORMAL		3.5	1.5
Overlap 7																NORMAL		3.5	1.5
Overlap 8																NORMAL		3.5	1.5
Overlap 9																NORMAL		3.5	1.5
Overlap 10	3															NORMAL		3.5	1.5
Overlap 11	1															NORMAL		3.5	1.5
Overlap 12																NORMAL		3.5	1.5
Overlap 13																NORMAL		3.5	1.5
Overlap 14																NORMAL		3.5	1.5
Overlap 15																NORMAL		3.5	1.5
Overlap 16																NORMAL		3.5	1.5

Approved By: Stephen Shreve **Date:** _____

Palm Beach County **Alternate Timing Sheet** **4/5/2012**

14352 : 460 - PGA Bl and I-95 (Standard File)

Alternate Phase Program 1, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5										
6										
7										
8										

Alternate Phase Program 2, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5										
6										
7										
8										

Alternate Phase Program 3, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5										
6										
7										
8										

Alternate Phase Program 4, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5										
6										
7										
8										

Alternate Phase Program 5, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5										
6										
7										
8										

TB Coor, Day Plan [4.4]

Day Plan Table 4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																

Minute																
Action																

Day Plan Table 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table 6	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Approved By: Stephen Shreve **Date:** _____

Palm Beach County **Special System Timing Sheet** **4/5/2012**

14352 : 460 - PGA Bl and I-95 (Standard File)

Coordination, Splits [2.7.1]

Split Table 7	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 8	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 9	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 10	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 11	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	34	6	40													
Mode	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph			ON													

Split Table 12	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	30		50													
Mode	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph			ON													

Split Table 13	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	33	6	41													
Mode	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph			ON													

Split Table 14	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	31	6	38													
Mode	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph			ON													

Split Table 15	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	21		39													
Mode	NON	OMT	MAX	OMT	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph			ON													

Split Table 16	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	25		35													
Mode	NON	OMT	MAX	OMT	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph			ON													

Approved By: Stephen Shreve **Date:** _____

CONTROLLER TIME SHEET

DATE TIMING INSTALLED: _____

INTERSECTION:	PGA BLVD & LAKE VICTORIA GARDENS DR	CONTROLLER TYPE:	NAZTEC
SIGNAL #	14375	SYSTEM #	470

PHASE NUMBER	APPROACH	MIN GREEN	GAP EXT	MAX 1	MAX 2	YEL CLR	RED CLR	WALK	PED CLR	MIN RCL	MAX RCL	PED RCL	LOCK CALLS	NA1 RIW	DETECTOR SETTINGS
	INTERVAL														
1	WALT	4.0	2.0	30.0		4.0	3.0	5.0	21.0	0					L1=NORMAL
2	EA	20.0	4.0	45.0		4.0	2.0	5.0	21.0	1					L2A/B=NORMAL
3	NA	6.0	2.0	25.0		4.0	2.0	5.0	14.0	0					L8=NORMAL
4	SA	6.0	2.0	25.0		4.0	3.0	5.0	21.0	0					L4=NORMAL L7=NORMAL
5															
6	WA	20.0	4.0	45.0		4.0	2.0	5.0	16.0	1					L6A/B=NORMAL
7															
8															

PRE-EMPTION TIMING							SPECIAL FUNCTIONS						
	GREEN BEFORE	TRACK CLR	TRACK CLR YEL	MIN DWELL	YEL AFTER	RED AFTER		START Φ	DUAL ENTRY	DET SWITCH	OUT OF FLASH	INTO FLASH	
								2-6	YES	NO	2-6	4	

COMMENTS	P1 CALLS P3 & P3 CALLS P1 WHEN ACTUATED 4R CONFLICTS P3&2R CONFLICTS P4;PED OVERLAP P1/P4	TIMING DESIGNED BY:	S. SHREVE, P.E.	DATE:	4/30/2008
FREE RING SEQUENCE = 3		APPROVED BY:	S. SHREVE, P.E.	DATE:	

SYSTEM TIMING SHEET

DATE TIMING INSTALLED: _____

INTERSECTION:	PGA BLVD & LAKE VICTORIA GARDENS DR			CONTROLLER TYPE:	NAZTEC
SYSTEM:	PGA BLVD	INTERSECTION #	14375	SYSTEM #	470

TOD SCHEDULER

WEEKDAY				WEEKEND							
				SATURDAY				SUNDAY			
TIME	PATTERN	TIME	PATTERN	TIME	PATTERN	TIME	PATTERN	TIME	PATTERN	TIME	PATTERN
0:00	100	7:00	2	0:00	100	10:00	6	0:00	100	10:00	6
9:00	4	11:00	1	20:00	5	22:00	100	20:00	5	22:00	100
15:00	3	19:00	5								
22:00	100										

TIMING PLANS

		1		2		3		4		5		6	
DIAL		1		2		3		4		5		6	
CYCLE LENGTH (SEC)		150		150		160		140		120		140	
OFFSET (SEC)		16		103		90		60		110		60	
END PERM 1		AUTO		AUTO		AUTO		AUTO		AUTO		AUTO	
COORDINATED PHASE		2		2		2		2		2		2	
		SPLIT	MODE	SPLIT	MODE	SPLIT	MODE	SPLIT	MODE	SPLIT	MODE	SPLIT	MODE
FORCE-OFF 1 (SEC)	WALT	30	MAX	35	MAX	30	MAX	28	MAX	20	MAX	20	MAX
FORCE-OFF 2 (SEC)	EA	62	MAX	57	MAX	70	MAX	53	MAX	45	MAX	62	MAX
FORCE-OFF 3 (SEC)	NA	25	NON	25	NON	27	NON	26	NON	25	NON	25	NON
FORCE-OFF 4 (SEC)	SA	33	NON	33	NON	33	NON	33	NON	30	NON	33	NON
FORCE-OFF 5 (SEC)													
FORCE-OFF 6 (SEC)	WA	92	MAX	92	MAX	100	MAX	81	MAX	65	MAX	82	MAX
FORCE-OFF 7 (SEC)													
FORCE-OFF 8 (SEC)		58	NON	58	NON	60	NON	59	NON	55	NON	58	NON

Special Features:

1) ALL PATTERNS = SEQUENCE 3

2)

3)

TIMING DESIGNED BY:	S. SHREVE, P.E.	DATE:	4/30/2008
APPROVED BY:	S. SHREVE, P.E.	DATE:	

SYSTEM TIMING SHEET

DATE TIMING INSTALLED: _____

INTERSECTION:	PGA BLVD & LAKE VICTORIA GARDENS DR			CONTROLLER TYPE:	NAZTEC
SYSTEM:	PGA BLVD	INTERSECTION #	14375	SYSTEM #	470

TOD SCHEDULER											
SPECIAL EVENT 1				SPECIAL EVENT 2				SPECIAL EVENT 3			
TIME	PATTERN	TIME	PATTERN	TIME	PATTERN	TIME	PATTERN	TIME	PATTERN	TIME	PATTERN
0:00	100	10:00	12	0:00	100	6:00	12	0:00	100	8:00	12
20:00	100			8:00	11	22:00	12	10:00	11	18:00	12
								20:00	100		

TIMING PLANS													
DIAL		11		12		13		14		15		16	
CYCLE LENGTH (SEC)		140		120									
OFFSET (SEC)		60		110									
END PERM 1		AUTO		AUTO									
COORDINATED PHASE		2		2									
		SPLIT	MODE	SPLIT	MODE								
FORCE-OFF 1 (SEC)	WALT	30	MAX	20	MAX								
FORCE-OFF 2 (SEC)	EA	47	MAX	45	MAX								
FORCE-OFF 3 (SEC)	NA	30	NON	25	NON								
FORCE-OFF 4 (SEC)	SA	33	NON	30	NON								
FORCE-OFF 5 (SEC)													
FORCE-OFF 6 (SEC)	WA	77	MAX	65	MAX								
FORCE-OFF 7 (SEC)													
FORCE-OFF 8 (SEC)		63	NON	55	NON								

Special Features:

1) ALL PATTERNS = SEQUENCE 3
2) SPECIAL EVENT 1 TOD SCHEDULER TO BE ACTIVE DECEMBER 25, 2007
3) SPECIAL EVENT 2 TOD SCHEDULER TO BE ACTIVE DECEMBER 22,23,24,26,27,28,29,30,31, 2007 AND JANUARY 1, 2008

TIMING DESIGNED BY:	S. SHREVE, P.E.	DATE:	12/13/2007
APPROVED BY:	S. SHREVE, P.E.	DATE:	

CONTROLLER TIME SHEET

DATE TIMING INSTALLED: _____

INTERSECTION:	117TH COURT AND CENTRAL BLVD	CONTROLLER TYPE:	NAZTEC
SIGNAL #	12545 WATSON B. DUNCAN MIDDLE/TIMBER TRACE ELEM	SYSTEM #	400

PHASE NUMBER	APPROACH	MIN GREEN	GAP EXT	MAX 1	MAX 2	YEL CLR	RED CLR	WALK	PED CLR	MIN RCL	MAX RCL	PED RCL	LOCK CALLS	NA1 RIW	DETECTOR SETTINGS
	INTERVAL														
1															
2	NA	20.0	4.0	45.0		4.0	1.0	0.0	0.0	1			1		L2:NORMAL
3															
4	EA	6.0	4.0	60.0		4.0	1.0	7.0	22.0	0			0		L4:D/N (5) L4R:D/N (10)
5	NALT	4.0	2.0	25.0		4.0	1.0	0.0	0.0	0			0		L5:NORMAL
6	SA	20.0	4.0	30.0		4.0	1.0	7.0	22.0	1			1		L6:NORMAL
7															
8															

PRE-EMPTION TIMING								SPECIAL FUNCTIONS						
	GREEN BEFORE	TRACK CLR	TRACK CLR YEL	MIN DWELL	YEL AFTER	RED AFTER			START Φ	DUAL ENTRY	DET SWITCH	OUT OF FLASH	INTO FLASH	
											YES			
									2 -6	2,6	5	2 - 6	4	

COMMENTS	STOP-N-GO 06:30 THRU 18:30 SCHOOL DAYS ONLY. FLASH ALL OTHER HOURS.	TIMING DESIGNED BY: K. LANE-PALMER	DATE: 7/19/2012
		APPROVED BY: Q. BARI, P.E.	DATE:

SYSTEM TIMING SHEET

DATE TIMING INSTALLED: _____

INTERSECTION:	117TH COURT AND CENTRAL BLVD			CONTROLLER TYPE:	NAZTEC
SYSTEM:	MILITARY TRAIL	INTERSECTION #	12545	SYSTEM #	400

TOD SCHEDULER											
WEEKDAY				WEEKEND							
				SATURDAY				SUNDAY			
TIME	PATTERN	TIME	PATTERN	TIME	PATTERN	TIME	PATTERN	TIME	PATTERN	TIME	PATTERN
0:00				0:00				0:00			

TIMING PLANS													
DIAL		1		2		3		4		5		6	
CYCLE LENGTH (SEC)													
OFFSET (SEC)													
PERMISSIVES		AUTO		AUTO		AUTO		AUTO		AUTO		AUTO	
COORDINATED PHASE													
		SPLIT	MODE	SPLIT	MODE	SPLIT	MODE	SPLIT	MODE	SPLIT	MODE	SPLIT	MODE
FORCE-OFF 1 (SEC)													
FORCE-OFF 2 (SEC)	NA												
FORCE-OFF 3 (SEC)													
FORCE-OFF 4 (SEC)	EA												
FORCE-OFF 5 (SEC)	NALT												
FORCE-OFF 6 (SEC)	SA												
FORCE-OFF 7 (SEC)													
FORCE-OFF 8 (SEC)													
Special Features:													
1)													
2)													
3)													
TIMING DESIGNED BY:	Q. BARI, P.E.									DATE:			
APPROVED BY:	Q. BARI, P.E.									DATE:			

CONTROLLER TIME SHEET

DATE TIMING INSTALLED: _____

INTERSECTION:	HOOD RD AND CENTRAL BLVD	CONTROLLER TYPE:	NAZTEC
SIGNAL #	11470	SYSTEM #	360

PHASE NUMBER	APPROACH	MIN GREEN	GAP EXT	MAX 1	MAX 2	YEL CLR	RED CLR	WALK	PED CLR	MIN RCL	MAX RCL	PED RCL	LOCK CALLS	NA1 RIW	DETECTOR SETTINGS
	INTERVAL														
1	SALT	4.0	2.0	15.0		4.0	2.0	0.0	0.0	0			0		L1=Normal
2	NA	19.0	4.0	45.0		4.0	2.0	7.0	27.0	1			1		L2:Normal
3	WALT	4.0	2.0	15.0		4.0	2.0	0.0	0.0	0			0		L3:Normal
4	EA	10.0	2.0	45.0		4.0	2.0	7.0	24.0	0			0		L4:Normal L4R:D/N (10)
5	NALT	4.0	2.0	15.0		4.0	2.0	0.0	0.0	0			0		L5=Normal
6	SA	19.0	4.0	45.0		4.0	2.0	7.0	26.0	1			1		L6:Normal
7	EALT	4.0	2.0	15.0		4.0	2.0	0.0	0.0	0			0		L7:Normal
8	WA	10.0	2.0	45.0		4.0	2.0	7.0	23.0	0			0		L8 Normal L8R:D/N (10)

PRE-EMPTION TIMING							SPECIAL FUNCTIONS					
	GREEN BEFORE	TRACK CLR	TRACK CLR YEL	MIN DWELL	YEL AFTER	RED AFTER		START Φ	DUAL ENTRY	DET SWITCH	OUT OF FLASH	INTO FLASH
									YES	YES		
								2-6		Φ's - 1,5	2-6	4-8

COMMENTS		TIMING DESIGNED BY:	K. LANE-PALMER	DATE:	11/16/2007
		APPROVED BY:	S. SHREVE, P.E.	DATE:	

SYSTEM TIMING SHEET

DATE TIMING INSTALLED: _____

INTERSECTION:	HOOD RD AND CENTRAL BLVD			CONTROLLER TYPE:	NAZTEC
SYSTEM:		INTERSECTION #	11470	SYSTEM #	360

TOD SCHEDULER											
WEEKDAY				WEEKEND							
				SATURDAY				SUNDAY			
TIME	PATTERN	TIME	PATTERN	TIME	PATTERN	TIME	PATTERN	TIME	PATTERN	TIME	PATTERN
0:00				0:00				0:00			

TIMING PLANS													
DIAL		1		2		3		4		5		6	
CYCLE LENGTH (SEC)													
OFFSET (SEC)													
PERMISSIVES		AUTO		AUTO		AUTO		AUTO		AUTO		AUTO	
COORDINATED PHASE													
		SPLIT	MODE	SPLIT	MODE	SPLIT	MODE	SPLIT	MODE	SPLIT	MODE	SPLIT	MODE
FORCE-OFF 1 (SEC)	SALT												
FORCE-OFF 2 (SEC)	NA												
FORCE-OFF 3 (SEC)	WALT												
FORCE-OFF 4 (SEC)	EA												
FORCE-OFF 5 (SEC)	NALT												
FORCE-OFF 6 (SEC)	SA												
FORCE-OFF 7 (SEC)	EALT												
FORCE-OFF 8 (SEC)	WA												
Special Features:													
1)													
2)													
3)													
TIMING DESIGNED BY:									DATE:				
APPROVED BY:	S. SHREVE, P.E.								DATE:				

Appendix B - Data Collection

Palm Beach County **Signal Timing Sheet** **9/27/2012**

8910 : 300 - Donald Ross Rd and Central Bl (Standard File)

Phase [1.1.1]

	1 (EL)	2 (WT)	3 (SL)	4 (NT)	5 (WL)	6 (ET)	7 (NL)	8 (ST)	9	10	11	12	13	14	15	16
Walk		5		5		5		5								
Ped Clearance		39		32		38		35								
Min Green	4	15	4	6	4	15	4	6	5	5	5	5	5	5	5	5
Passage	2	4	2	2	2	4	2	2	1	1	1	1	1	1	1	1
Max1	20	45	20	25	30	45	20	25	25	25	25	25	25	25	25	25
Max2	15	99	15	25	15	99	15	25	50	50	50	50	50	50	50	50
Yellow	4	4.5	4	4.5	4	4.5	4	4.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red	5	3.5	5	3.5	5	3.5	4.5	3	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5

Phase Option [1.1.2]

	1 (EL)	2 (WT)	3 (SL)	4 (NT)	5 (WL)	6 (ET)	7 (NL)	8 (ST)	9	10	11	12	13	14	15	16
Enable	ON	ON	ON	ON	ON	ON	ON	ON								
Auto Entry				ON				ON								
Auto Exit		ON				ON										
Non Act1																
Non Act2																
Lock Call		ON				ON			ON	ON	ON	ON	ON	ON	ON	ON
Min Recall		ON				ON										
Max Recall	ON	ON				ON	ON									
Ped Recall																
Dual Entry		ON		ON		ON		ON								
SimGap Enable									ON	ON	ON	ON	ON	ON	ON	ON
Rest In Walk																

Detector, Vehicle Parameters 1-16 [5.1]

	1 (EBL1)	2 (EBL2)	3 (WBT1)	4 (WBT2)	5 (WBT3)	6 (SBL1)	7 (SBL2)	8 (NBT1)	9 (NBT2)	10 (NBT3)	11 (NBR1)	12 (WBL1)	13 (WBL2)	14 (EBT1)	15 (EBT2)	16 (EBT3)
Call Phase	1	1	2	2	2	3	3	4	4	4	4	5	5	6	6	6
Switch Phase																
Delay Time																

Detector, Vehicle Parameters 17-32 [5.1]

	17 (NBL1)	18 (NBL2)	19 (SBT1)	20 (SBT2)	21 (SBT3)	22 (SBR1)	23	24	25	26	27	28	29	30	31	32
Call Phase	7	7	8	8	8	8										
Switch Phase																
Delay Time																

Detector, Vehicle Parameters 33-48 [5.1]

	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
Call Phase																
Switch Phase																
Delay Time																

Detector, Vehicle Parameters 49-64 [5.1]

	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
Call Phase																
Switch Phase																
Delay Time																

Appendix B - Data Collection

Approved By: Quazi Bari **Date:** _____

Palm Beach County **System Timing Sheet** **9/27/2012**

8910 : 300 - Donald Ross Rd and Central Bl (Standard File)

TB Coor, Day Plan [4.4]

Day Plan Table 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		6	9	15	18	20										
Minute		30			30	30										
Action	9	2	1	3	4	5										

Day Plan Table 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		8	10	19	21											
Minute																
Action	9	4	1	4	5											

Day Plan Table 3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		8	10	18	21											
Minute																
Action	9	4	1	4	5											

Coordination, Pattern 1-16 [2.1]/Coordination, Alt Tables+[2.6]

Pattern	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Cycle Time	140	160	160	120	100											
Offset Time	33	48	3	64	49											
Split Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Seq Number	2	2	2	1	1	1	1	1	1	2	2	2	2	1	1	1
Ph Opt Alt																
Ph Time Alt									1							

Coordination, Splits [2.7.1]

Split Table 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	20	69	20	31	39	50	20	31								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph						ON										

Split Table 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	26	62	26	46	27	61	24	48								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph						ON										

Split Table 3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	26	60	26	48	27	59	26	48								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph						ON										

Split Table 4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	24	47	20	29	23	48	20	29								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON

Appendix B - Data Collection

Coord-Ph		ON														

Split Table 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	16	47	16	21	16	47	16	21								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 6	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Approved By: Quazi Bari **Date:** _____

Palm Beach County **Preempt & Overlap Timing Sheet** **9/27/2012**

8910 : 300 - Donald Ross Rd and Central Bl (Standard File)

Preemption Times[3.1]/Phases[3.2]/Options[3.3]

Channel	1	2	3	4	5	6
Lock Input	ON	ON	ON	ON	ON	ON
Override Flash		ON	ON	ON	ON	ON
Override Higher	ON	ON	ON	ON	ON	ON
Flash Dwell						
Link						
Delay						
Min Duration						
Min Green	5					
Min Walk						
Ped Clear						
Track Green						
Min Dwell						
Max Presence						
Track R1						
Track R2						
Track R3						
Track R4						
Dwell P1						
Dwell P2						
Dwell P3						
Dwell P4						
Dwell P5						
Dwell P6						
Dwell P7						
Dwell P8						
Dwell P9						
Dwell P10						
Dwell P11						
Dwell P12						
Dwell Ped1						
Dwell Ped2						
Dwell Ped3						
Dwell Ped4						
Dwell Ped5						
Dwell Ped6						
Dwell Ped7						
Dwell Ped8						
Exit R1						
Exit R2						
Exit R3						
Exit R4						

Preemption Times+[3.4]/Overlaps+[3.5]/Options+[3.6]

Preempt	1	2	3	4	5	6
Enable	ON	ON	ON	ON	ON	ON
Type	RAIL	EMERG	EMERG	EMERG	EMERG	EMERG
Skip Track						
Volt Mon Flash						
Coord in Preempt						
Max2	ON					
Return Max/Min	MAX	MAX	MAX	MAX	MAX	MAX
Extend Dwell						
Pattern						
Output Mode	TS2	TS2	TS2	TS2	TS2	TS2
Track Over 1						
Track Over 2						
Track Over 3						
Track Over 4						
Track Over 5						
Track Over 6						
Track Over 7						
Track Over 8						
Track Over 9						
Track Over 10						
Track Over 11						
Track Over 12						
Dwell Over 1						
Dwell Over 2						
Dwell Over 3						
Dwell Over 4						
Dwell Over 5						
Dwell Over 6						
Dwell Over 7						
Dwell Over 8						
Dwell Over 9						
Dwell Over 10						
Dwell Over 11						
Dwell Over 12						
Ped Clear						
Yellow	5					
Red	3					
Return Min/Max						
Delay Inh						
Exit Time						
All Red B4						

Appendix B - Data Collection

Overlap Program Parameters [1.5.2.1]

Overlap	Included Phases								Modifer Phases								Type	Green	Yellow	Red
Overlap 1																	NORMAL		3.5	1.5
Overlap 2																	NORMAL		3.5	1.5
Overlap 3																	NORMAL		3.5	1.5
Overlap 4																	NORMAL		3.5	1.5
Overlap 5																	NORMAL		3.5	1.5
Overlap 6																	NORMAL		3.5	1.5
Overlap 7																	NORMAL		3.5	1.5
Overlap 8																	NORMAL		3.5	1.5
Overlap 9	1																NORMAL		3.5	1.5
Overlap 10	3																NORMAL		3.5	1.5
Overlap 11	5																NORMAL		3.5	1.5
Overlap 12	7																NORMAL		3.5	1.5
Overlap 13																	NORMAL		3.5	1.5
Overlap 14																	NORMAL		3.5	1.5
Overlap 15																	NORMAL		3.5	1.5
Overlap 16																	NORMAL		3.5	1.5

Approved By: Quazi Bari **Date:** _____

Palm Beach County **Alternate Timing Sheet** **9/27/2012**

8910 : 300 - Donald Ross Rd and Central Bl (Standard File)

Alternate Phase Program 1, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1			4	2	15		4	5	1	
2										
3										
4										
5										
6										
7			4	2	15		4	4.5	7	
8										

Alternate Phase Program 2, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5										
6										
7										
8										

Alternate Phase Program 3, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5										
6										
7										
8										

Alternate Phase Program 4, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5										
6										
7										
8										

Alternate Phase Program 5, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5										
6										
7										
8										

TB Coor, Day Plan [4.4]

Appendix B - Data Collection

Day Plan Table 4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table 6	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Approved By: Quazi Bari **Date:** _____

Palm Beach County **Special System Timing Sheet** **9/27/2012**

8910 : 300 - Donald Ross Rd and Central Bl (Standard File)

Coordination, Splits [2.7.1]

Split Table 7	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 8	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 9	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 10	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 11	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 12	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 13	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	22	28	19	31	22	28	19	31								
Mode	NON	MAX	NON	NON	MAX	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph						ON										

Appendix B - Data Collection

Split Table 14	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 15	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 16	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Approved By: Quazi Bari **Date:** _____

Appendix B - Data Collection

Palm Beach County **Signal Timing Sheet** **10/24/2012**

12651 : 415 - Kyoto Gardens Dr and Military Trail (Standard File)

Phase [1.1.1]

	1 (NL)	2 (ST)	3	4 (WT)	5 (SL)	6 (NT)	7	8	9	10	11	12	13	14	15	16
Walk						7										
Ped Clearance						26		20								
Min Green	4	15	4	6	4	15	4	6	5	5	5	5	5	5	5	5
Passage	2.5	4	2	2.5	2.5	4	2.5	2	1	1	1	1	1	1	1	1
Max1	40	50	15	35	35	50	25	25	25	25	25	25	25	25	25	25
Max2									50	50	50	50	50	50	50	50
Yellow	4	4.5	4	4	4	4.5	4	4	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red	4	3	2	4	4	4.5	2	2	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5

Phase Option [1.1.2]

	1 (NL)	2 (ST)	3	4 (WT)	5 (SL)	6 (NT)	7	8	9	10	11	12	13	14	15	16
Enable	ON	ON		ON	ON	ON										
Auto Entry				ON												
Auto Exit		ON				ON										
Non Act1																
Non Act2																
Lock Call		ON				ON			ON	ON	ON	ON	ON	ON	ON	ON
Min Recall		ON				ON										
Max Recall																
Ped Recall																
Dual Entry		ON				ON										
SimGap Enable		ON				ON			ON	ON	ON	ON	ON	ON	ON	ON
Rest In Walk																

Detector, Vehicle Parameters 1-16 [5.1]

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Call Phase	1	2	2	2	4	4	4	5	6	6	6	6				
Switch Phase																
Delay Time							10									

Detector, Vehicle Parameters 17-32 [5.1]

	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Call Phase																
Switch Phase																
Delay Time																

Detector, Vehicle Parameters 33-48 [5.1]

	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
Call Phase																
Switch Phase																
Delay Time																

Detector, Vehicle Parameters 49-64 [5.1]

	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
Call Phase																
Switch Phase																
Delay Time																

Appendix B - Data Collection

Approved By: Stephen Shreve **Date:** _____

Palm Beach County **System Timing Sheet** **10/24/2012**

12651 : 415 - Kyoto Gardens Dr and Military Trail (Standard File)

TB Coor, Day Plan [4.4]

Day Plan Table 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		6	9	16	20											
Minute		30														
Action	100	2	1	3	4											

Day Plan Table 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		8	11	19												
Minute																
Action	100	4	1	4												

Day Plan Table 3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		8	11	19												
Minute																
Action	100	4	1	4												

Coordination, Pattern 1-16 [2.1]/Coordination, Alt Tables+[2.6]

Pattern	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Cycle Time	160	170	180	100												
Offset Time	111	126	99	67												
Split Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Seq Number	1	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1
Ph Opt Alt																
Ph Time Alt																

Coordination, Splits [2.7.1]

Split Table 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	35	95		30	23	107		30								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	22	114		34	40	96		34								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	50	84		46	26	108		46								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	34	36		30	26	44		30								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 6	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Approved By: Stephen Shreve **Date:** _____

Palm Beach County **Preempt & Overlap Timing Sheet** **10/24/2012**

12651 : 415 - Kyoto Gardens Dr and Military Trail (Standard File)

Preemption Times[3.1]/Phases[3.2]/Options[3.3]

Channel	1	2	3	4	5	6
Lock Input		ON	ON	ON	ON	ON
Override Flash		ON	ON	ON	ON	ON
Override Higher						
Flash Dwell						
Link						
Delay						
Min Duration						
Min Green						
Min Walk						
Ped Clear						
Track Green						
Min Dwell						
Max Presence						
Track R1						
Track R2						
Track R3						
Track R4						
Dwell P1						
Dwell P2						
Dwell P3						
Dwell P4						
Dwell P5						
Dwell P6						
Dwell P7						
Dwell P8						
Dwell P9						
Dwell P10						
Dwell P11						
Dwell P12						
Dwell Ped1						
Dwell Ped2						
Dwell Ped3						
Dwell Ped4						
Dwell Ped5						
Dwell Ped6						
Dwell Ped7						
Dwell Ped8						
Exit R1						
Exit R2						
Exit R3						
Exit R4						

Preemption Times+[3.4]/Overlaps+[3.5]/Options+[3.6]

Preempt	1	2	3	4	5	6
Enable						
Type	RAIL	EMERG	EMERG	EMERG	EMERG	EMERG
Skip Track						
Volt Mon Flash						
Coord in Preempt						
Max2						
Return Max/Min	MAX	MAX	MAX	MAX	MAX	MAX
Extend Dwell						
Pattern						
Output Mode	TS2	TS2	TS2	TS2	TS2	TS2
Track Over 1						
Track Over 2						
Track Over 3						
Track Over 4						
Track Over 5						
Track Over 6						
Track Over 7						
Track Over 8						
Track Over 9						
Track Over 10						
Track Over 11						
Track Over 12						
Dwell Over 1						
Dwell Over 2						
Dwell Over 3						
Dwell Over 4						
Dwell Over 5						
Dwell Over 6						
Dwell Over 7						
Dwell Over 8						
Dwell Over 9						
Dwell Over 10						
Dwell Over 11						
Dwell Over 12						
Ped Clear						
Yellow						
Red						
Return Min/Max						
Delay Inh						
Exit Time						
All Red B4						

Overlap Program Parameters [1.5.2.1]

Overlap	Included Phases								Modifer Phases								Type	Green	Yellow	Red
Overlap 1																	NORMAL		3.5	1.5
Overlap 2																	NORMAL		3.5	1.5
Overlap 3																	NORMAL		3.5	1.5
Overlap 4																	NORMAL		3.5	1.5
Overlap 5																	NORMAL		3.5	1.5

Appendix B - Data Collection

Overlap 6																	NORMAL		3.5	1.5
Overlap 7																	NORMAL		3.5	1.5
Overlap 8																	NORMAL		3.5	1.5
Overlap 9																	NORMAL		3.5	1.5
Overlap 10																	NORMAL		3.5	1.5
Overlap 11																	NORMAL		3.5	1.5
Overlap 12	4																NORMAL		3.5	1.5
Overlap 13																	NORMAL		3.5	1.5
Overlap 14																	NORMAL		3.5	1.5
Overlap 15																	NORMAL		3.5	1.5
Overlap 16																	NORMAL		3.5	1.5

Approved By: Stephen Shreve **Date:** _____

Palm Beach County **Alternate Timing Sheet** **10/24/2012**

12651 : 415 - Kyoto Gardens Dr and Military Trail (Standard File)

Alternate Phase Program 1, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5										
6										
7										
8										

Alternate Phase Program 2, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5										
6										
7										
8										

Alternate Phase Program 3, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5										
6										
7										
8										

Alternate Phase Program 4, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5										
6										
7										
8										

Alternate Phase Program 5, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5										
6										
7										
8										

TB Coor, Day Plan [4.4]

Day Plan Table 4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action	100															

Day Plan Table 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																

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Action	100															

Day Plan Table 6	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action	100															

Approved By: Stephen Shreve **Date:** _____

Palm Beach County **Special System Timing Sheet** **10/24/2012**

12651 : 415 - Kyoto Gardens Dr and Military Trail (Standard File)

Coordination, Splits [2.7.1]

Split Table 7	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 8	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 9	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 10	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 11	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 12	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 13	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 14	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 15	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON

Coord-Ph		ON														

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Split Table 16	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Approved By: Stephen Shreve **Date:** _____

Appendix B - Data Collection

Palm Beach County **Signal Timing Sheet** **10/2/2012**

11475 : 365 - Hood Rd and Military Trail (Standard File)

Phase [1.1.1]

	1 (NL)	2 (ST)	3 (EL)	4 (WT)	5 (SL)	6 (NT)	7 (WL)	8 (ET)	9	10	11	12	13	14	15	16
Walk		5		5		5		5								
Ped Clearance		27		33		29		36								
Min Green	4	20	4	6	4	20	4	6								
Passage	2	4	2	3	2	4	2	3								
Max1	15	45	15	30	30	45	15	30								
Max2																
Yellow	4	4.5	4	4.5	4	4.5	4	4.5								
Red	4.5	3	4.5	3.5	4.5	3	4.5	3.5								

Phase Option [1.1.2]

	1 (NL)	2 (ST)	3 (EL)	4 (WT)	5 (SL)	6 (NT)	7 (WL)	8 (ET)	9	10	11	12	13	14	15	16
Enable	ON	ON	ON	ON	ON	ON	ON	ON								
Auto Entry				ON				ON								
Auto Exit		ON				ON										
Non Act1																
Non Act2																
Lock Call		ON				ON										
Min Recall		ON				ON										
Max Recall																
Ped Recall																
Dual Entry		ON		ON		ON		ON								
SimGap Enable									ON	ON	ON	ON	ON	ON	ON	ON
Rest In Walk																

Detector, Vehicle Parameters 1-16 [5.1]

	1 (NBL1)	2 (NBL2)	3 (SBT1)	4 (SBT2)	5 (SBT3)	6 (SBR1)	7 (EBL1)	8 (EBL2)	9 (WBT1)	10 (WBT2)	11 (WBR1)	12 (SBL1)	13 (SBL2)	14 (NBT1)	15 (NBT2)	16 (NBT3)
Call Phase	1	1	2	2	2	2	3	3	4	4	4	5	5	6	6	6
Switch Phase																
Delay Time											5					

Detector, Vehicle Parameters 17-32 [5.1]

	17 (NBR1)	18 (WBL1)	19 (WBL2)	20 (EBT1)	21 (EBT2)	22 (EBR1)	23	24	25	26	27	28	29	30	31	32
Call Phase	6	7	7	8	8	8										
Switch Phase																
Delay Time						5										

Detector, Vehicle Parameters 33-48 [5.1]

	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
Call Phase																
Switch Phase																
Delay Time																

Detector, Vehicle Parameters 49-64 [5.1]

	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
Call Phase	8	8	8	4	4	4										
Switch Phase																
Delay Time																

Appendix B - Data Collection

Approved By: Quazi Bari **Date:** _____

Palm Beach County **System Timing Sheet** **10/2/2012**

11475 : 365 - Hood Rd and Military Trail (Standard File)

TB Coor, Day Plan [4.4]

Day Plan Table 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		6	9	15	18	20	22									
Minute		30			30	30										
Action	100	2	1	3	4	5	100									

Day Plan Table 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		8	10	19	21	22										
Minute																
Action	100	4	1	4	5	100										

Day Plan Table 3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		8	10	18	21	22										
Minute																
Action	100	4	1	4	5	100										

Coordination, Pattern 1-16 [2.1]/Coordination, Alt Tables+[2.6]

Pattern	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Cycle Time	140	160	160	120	100											
Offset Time	56	64	136	13	88											
Split Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Seq Number	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1
Ph Opt Alt																
Ph Time Alt																

Coordination, Splits [2.7.1]

Split Table 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	18	55	21	46	22	51	18	49								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	18	75	20	47	34	59	18	49								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	20	67	20	53	28	59	24	49								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph						ON										

Split Table 4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	17	60	16	27	19	58	18	25								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON

Appendix B - Data Collection

Coord-Ph		ON														

Split Table 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	17	46	17	20	17	46	17	20								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 6	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Approved By: Quazi Bari **Date:** _____

Palm Beach County **Preempt & Overlap Timing Sheet** **10/2/2012**

11475 : 365 - Hood Rd and Military Trail (Standard File)

Preemption Times[3.1]/Phases[3.2]/Options[3.3]

Channel	1	2	3	4	5	6
Lock Input						
Override Flash						
Override Higher						
Flash Dwell						
Link						
Delay						
Min Duration						
Min Green						
Min Walk						
Ped Clear						
Track Green						
Min Dwell						
Max Presence						
Track R1						
Track R2						
Track R3						
Track R4						
Dwell P1						
Dwell P2						
Dwell P3						
Dwell P4						
Dwell P5						
Dwell P6						
Dwell P7						
Dwell P8						
Dwell P9						
Dwell P10						
Dwell P11						
Dwell P12						
Dwell Ped1						
Dwell Ped2						
Dwell Ped3						
Dwell Ped4						
Dwell Ped5						
Dwell Ped6						
Dwell Ped7						
Dwell Ped8						
Exit R1						
Exit R2						
Exit R3						
Exit R4						

Preemption Times+[3.4]/Overlaps+[3.5]/Options+[3.6]

Preempt	1	2	3	4	5	6
Enable						
Type	EMERG	EMERG	EMERG	EMERG	EMERG	EMERG
Skip Track						
Volt Mon Flash						
Coord in Preempt						
Max2						
Return Max/Min	MAX	MAX	MAX	MAX	MAX	MAX
Extend Dwell						
Pattern						
Output Mode	TS2	TS2	TS2	TS2	TS2	TS2
Track Over 1						
Track Over 2						
Track Over 3						
Track Over 4						
Track Over 5						
Track Over 6						
Track Over 7						
Track Over 8						
Track Over 9						
Track Over 10						
Track Over 11						
Track Over 12						
Dwell Over 1						
Dwell Over 2						
Dwell Over 3						
Dwell Over 4						
Dwell Over 5						
Dwell Over 6						
Dwell Over 7						
Dwell Over 8						
Dwell Over 9						
Dwell Over 10						
Dwell Over 11						
Dwell Over 12						
Ped Clear						
Yellow						
Red						
Return Min/Max						
Delay Inh						
Exit Time						
All Red B4						

Appendix B - Data Collection

Overlap Program Parameters [1.5.2.1]

Overlap	Included Phases								Modifer Phases								Type	Green	Yellow	Red
Overlap 1	1																NORMAL		3.5	1.5
Overlap 2	3																NORMAL		3.5	1.5
Overlap 3	5																NORMAL		3.5	1.5
Overlap 4	7																NORMAL		3.5	1.5
Overlap 5																	NORMAL		3.5	1.5
Overlap 6																	NORMAL		3.5	1.5
Overlap 7																	NORMAL		3.5	1.5
Overlap 8																	NORMAL		3.5	1.5
Overlap 9																	NORMAL		3.5	1.5
Overlap 10																	NORMAL		3.5	1.5
Overlap 11																	NORMAL		3.5	1.5
Overlap 12																	NORMAL		3.5	1.5
Overlap 13																	NORMAL		3.5	1.5
Overlap 14																	NORMAL		3.5	1.5
Overlap 15																	NORMAL		3.5	1.5
Overlap 16																	NORMAL		3.5	1.5

Approved By: Quazi Bari **Date:** _____

Palm Beach County **Alternate Timing Sheet** **10/2/2012**

11475 : 365 - Hood Rd and Military Trail (Standard File)

Alternate Phase Program 1, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5										
6										
7										
8										

Alternate Phase Program 2, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5										
6										
7										
8										

Alternate Phase Program 3, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5										
6										
7										
8										

Alternate Phase Program 4, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5										
6										
7										
8										

Alternate Phase Program 5, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5										
6										
7										
8										

TB Coor, Day Plan [4.4]

Appendix B - Data Collection

Day Plan Table 4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action	100															

Day Plan Table 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table 6	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Approved By: Quazi Bari **Date:** _____

Palm Beach County **Special System Timing Sheet** **10/2/2012**

11475 : 365 - Hood Rd and Military Trail (Standard File)

Coordination, Splits [2.7.1]

Split Table 7	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 8	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 9	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 10	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 11	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 12	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 13	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	36	62	30	22	20	78	30	22								
Mode	NON	MAX	NON	NON	MAX	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

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Split Table 14	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 15	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 16	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Approved By: Quazi Bari **Date:** _____

Appendix B - Data Collection

Palm Beach County **Signal Timing Sheet** **10/2/2012**

8925 : 310 - Donald Ross and Military Trail (Standard File)

Phase [1.1.1]

	1 (NL)	2 (ST)	3 (EL)	4 (WT)	5 (SL)	6 (NT)	7 (WL)	8 (ET)	9	10	11	12	13	14	15	16
Walk		5		5		5		5								
Ped Clearance		35		35		39		37								
Min Green	4	10	4	10	4	10	4	10	5	5	5	5	5	5	5	5
Passage	3	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1
Max1	20	55	25	45	25	55	15	45	25	25	25	25	25	25	25	25
Max2	45	35	70	81	15	35	15	91	50	50	50	50	50	50	50	50
Yellow	4	4.5	4	4.5	4	4.5	4	4.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red	4.5	3	4.5	3.5	4.5	3	4.5	3.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5

Phase Option [1.1.2]

	1 (NL)	2 (ST)	3 (EL)	4 (WT)	5 (SL)	6 (NT)	7 (WL)	8 (ET)	9	10	11	12	13	14	15	16
Enable	ON	ON	ON	ON	ON	ON	ON	ON								
Auto Entry				ON				ON								
Auto Exit		ON				ON										
Non Act1																
Non Act2																
Lock Call				ON				ON	ON	ON	ON	ON	ON	ON	ON	ON
Min Recall				ON				ON								
Max Recall		ON		ON	ON	ON		ON								
Ped Recall																
Dual Entry		ON		ON		ON		ON								
SimGap Enable									ON	ON	ON	ON	ON	ON	ON	ON
Rest In Walk																

Detector, Vehicle Parameters 1-16 [5.1]

	1 (NBL1)	2 (NBL2)	3 (SBT1)	4 (SBT2)	5 (SBT3)	6 (SBR1)	7 (EBL1)	8 (EBL2)	9 (WBT1)	10 (WBT2)	11 (WBT3)	12 (WBR1)	13 (SBL1)	14 (SBL2)	15 (NBT1)	16 (NBT2)
Call Phase	1	1	2	2	2	2	3	3	4	4	4	4	5	5	6	6
Switch Phase																
Delay Time																

Detector, Vehicle Parameters 17-32 [5.1]

	17 (NBT3)	18 (NBR1)	19 (WBL1)	20 (WBL2)	21 (EBT1)	22 (EBT2)	23 (EBT3)	24 (EBR1)	25	26	27	28	29	30	31	32
Call Phase	6	6	7	7	8	8	8	8								
Switch Phase																
Delay Time																

Detector, Vehicle Parameters 33-48 [5.1]

	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
Call Phase																
Switch Phase																
Delay Time																

Detector, Vehicle Parameters 49-64 [5.1]

	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
Call Phase																
Switch Phase																
Delay Time																

Appendix B - Data Collection

Approved By: Quazi Bari **Date:** _____

Palm Beach County **System Timing Sheet** **10/2/2012**

8925 : 310 - Donald Ross and Military Trail (Standard File)

TB Coor, Day Plan [4.4]

Day Plan Table 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		6	9	15	18	20										
Minute		30			30	30										
Action	9	2	1	3	4	5										

Day Plan Table 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		8	10	19	21											
Minute																
Action	9	4	1	4	5											

Day Plan Table 3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		8	10	18	21											
Minute																
Action	9	4	1	4	5											

Coordination, Pattern 1-16 [2.1]/Coordination, Alt Tables+[2.6]

Pattern	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Cycle Time	140	160	160	120	100											
Offset Time	14	30	4	51	40											
Split Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Seq Number	9	11	3	9	1	1	1	1	1	9	9	9	9	1	1	1
Ph Opt Alt																
Ph Time Alt									1							

Coordination, Splits [2.7.1]

Split Table 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	23	43	25	49	28	38	19	55								
Mode	NON	NON	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph				ON												

Split Table 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	20	61	30	49	29	52	18	61								
Mode	NON	NON	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph				ON												

Split Table 3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	25	59	27	49	32	52	20	56								
Mode	NON	NON	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph				ON												

Split Table 4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	20	40	22	38	22	38	20	40								
Mode	NON	MAX	NON	MAX	NON	MAX	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON

Appendix B - Data Collection

Coord-Ph				ON												

Split Table 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	16	33	17	34	18	31	16	35								
Mode	NON	MAX	NON	MAX	NON	MAX	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph				ON												

Split Table 6	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Approved By: Quazi Bari **Date:** _____

Palm Beach County **Preempt & Overlap Timing Sheet** **10/2/2012**

8925 : 310 - Donald Ross and Military Trail (Standard File)

Preemption Times[3.1]/Phases[3.2]/Options[3.3]

Channel	1	2	3	4	5	6
Lock Input	ON	ON	ON	ON	ON	ON
Override Flash		ON	ON	ON	ON	ON
Override Higher	ON	ON	ON	ON	ON	ON
Flash Dwell		ON	ON	ON	ON	ON
Link						
Delay						
Min Duration						
Min Green	5					
Min Walk						
Ped Clear						
Track Green						
Min Dwell						
Max Presence						
Track R1						
Track R2						
Track R3						
Track R4						
Dwell P1						
Dwell P2						
Dwell P3						
Dwell P4						
Dwell P5						
Dwell P6						
Dwell P7						
Dwell P8						
Dwell P9						
Dwell P10						
Dwell P11						
Dwell P12						
Dwell Ped1						
Dwell Ped2						
Dwell Ped3						
Dwell Ped4						
Dwell Ped5						
Dwell Ped6						
Dwell Ped7						
Dwell Ped8						
Exit R1						
Exit R2						
Exit R3						
Exit R4						

Preemption Times+[3.4]/Overlaps+[3.5]/Options+[3.6]

Preempt	1	2	3	4	5	6
Enable	ON	ON	ON	ON	ON	ON
Type	RAIL	EMERG	EMERG	EMERG	EMERG	EMERG
Skip Track						
Volt Mon Flash						
Coord in Preempt						
Max2	ON					
Return Max/Min	MAX	MAX	MAX	MAX	MAX	MAX
Extend Dwell						
Pattern						
Output Mode	TS2	TS2	TS2	TS2	TS2	TS2
Track Over 1						
Track Over 2						
Track Over 3						
Track Over 4						
Track Over 5						
Track Over 6						
Track Over 7						
Track Over 8						
Track Over 9						
Track Over 10						
Track Over 11						
Track Over 12						
Dwell Over 1						
Dwell Over 2						
Dwell Over 3						
Dwell Over 4						
Dwell Over 5						
Dwell Over 6						
Dwell Over 7						
Dwell Over 8						
Dwell Over 9						
Dwell Over 10						
Dwell Over 11						
Dwell Over 12						
Ped Clear						
Yellow	5					
Red	3					
Return Min/Max						
Delay Inh						
Exit Time						
All Red B4						

Appendix B - Data Collection

Overlap Program Parameters [1.5.2.1]

Overlap	Included Phases								Modifer Phases								Type	Green	Yellow	Red
Overlap 1	1																NORMAL		3.5	1.5
Overlap 2	3																NORMAL		3.5	1.5
Overlap 3																	NORMAL		3.5	1.5
Overlap 4	7																NORMAL		3.5	1.5
Overlap 5																	NORMAL		3.5	1.5
Overlap 6																	NORMAL		3.5	1.5
Overlap 7																	NORMAL		3.5	1.5
Overlap 8																	NORMAL		3.5	1.5
Overlap 9																	NORMAL		3.5	1.5
Overlap 10																	NORMAL		3.5	1.5
Overlap 11																	NORMAL		3.5	1.5
Overlap 12																	NORMAL		3.5	1.5
Overlap 13																	NORMAL		3.5	1.5
Overlap 14																	NORMAL		3.5	1.5
Overlap 15																	NORMAL		3.5	1.5
Overlap 16																	NORMAL		3.5	1.5

Approved By: Quazi Bari **Date:** _____

Palm Beach County **Alternate Timing Sheet** **10/2/2012**

8925 : 310 - Donald Ross and Military Trail (Standard File)

Alternate Phase Program 1, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5			4	2	12		4	4.5	5	
6										
7										
8										

Alternate Phase Program 2, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5										
6										
7										
8										

Alternate Phase Program 3, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5										
6										
7										
8										

Alternate Phase Program 4, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5										
6										
7										
8										

Alternate Phase Program 5, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5										
6										
7										
8										

TB Coor, Day Plan [4.4]

Appendix B - Data Collection

Day Plan Table 4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action	100															

Day Plan Table 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table 6	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Approved By: Quazi Bari **Date:** _____

Palm Beach County **Special System Timing Sheet** **10/2/2012**

8925 : 310 - Donald Ross and Military Trail (Standard File)

Coordination, Splits [2.7.1]

Split Table 7	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 8	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 9	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 10	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 11	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 12	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 13	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	MAX	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph				ON												

Appendix B - Data Collection

Split Table 14	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 15	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 16	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Approved By: Quazi Bari **Date:** _____

Appendix B - Data Collection

Palm Beach County **Signal Timing Sheet** **9/27/2012**

8924 : 290 - Donald Ross Rd and I-95 (Standard File)

Phase [1.1.1]

	1 (WT)	2 (WL)	3 (NR)	4 (ET)	5 (EL)	6 (SL)	7	8	9	10	11	12	13	14	15	16
Walk			5			5										
Ped Clearance			17			17										
Min Green	6	12	10	6	6	6		6								
Passage		4	4	2		3		2								
Max1	6	12	30	20	6	30		40								
Max2																
Yellow	4	4	4	4	4	4		4	4	4	4	4	4	4	4	4
Red	2	3	2	2	2	2		2								

Phase Option [1.1.2]

	1 (WT)	2 (WL)	3 (NR)	4 (ET)	5 (EL)	6 (SL)	7	8	9	10	11	12	13	14	15	16
Enable	ON	ON	ON	ON	ON	ON		ON								
Auto Entry								ON								
Auto Exit			ON													
Non Act1																
Non Act2																
Lock Call			ON													
Min Recall			ON													
Max Recall	ON	ON	ON	ON	ON	ON		ON								
Ped Recall																
Dual Entry																
SimGap Enable																
Rest In Walk																

Detector, Vehicle Parameters 1-16 [5.1]

	1 (WBL1)	2 (WBL2)	3 (WBT1)	4 (WBT2)	5 (WBL3)	6 (WBL4)	7 (WBT3)	8 (WBT4)	9 (NBL1)	10 (NBR1)	11 (EBL1)	12 (EBL2)	13 (EBT1)	14 (EBL3)	15 (EBT2)	16 (SBL1)
Call Phase	2	2	2	2	8	8	6	6	6	6						
Switch Phase																
Delay Time																

Detector, Vehicle Parameters 17-32 [5.1]

	17 (SBL2)	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Call Phase	2	2	2	2	6	6	6	6	4	4	4	4				
Switch Phase																
Delay Time																

Detector, Vehicle Parameters 33-48 [5.1]

	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
Call Phase																
Switch Phase																
Delay Time																

Detector, Vehicle Parameters 49-64 [5.1]

	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
Call Phase	3	3	3	3	3	3	3	3								
Switch Phase																
Delay Time																

Appendix B - Data Collection

Approved By: Quazi Bari **Date:** _____

Palm Beach County **System Timing Sheet** **9/27/2012**

8924 : 290 - Donald Ross Rd and I-95 (Standard File)

TB Coor, Day Plan [4.4]

Day Plan Table 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		6	9	15	18	20										
Minute		30			30	30										
Action	4	2	1	3	4	4										

Day Plan Table 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		8	10	19	21											
Minute																
Action	4	4	1	4	4											

Day Plan Table 3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		8	10	18	21											
Minute																
Action	4	4	1	4	4											

Coordination, Pattern 1-16 [2.1]/Coordination, Alt Tables+[2.6]

Pattern	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Cycle Time	140	160	160	120												
Offset Time		1	142	43												
Split Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Seq Number	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Ph Opt Alt																
Ph Time Alt																

Coordination, Splits [2.7.1]

Split Table 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	12	19	28	21	12	27		21								
Mode	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph			ON													

Split Table 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	12	19	33	21	12	20		43								
Mode	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph			ON													

Split Table 3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	12	19	41	25	12	28		23								
Mode	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph			ON													

Split Table 4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	12	19	18	21	12	20		18								
Mode	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON

Appendix B - Data Collection

Coord-Ph			ON													

Split Table 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	OMT	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph			ON													

Split Table 6	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Approved By: Quazi Bari **Date:** _____

Palm Beach County **Preempt & Overlap Timing Sheet** **9/27/2012**

8924 : 290 - Donald Ross Rd and I-95 (Standard File)

Preemption Times[3.1]/Phases[3.2]/Options[3.3]

Channel	1	2	3	4	5	6
Lock Input		ON	ON	ON	ON	ON
Override Flash		ON	ON	ON	ON	ON
Override Higher	ON					
Flash Dwell						
Link						
Delay						
Min Duration						
Min Green						
Min Walk						
Ped Clear						
Track Green						
Min Dwell						
Max Presence						
Track R1						
Track R2						
Track R3						
Track R4						
Dwell P1						
Dwell P2						
Dwell P3						
Dwell P4						
Dwell P5						
Dwell P6						
Dwell P7						
Dwell P8						
Dwell P9						
Dwell P10						
Dwell P11						
Dwell P12						
Dwell Ped1						
Dwell Ped2						
Dwell Ped3						
Dwell Ped4						
Dwell Ped5						
Dwell Ped6						
Dwell Ped7						
Dwell Ped8						
Exit R1						
Exit R2						
Exit R3						
Exit R4						

Preemption Times+[3.4]/Overlaps+[3.5]/Options+[3.6]

Preempt	1	2	3	4	5	6
Enable						
Type	RAIL	EMERG	EMERG	EMERG	EMERG	EMERG
Skip Track						
Volt Mon Flash						
Coord in Preempt						
Max2						
Return Max/Min	MAX	MAX	MAX	MAX	MAX	MAX
Extend Dwell						
Pattern						
Output Mode	TS2	TS2	TS2	TS2	TS2	TS2
Track Over 1						
Track Over 2						
Track Over 3						
Track Over 4						
Track Over 5						
Track Over 6						
Track Over 7						
Track Over 8						
Track Over 9						
Track Over 10						
Track Over 11						
Track Over 12						
Dwell Over 1						
Dwell Over 2						
Dwell Over 3						
Dwell Over 4						
Dwell Over 5						
Dwell Over 6						
Dwell Over 7						
Dwell Over 8						
Dwell Over 9						
Dwell Over 10						
Dwell Over 11						
Dwell Over 12						
Ped Clear						
Yellow						
Red						
Return Min/Max						
Delay Inh						
Exit Time						
All Red B4						

Appendix B - Data Collection

Overlap Program Parameters [1.5.2.1]

Overlap	Included Phases								Modifer Phases								Type	Green	Yellow	Red
Overlap 1	2	3	4														NORMAL		4	2
Overlap 2	2	3	4	5	6												NORMAL		4	2
Overlap 3	1	8															NORMAL		4	2
Overlap 4																	NORMAL		4	2
Overlap 5	5	6															NORMAL		4	2
Overlap 6																	NORMAL		3.5	1.5
Overlap 7																	NORMAL		3.5	1.5
Overlap 8																	NORMAL		3.5	1.5
Overlap 9	6	8															NORMAL		4	2
Overlap 10	1	2	6	8													NORMAL		4	2
Overlap 11	4	5															NORMAL		4	2
Overlap 12	3	4	5														NORMAL		4	2
Overlap 13	1	2	3														NORMAL		4	2
Overlap 14																	NORMAL		3.5	1.5
Overlap 15																	NORMAL		3.5	1.5
Overlap 16																	NORMAL		3.5	1.5

Approved By: Quazi Bari **Date:** _____

Palm Beach County **Alternate Timing Sheet** **9/27/2012**

8924 : 290 - Donald Ross Rd and I-95 (Standard File)

Alternate Phase Program 1, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5										
6										
7										
8										

Alternate Phase Program 2, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5										
6										
7										
8										

Alternate Phase Program 3, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5										
6										
7										
8										

Alternate Phase Program 4, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5										
6										
7										
8										

Alternate Phase Program 5, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5										
6										
7										
8										

TB Coor, Day Plan [4.4]

Appendix B - Data Collection

Day Plan Table 4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action	100															

Day Plan Table 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action	100															

Day Plan Table 6	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action	100															

Approved By: Quazi Bari **Date:** _____

Palm Beach County **Special System Timing Sheet** **9/27/2012**

8924 : 290 - Donald Ross Rd and I-95 (Standard File)

Coordination, Splits [2.7.1]

Split Table 7	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 8	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 9	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 10	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 11	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 12	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 13	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Appendix B - Data Collection

Split Table 14	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 15	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 16	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Approved By: Quazi Bari **Date:** _____

Appendix B - Data Collection

Palm Beach County **Signal Timing Sheet** **9/27/2012**

8907 : 297 - Donald Ross Rd & Parkside Dr (Standard File)

Phase [1.1.1]

	1 (EL)	2 (WT)	3	4	5 (WL)	6 (ET)	7	8 (SR)	9	10	11	12	13	14	15	16
Walk		7						7								
Ped Clearance		20						25								
Min Green	4	20			4	20		6	5	5	5	5	5	5	5	5
Passage	2	4			2	4		2	1	1	1	1	1	1	1	1
Max1	25	45			10	45		30	25	25	25	25	25	25	25	25
Max2									50	50	50	50	50	50	50	50
Yellow	4	4.5	4	4	4	4.5	4	4	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red	4	3			4	4		4.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5

Phase Option [1.1.2]

	1 (EL)	2 (WT)	3	4	5 (WL)	6 (ET)	7	8 (SR)	9	10	11	12	13	14	15	16
Enable	ON	ON			ON	ON		ON								
Auto Entry								ON								
Auto Exit		ON				ON										
Non Act1																
Non Act2																
Lock Call		ON				ON			ON	ON	ON	ON	ON	ON	ON	ON
Min Recall		ON				ON										
Max Recall																
Ped Recall																
Dual Entry		ON				ON										
SimGap Enable		ON				ON			ON	ON	ON	ON	ON	ON	ON	ON
Rest In Walk																

Detector, Vehicle Parameters 1-16 [5.1]

	1 (EBL1)	2 (WBT1)	3 (WBT2)	4 (WBT3)	5 (WBR1)	6 (WBL1)	7 (EBT1)	8 (EBT2)	9 (EBT3)	10 (SBL1)	11 (SBR1)	12	13	14	15	16
Call Phase	1	2	2	2	2	5	6	6	6	8	8					
Switch Phase	6					2										
Delay Time											10					

Detector, Vehicle Parameters 17-32 [5.1]

	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Call Phase																
Switch Phase																
Delay Time																

Detector, Vehicle Parameters 33-48 [5.1]

	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
Call Phase																
Switch Phase																
Delay Time																

Detector, Vehicle Parameters 49-64 [5.1]

	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
Call Phase																
Switch Phase																
Delay Time																

Appendix B - Data Collection

Approved By: Quazi Bari **Date:** _____

Palm Beach County **System Timing Sheet** **9/27/2012**

8907 : 297 - Donald Ross Rd & Parkside Dr (Standard File)

TB Coor, Day Plan [4.4]

Day Plan Table 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		6	9	15	18	20										
Minute		30			30	30										
Action	100	2	1	3	4	5										

Day Plan Table 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		8	10	19	21											
Minute																
Action	100	4	1	4	5											

Day Plan Table 3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		8	10	18	21											
Minute																
Action	100	4	1	4	5											

Coordination, Pattern 1-16 [2.1]/Coordination, Alt Tables+[2.6]

Pattern	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Cycle Time	140	160	160	120	100						120					
Offset Time	24		132	40							38					
Split Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Seq Number	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Ph Opt Alt																
Ph Time Alt																

Coordination, Splits [2.7.1]

Split Table 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	24	89		27	17	96		27								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	30	89		41	15	104		41								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	28	91		41	15	104		41								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	22	76		22	17	81		22								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	16	65		19	16	65		19								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

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Split Table 6	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Approved By: Quazi Bari **Date:** _____

Palm Beach County **Preempt & Overlap Timing Sheet** **9/27/2012**

8907 : 297 - Donald Ross Rd & Parkside Dr (Standard File)

Preemption Times[3.1]/Phases[3.2]/Options[3.3]

Channel	1	2	3	4	5	6
Lock Input		ON	ON	ON	ON	ON
Override Flash		ON	ON	ON	ON	ON
Override Higher						ON
Flash Dwell						
Link						
Delay						
Min Duration						
Min Green						
Min Walk						
Ped Clear						
Track Green						
Min Dwell						
Max Presence						
Track R1						
Track R2						
Track R3						
Track R4						
Dwell P1						
Dwell P2						
Dwell P3						
Dwell P4						
Dwell P5						
Dwell P6						
Dwell P7						
Dwell P8						
Dwell P9						
Dwell P10						
Dwell P11						
Dwell P12						
Dwell Ped1						
Dwell Ped2						
Dwell Ped3						
Dwell Ped4						
Dwell Ped5						
Dwell Ped6						
Dwell Ped7						
Dwell Ped8						
Exit R1						
Exit R2						
Exit R3						
Exit R4						

Preemption Times+[3.4]/Overlaps+[3.5]/Options+[3.6]

Preempt	1	2	3	4	5	6
Enable						
Type	RAIL	EMERG	EMERG	EMERG	EMERG	EMERG
Skip Track						
Volt Mon Flash						
Coord in Preempt						
Max2						
Return Max/Min	MAX	MAX	MAX	MAX	MAX	MAX
Extend Dwell						
Pattern						
Output Mode	TS2	TS2	TS2	TS2	TS2	TS2
Track Over 1						
Track Over 2						
Track Over 3						
Track Over 4						
Track Over 5						
Track Over 6						
Track Over 7						
Track Over 8						
Track Over 9						
Track Over 10						
Track Over 11						
Track Over 12						
Dwell Over 1						
Dwell Over 2						
Dwell Over 3						
Dwell Over 4						
Dwell Over 5						
Dwell Over 6						
Dwell Over 7						
Dwell Over 8						
Dwell Over 9						
Dwell Over 10						
Dwell Over 11						
Dwell Over 12						
Ped Clear						
Yellow						
Red						
Return Min/Max						
Delay Inh						
Exit Time						
All Red B4						

Overlap Program Parameters [1.5.2.1]

Overlap	Included Phases	Modifer Phases	Type	Green	Yellow	Red
Overlap 1	1		NORMAL		3.5	1.5
Overlap 2			NORMAL		3.5	1.5
Overlap 3			NORMAL		3.5	1.5

Appendix B - Data Collection

Overlap 4																	NORMAL		3.5	1.5
Overlap 5																	NORMAL		3.5	1.5
Overlap 6																	NORMAL		3.5	1.5
Overlap 7																	NORMAL		3.5	1.5
Overlap 8																	NORMAL		3.5	1.5
Overlap 9	1																NORMAL		3.5	1.5
Overlap 10	8																NORMAL		3.5	1.5
Overlap 11																	NORMAL		3.5	1.5
Overlap 12																	NORMAL		3.5	1.5
Overlap 13																	NORMAL		3.5	1.5
Overlap 14																	NORMAL		3.5	1.5
Overlap 15																	NORMAL		3.5	1.5
Overlap 16																	NORMAL		3.5	1.5

Approved By: Quazi Bari **Date:** _____

Palm Beach County **Alternate Timing Sheet** **9/27/2012**

8907 : 297 - Donald Ross Rd & Parkside Dr (Standard File)

Alternate Phase Program 1, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5										
6										
7										
8										

Alternate Phase Program 2, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5										
6										
7										
8										

Alternate Phase Program 3, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5										
6										
7										
8										

Alternate Phase Program 4, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5										
6										
7										
8										

Alternate Phase Program 5, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5										
6										
7										
8										

TB Coor, Day Plan [4.4]

Day Plan Table 4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Hour																
Minute																
Action																

Day Plan Table 6	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Approved By: Quazi Bari **Date:** _____

Palm Beach County **Special System Timing Sheet** **9/27/2012**

8907 : 297 - Donald Ross Rd & Parkside Dr (Standard File)

Coordination, Splits [2.7.1]

Split Table 7	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 8	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 9	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 10	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 11	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	40	41		39	16	65		39								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 12	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 13	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 14	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 15	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Appendix B - Data Collection

Time																
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 16	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Time																
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Approved By: Quazi Bari **Date:** _____

CONTROLLER TIME SHEET

DATE TIMING INSTALLED: _____

INTERSECTION:	NORTHLAKE BLVD. AND KEATING DR.	CONTROLLER TYPE:	NAZTEC
SIGNAL #	17324	SYSTEM #	665

PHASE NUMBER	APPROACH	MIN GREEN	GAP EXT	MAX 1	MAX 2	YEL CLR	RED CLR	WALK	PED CLR	MIN RCL	MAX RCL	PED RCL	LOCK CALLS	NA1 RIW	DETECTOR SETTINGS
	INTERVAL														
1	WALT	4.0	2.0	15.0		4.0	2.0	0.0	0.0	0			0		L1:NORMAL
2	EA	20.0	4.0	45.0		4.0	1.0	7.0	22.0	1			1		ADV:NORMAL
3	NA	5.0	2.0	20.0		4.0	2.0	5.0	26.0	0			0		L3:NORMAL L3R:D/N (10)
4	SA	5.0	2.0	25.0		4.0	2.0	0.0	0.0	0			0		L4:NORMAL L4R:D/N (10)
5	EALT	4.0	2.0	25.0		4.0	2.0	0.0	0.0	0			0		L5:NORMAL
6	WA	20.0	4.0	45.0		4.0	1.0	7.0	22.0	1			1		ADV:NORMAL
7															
8															

PRE-EMPTION TIMING								SPECIAL FUNCTIONS						
	GREEN BEFORE	TRACK CLR	TRACK CLR YEL	MIN DWELL	YEL AFTER	RED AFTER			START Φ	DUAL ENTRY	DET SWITCH	OUT OF FLASH	INTO FLASH	
										YES	NO			
									2 - 6			2 - 6	4	

COMMENTS		TIMING DESIGNED BY:	S. SHREVE, P.E.	DATE:	10/15/2008
		APPROVED BY:	G.V. JEEDIGUNTA, P.E.	DATE:	

SYSTEM TIMING SHEET

DATE TIMING INSTALLED: _____

INTERSECTION:	NORTHLAKE BLVD. AND KEATING DR.			CONTROLLER TYPE:	NAZTEC
SYSTEM:	NORTHLAKE BLVD.	INTERSECTION #	17324	SYSTEM #	665

TOD SCHEDULER											
WEEKDAY				WEEKEND							
				SATURDAY				SUNDAY			
TIME	PATTERN	TIME	PATTERN	TIME	PATTERN	TIME	PATTERN	TIME	PATTERN	TIME	PATTERN
0:00	100	6:30	2	0:00	100	7:00	5	0:00	100	7:00	5
9:00	4	11:00	1	9:00	1	18:00	4	9:00	1	18:00	4
13:30	3	19:00	4	21:00	5	23:00	100	21:00	5	23:00	100
21:00	5	23:00	100								

TIMING PLANS													
DIAL		1		2		3		4		5		6	
CYCLE LENGTH (SEC)		140		140		160		130		120			
OFFSET (SEC)		94		94		61		94		88			
PERMISSIVES		AUTO		AUTO		AUTO		AUTO		AUTO		AUTO	
COORDINATED PHASE		2		2		2		2		2			
		SPLIT	MODE	SPLIT	MODE	SPLIT	MODE	SPLIT	MODE	SPLIT	MODE	SPLIT	MODE
FORCE-OFF 1 (SEC)	WALT	20	NON	20	NON	21	MAX	20	NON	18	NON		
FORCE-OFF 2 (SEC)	EA	52	MAX	61	MAX	71	MAX	48	MAX	40	MAX		
FORCE-OFF 3 (SEC)	NA	39	NON	36	NON	38	NON	38	NON	38	NON		
FORCE-OFF 4 (SEC)	SA	29	NON	23	NON	30	NON	24	NON	24	NON		
FORCE-OFF 5 (SEC)	EALT	29	NON	20	NON	26	NON	26	NON	19	NON		
FORCE-OFF 6 (SEC)	WA	43	MAX	61	MAX	66	MAX	42	MAX	39	MAX		
FORCE-OFF 7 (SEC)		0	NON	0	NON	0	NON	0	NON	0	NON		
FORCE-OFF 8 (SEC)		68	NON	59	NON	68	NON	62	NON	62	NON		

Special Features:

1) PATTERN 3: SEQUENCE 3 (PHASE 5 LEADS)
2)
3)

TIMING DESIGNED BY:	S. SHREVE, P.E.	DATE:	10/15/2008
APPROVED BY:	G.V. JEEDIGUNTA, P.E.	DATE:	

Appendix B - Data Collection

Palm Beach County **Signal Timing Sheet** **11/9/2011**

17325 : 675 - Northlake Bl and I-95 (Special 2 File)

Phase [1.1.1]

	1 (WT)	2 (WL)	3 (NR)	4 (NL)	5 (ET)	6 (EL)	7 (SR)	8 (SL)	9	10	11	12	13	14	15	16
Walk		5	5			5	5									
Ped Clearance		10	10			10	10									
Min Green	4	4	10	6	4	4	5	6	4	4						
Passage		2	4	2		2	4	2	2	2						
Max1	4	20	45	25	4	20	45	25	20	20						
Max2																
Yellow	4.5	4	4	4	4.5	4	4	4	4	4						
Red	2	3	2	2	2	3	2	2	2	2						

Phase Option [1.1.2]

	1 (WT)	2 (WL)	3 (NR)	4 (NL)	5 (ET)	6 (EL)	7 (SR)	8 (SL)	9	10	11	12	13	14	15	16
Enable	ON	ON	ON	ON	ON	ON	ON	ON								
Auto Entry								ON								
Auto Exit			ON													
Non Act1																
Non Act2																
Lock Call	ON	ON	ON		ON	ON	ON									
Min Recall			ON													
Max Recall			ON			ON										
Ped Recall																
Dual Entry																
SimGap Enable									ON	ON	ON	ON	ON	ON	ON	ON
Rest In Walk																

Detector, Vehicle Parameters 1-16 [5.1]

	1 (WBL1)	2 (WBL2)	3 (WBT1)	4 (WBT2)	5 (WBT3)	6 (EBL1)	7 (EBL2)	8 (EBT1)	9 (EBT2)	10 (EBT3)	11 (NBL1)	12 (NBL2)	13 (NBR1)	14 (NBR2)	15 (WBL3)	16 (WBL4)
Call Phase	2	2	2	2	2	6	6	6	6	6	4	4	4	4	2	2
Switch Phase																
Delay Time																

Detector, Vehicle Parameters 17-32 [5.1]

	17 (WBT4)	18 (WBT5)	19 (WBT6)	20 (SBL1)	21 (SBL2)	22 (SBR1)	23 (SBR2)	24 (EBL3)	25 (EBL4)	26 (EBT4)	27 (EBT5)	28 (EBT6)	29	30	31	32
Call Phase	2	2	2	8	8	8	8	6	6	6	6	6				
Switch Phase																
Delay Time																

Detector, Vehicle Parameters 33-48 [5.1]

	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
Call Phase	3	3	3	3	3	7	7	7	7	7					3	3
Switch Phase																
Delay Time																

Detector, Vehicle Parameters 49-64 [5.1]

	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
Call Phase	3	3	3	7	7	7	7	7								
Switch Phase																
Delay Time																

Appendix B - Data Collection

Approved By: Stephen Shreve **Date:** _____

Palm Beach County **System Timing Sheet** **11/9/2011**

17325 : 675 - Northlake Bl and I-95 (Special 2 File)

TB Coor, Day Plan [4.4]

Day Plan Table 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		7	10	15	20											
Minute																
Action	4	2	1	3	4											

Day Plan Table 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		7	9	21												
Minute																
Action	4	4	5	4												

Day Plan Table 3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		7	9	21												
Minute																
Action	4	4	5	4												

Coordination, Pattern 1-16 [2.1]/Coordination, Alt Tables+[2.6]

Pattern	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Cycle Time	160	170	170	120	160											
Offset Time	136	80	51	98	40											
Split Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Seq Number	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Ph Opt Alt																
Ph Time Alt																

Coordination, Splits [2.7.1]

Split Table 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	11	22	33	20	11	22	24	17								
Mode	NON	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph			ON													

Split Table 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	11	22	26	20	11	22	33	25								
Mode	NON	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph			ON													

Split Table 3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	11	22	37	32	11	22	19	16								
Mode	NON	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph			ON													

Split Table 4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	11	16	16	19	11	16	13	18								
Mode	NON	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON

Appendix B - Data Collection

Coord-Ph			ON													

Split Table 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	11	22	36	16	11	22	20	22								
Mode	NON	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph			ON													

Split Table 6	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Approved By: Stephen Shreve **Date:** _____

Palm Beach County **Preempt & Overlap Timing Sheet** **11/9/2011**

17325 : 675 - Northlake Bl and I-95 (Special 2 File)

Preemption Times[3.1]/Phases[3.2]/Options[3.3]

Channel	1	2	3	4	5	6
Lock Input		ON	ON	ON	ON	ON
Override Flash		ON	ON	ON	ON	ON
Override Higher	ON	ON	ON	ON	ON	ON
Flash Dwell						
Link						
Delay						
Min Duration						
Min Green						
Min Walk						
Ped Clear						
Track Green						
Min Dwell						
Max Presence						
Track R1						
Track R2						
Track R3						
Track R4						
Dwell P1						
Dwell P2						
Dwell P3						
Dwell P4						
Dwell P5						
Dwell P6						
Dwell P7						
Dwell P8						
Dwell P9						
Dwell P10						
Dwell P11						
Dwell P12						
Dwell Ped1						
Dwell Ped2						
Dwell Ped3						
Dwell Ped4						
Dwell Ped5						
Dwell Ped6						
Dwell Ped7						
Dwell Ped8						
Exit R1						
Exit R2						
Exit R3						
Exit R4						

Preemption Times+[3.4]/Overlaps+[3.5]/Options+[3.6]

Preempt	1	2	3	4	5	6
Enable		ON	ON	ON	ON	ON
Type	RAIL	EMERG	EMERG	EMERG	EMERG	EMERG
Skip Track						
Volt Mon Flash						
Coord in Preempt						
Max2						
Return Max/Min	MAX	MAX	MAX	MAX	MAX	MAX
Extend Dwell						
Pattern						
Output Mode	TS2	TS2	TS2	TS2	TS2	TS2
Track Over 1						
Track Over 2						
Track Over 3						
Track Over 4						
Track Over 5						
Track Over 6						
Track Over 7						
Track Over 8						
Track Over 9						
Track Over 10						
Track Over 11						
Track Over 12						
Dwell Over 1						
Dwell Over 2						
Dwell Over 3						
Dwell Over 4						
Dwell Over 5						
Dwell Over 6						
Dwell Over 7						
Dwell Over 8						
Dwell Over 9						
Dwell Over 10						
Dwell Over 11						
Dwell Over 12						
Ped Clear						
Yellow	4					
Red	2					
Max Green						

Appendix B - Data Collection

Overlap Program Parameters [1.5.2.1]

Overlap	Included Phases								Modifer Phases								Type	Green	Yellow	Red
Overlap 1	2	3	4														NORMAL		3.5	1.5
Overlap 2	1	2	3														NORMAL		3.5	1.5
Overlap 3	5	6	7														NORMAL		3.5	1.5
Overlap 4	4	5	10														NORMAL		3.5	1.5
Overlap 5	1	8	9														NORMAL		3.5	1.5
Overlap 6	2	3	4	5	6												NORMAL		3.5	1.5
Overlap 7	1	2	6	7	8	9											NORMAL		3.5	1.5
Overlap 8	6	7	8	9													NORMAL		3.5	1.5
Overlap 9	3	4	5														NORMAL		3.5	1.5
Overlap 10																	NORMAL		3.5	1.5
Overlap 11	1	7	8														NORMAL		3.5	1.5
Overlap 12																	NORMAL		3.5	1.5
Overlap 13	2	3															PED 1		3.5	1.5
Overlap 14	2	3															PED 1		3.5	1.5
Overlap 15	6	7															PED 1		3.5	1.5
Overlap 16	6	7															PED 1		3.5	1.5

Approved By: Stephen Shreve **Date:** _____

Palm Beach County **Alternate Timing Sheet** **11/9/2011**

17325 : 675 - Northlake Bl and I-95 (Special 2 File)

Alternate Phase Program 1, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5										
6										
7										
8										

Alternate Phase Program 2, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5										
6										
7										
8										

Alternate Phase Program 3, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5										
6										
7										
8										

Alternate Phase Program 4, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5										
6										
7										
8										

Alternate Phase Program 5, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5										
6										
7										
8										

TB Coor, Day Plan [4.4]

Appendix B - Data Collection

Day Plan Table 4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table 6	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Approved By: Stephen Shreve **Date:** _____

Palm Beach County **Special System Timing Sheet** **11/9/2011**

17325 : 675 - Northlake Bl and I-95 (Special 2 File)

Coordination, Splits [2.7.1]

Split Table 7	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 8	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 9	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 10	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 11	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 12	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 13	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Appendix B - Data Collection

Split Table 14	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 15	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 16	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Approved By: Stephen Shreve **Date:** _____

Palm Beach County **Signal Timing Sheet** **5/11/2012**

17326 : 680 - Northlake Bl and Roan Ln (Standard File)

Phase [1.1.1]

	1 (EL)	2 (WT)	3	4	5	6 (ET)	7	8	9	10	11	12	13	14	15	16
Walk		7														
Ped Clearance		14														
Min Green	4	20				20										
Passage	3	4				4										
Max1	25	60				60										
Max2																
Yellow	4	4.5				4.5			3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red	4	2				2										

Phase Option [1.1.2]

	1 (EL)	2 (WT)	3	4	5	6 (ET)	7	8	9	10	11	12	13	14	15	16
Enable	ON	ON				ON										
Auto Entry	ON															
Auto Exit		ON				ON										
Non Act1																
Non Act2																
Lock Call		ON				ON										
Min Recall		ON				ON										
Max Recall																
Ped Recall																
Dual Entry		ON				ON										
Sim Gap Enable																
Rest In Walk																

Detector, Vehicle Parameters 1-16 [5.1]

	1 (EBL1)	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Call Phase	1															
Switch Phase																
Delay Time																

Detector, Vehicle Parameters 17-32 [5.1]

	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Call Phase																
Switch Phase																
Delay Time																

Detector, Vehicle Parameters 33-48 [5.1]

	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
Call Phase																
Switch Phase																
Delay Time																

Detector, Vehicle Parameters 49-64 [5.1]

	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
Call Phase																
Switch Phase																
Delay Time																

Approved By: Stephen Shreve **Date:** _____

Palm Beach County **System Timing Sheet** **5/11/2012**

17326 : 680 - Northlake Bl and Roan Ln (Standard File)

TB Coor, Day Plan [4.4]

Day Plan Table 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		7	10	15	20											
Minute																
Action	100	2	1	3	4											

Day Plan Table 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		7	9	21												
Minute																
Action	100	4	5	4												

Day Plan Table 3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		7	9	21												
Minute																
Action	100	4	5	4												

Coordination, Pattern 1-16 [2.1]/Coordination, Alt Tables+[2.6]

Pattern	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Cycle Time	160	170	170	120	160											
Offset Time	39	76	77	13	42											
Split Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Seq Number	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Ph Opt Alt																
Ph Time Alt																

Coordination, Splits [2.7.1]

Split Table 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	33	127				160										
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	33	137				170										
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	33	137				170										
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	33	87				120										
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	33	127				160										
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 6	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Approved By: Stephen Shreve **Date:** _____

Palm Beach County **Preempt & Overlap Timing Sheet** **5/11/2012**

17326 : 680 - Northlake Bl and Roan Ln (Standard File)

Preemption Times[3.1]/Phases[3.2]/Options[3.3]

Channel	1	2	3	4	5	6
Lock Input						
Override Flash						
Override Higher						
Flash Dwell						
Link						
Delay						
Min Duration						
Min Green						
Min Walk						
Ped Clear						
Track Green						
Min Dwell						
Max Presence						
Track R1						
Track R2						
Track R3						
Track R4						
Dwell P1						
Dwell P2						
Dwell P3						
Dwell P4						
Dwell P5						
Dwell P6						
Dwell P7						
Dwell P8						
Dwell P9						
Dwell P10						
Dwell P11						
Dwell P12						
Dwell Ped1						
Dwell Ped2						
Dwell Ped3						
Dwell Ped4						
Dwell Ped5						
Dwell Ped6						
Dwell Ped7						
Dwell Ped8						
Exit R1						
Exit R2						
Exit R3						
Exit R4						

Preemption Times+[3.4]/Overlaps+[3.5]/Options+[3.6]

Preempt	1	2	3	4	5	6
Enable						
Type	EMERG	EMERG	EMERG	EMERG	EMERG	EMERG
Skip Track						
Volt Mon Flash						
Coord in Preempt						
Max2	ON					
Return Max/Min	MAX	MAX	MAX	MAX	MAX	MAX
Extend Dwell						
Pattern						
Output Mode	TS2	TS2	TS2	TS2	TS2	TS2
Track Over 1						
Track Over 2						
Track Over 3						
Track Over 4						
Track Over 5						
Track Over 6						
Track Over 7						
Track Over 8						
Track Over 9						
Track Over 10						
Track Over 11						
Track Over 12						
Dwell Over 1						
Dwell Over 2						
Dwell Over 3						
Dwell Over 4						
Dwell Over 5						
Dwell Over 6						
Dwell Over 7						
Dwell Over 8						
Dwell Over 9						
Dwell Over 10						
Dwell Over 11						
Dwell Over 12						
Ped Clear						
Yellow						
Red						
Max Green						

Overlap Program Parameters [1.5.2.1]

Overlap	Included Phases								Modifer Phases								Type	Green	Yellow	Red
Overlap 1																	NORMAL		3.5	1.5
Overlap 2																	NORMAL		3.5	1.5
Overlap 3																	NORMAL		3.5	1.5
Overlap 4																	NORMAL		3.5	1.5
Overlap 5																	NORMAL		3.5	1.5

Overlap 6																NORMAL		3.5	1.5
Overlap 7																NORMAL		3.5	1.5
Overlap 8																NORMAL		3.5	1.5
Overlap 9																NORMAL		3.5	1.5
Overlap 10																NORMAL		3.5	1.5
Overlap 11																NORMAL		3.5	1.5
Overlap 12																NORMAL		3.5	1.5
Overlap 13																NORMAL		3.5	1.5
Overlap 14																NORMAL		3.5	1.5
Overlap 15																NORMAL		3.5	1.5
Overlap 16																NORMAL		3.5	1.5

Approved By: Stephen Shreve **Date:** _____

Palm Beach County **Alternate Timing Sheet** **5/11/2012**

17326 : 680 - Northlake Bl and Roan Ln (Standard File)

Alternate Phase Program 1, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5										
6										
7										
8										

Alternate Phase Program 2, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5										
6										
7										
8										

Alternate Phase Program 3, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5										
6										
7										
8										

Alternate Phase Program 4, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5										
6										
7										
8										

Alternate Phase Program 5, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5										
6										
7										
8										

TB Coor, Day Plan [4.4]

Day Plan Table 4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																

Minute																
Action																

Day Plan Table 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table 6	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Approved By: Stephen Shreve **Date:** _____

Palm Beach County **Special System Timing Sheet** **5/11/2012**

17326 : 680 - Northlake Bl and Roan Ln (Standard File)

Coordination, Splits [2.7.1]

Split Table 7	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 8	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 9	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 10	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 11	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 12	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 13	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	36	62	30	22	20	78	30	22								
Mode	NON	MAX	NON	NON	MAX	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 14	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 15	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 16	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Approved By: Stephen Shreve **Date:** _____

Palm Beach County **Signal Timing Sheet** **3/30/2012**

17330 : 685 - Northlake Bl and Sandtree Dr (Standard File)

Phase [1.1.1]

	1 (EL)	2 (WT)	3 (SL)	4 (NT)	5 (WL)	6 (ET)	7 (NL)	8 (ST)	9	10	11	12	13	14	15	16
Walk		7		5		7		5								
Ped Clearance		18		30		24		39								
Min Green	4	20	4	6	4	20	4	6								
Passage	2	4	2	2	2	4	2	2								
Max1	20	45	15	20	20	45	30	20								
Max2																
Yellow	4	4.5	4	4	4	4.5	4	4	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red	3	3	2.5	3	3	3	2.5	3								

Phase Option [1.1.2]

	1 (EL)	2 (WT)	3 (SL)	4 (NT)	5 (WL)	6 (ET)	7 (NL)	8 (ST)	9	10	11	12	13	14	15	16
Enable	ON	ON	ON	ON	ON	ON	ON	ON								
Auto Entry				ON				ON								
Auto Exit		ON				ON										
Non Act1																
Non Act2																
Lock Call		ON				ON										
Min Recall		ON				ON										
Max Recall																
Ped Recall																
Dual Entry		ON		ON		ON		ON								
Sim Gap Enable																
Rest In Walk																

Detector, Vehicle Parameters 1-16 [5.1]

	1 (EBL1)	2 (WBT1)	3 (WBT2)	4 (WBT3)	5 (SBL1)	6 (NBT1)	7 (NBR1)	8 (WBL1)	9 (WBL2)	10 (EBT1)	11 (EBT2)	12 (EBT3)	13 (EBR1)	14 (NBL1)	15 (NBL2)	16 (SBT1)
Call Phase	1	2	2	2	3	4	4	5	5	6	6	6	6	7	7	8
Switch Phase																
Delay Time						5	10									5

Detector, Vehicle Parameters 17-32 [5.1]

	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Call Phase																
Switch Phase																
Delay Time																

Detector, Vehicle Parameters 33-48 [5.1]

	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
Call Phase																
Switch Phase																
Delay Time																

Detector, Vehicle Parameters 49-64 [5.1]

	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
Call Phase																
Switch Phase																
Delay Time																

Approved By: Stephen Shreve **Date:** _____

Palm Beach County **System Timing Sheet** **3/30/2012**

17330 : 685 - Northlake Bl and Sandtree Dr (Standard File)

TB Coor, Day Plan [4.4]

Day Plan Table 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		7	10	15	20											
Minute																
Action	100	2	1	3	4											

Day Plan Table 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		7	9	21												
Minute																
Action	100	4	5	4												

Day Plan Table 3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		7	9	21												
Minute																
Action	100	4	5	4												

Coordination, Pattern 1-16 [2.1]/Coordination, Alt Tables+[2.6]

Pattern	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Cycle Time	160	170	170	120	160											
Offset Time	93	20	17	74	142											
Split Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Seq Number	6	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1
Ph Opt Alt																
Ph Time Alt																

Coordination, Splits [2.7.1]

Split Table 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	22	64	36	48	23	63	31	53								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph						ON										

Split Table 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	28	66	25	51	23	71	24	52								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph						ON										

Split Table 3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	19	68	24	59	20	67	32	51								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph						ON										

Split Table 4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	24	56	22	18	24	56	21	19								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph						ON										

Split Table 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	18	66	23	53	19	65	23	53								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph						ON										

Split Table 6	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Approved By: Stephen Shreve **Date:** _____

Palm Beach County **Preempt & Overlap Timing Sheet** **3/30/2012**

17330 : 685 - Northlake Bl and Sandtree Dr (Standard File)

Preemption Times[3.1]/Phases[3.2]/Options[3.3]

Channel	1	2	3	4	5	6
Lock Input						
Override Flash						
Override Higher						
Flash Dwell						
Link						
Delay						
Min Duration						
Min Green						
Min Walk						
Ped Clear						
Track Green						
Min Dwell						
Max Presence						
Track R1						
Track R2						
Track R3						
Track R4						
Dwell P1						
Dwell P2						
Dwell P3						
Dwell P4						
Dwell P5						
Dwell P6						
Dwell P7						
Dwell P8						
Dwell P9						
Dwell P10						
Dwell P11						
Dwell P12						
Dwell Ped1						
Dwell Ped2						
Dwell Ped3						
Dwell Ped4						
Dwell Ped5						
Dwell Ped6						
Dwell Ped7						
Dwell Ped8						
Exit R1						
Exit R2						
Exit R3						
Exit R4						

Preemption Times+[3.4]/Overlaps+[3.5]/Options+[3.6]

Preempt	1	2	3	4	5	6
Enable						
Type	EMERG	EMERG	EMERG	EMERG	EMERG	EMERG
Skip Track						
Volt Mon Flash						
Coord in Preempt						
Max2	ON					
Return Max/Min	MAX	MAX	MAX	MAX	MAX	MAX
Extend Dwell						
Pattern						
Output Mode	TS2	TS2	TS2	TS2	TS2	TS2
Track Over 1						
Track Over 2						
Track Over 3						
Track Over 4						
Track Over 5						
Track Over 6						
Track Over 7						
Track Over 8						
Track Over 9						
Track Over 10						
Track Over 11						
Track Over 12						
Dwell Over 1						
Dwell Over 2						
Dwell Over 3						
Dwell Over 4						
Dwell Over 5						
Dwell Over 6						
Dwell Over 7						
Dwell Over 8						
Dwell Over 9						
Dwell Over 10						
Dwell Over 11						
Dwell Over 12						
Ped Clear						
Yellow						
Red						
Max Green						

Overlap Program Parameters [1.5.2.1]

Overlap	Included Phases								Modifer Phases								Type	Green	Yellow	Red
Overlap 1																	NORMAL		3.5	1.5
Overlap 2																	NORMAL		3.5	1.5
Overlap 3																	NORMAL		3.5	1.5
Overlap 4	7																NORMAL		3.5	1.5
Overlap 5																	NORMAL		3.5	1.5

Overlap 6																NORMAL		3.5	1.5
Overlap 7																NORMAL		3.5	1.5
Overlap 8																NORMAL		3.5	1.5
Overlap 9																NORMAL		3.5	1.5
Overlap 10																NORMAL		3.5	1.5
Overlap 11																NORMAL		3.5	1.5
Overlap 12																NORMAL		3.5	1.5
Overlap 13																NORMAL		3.5	1.5
Overlap 14																NORMAL		3.5	1.5
Overlap 15																NORMAL		3.5	1.5
Overlap 16																NORMAL		3.5	1.5

Approved By: Stephen Shreve **Date:** _____

Palm Beach County **Alternate Timing Sheet** **3/30/2012**

17330 : 685 - Northlake Bl and Sandtree Dr (Standard File)

Alternate Phase Program 1, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4							4			
5										
6										
7										
8							4			

Alternate Phase Program 2, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5										
6										
7										
8										

Alternate Phase Program 3, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5										
6										
7										
8										

Alternate Phase Program 4, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5										
6										
7										
8										

Alternate Phase Program 5, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5										
6										
7										
8										

TB Coor, Day Plan [4.4]

Day Plan Table 4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																

Minute																
Action																

Day Plan Table 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table 6	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Approved By: Stephen Shreve **Date:** _____

Palm Beach County **Special System Timing Sheet** **3/30/2012**

17330 : 685 - Northlake Bl and Sandtree Dr (Standard File)

Coordination, Splits [2.7.1]

Split Table 7	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 8	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 9	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 10	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 11	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 12	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 13	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	36	62	30	22	20	78	30	22								
Mode	NON	MAX	NON	NON	MAX	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 14	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 15	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 16	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Approved By: Stephen Shreve **Date:** _____

2012 PALM BEACH COUNTY

PEAK SEASON FACTOR CATEGORY REPORT

2012 PEAK SEASON FACTOR CATEGORY REPORT REPORT TYPE: ALL
CATEGORY: 9300 EAST- A1A TO US1

MOCF: 0.88

WEEK	DATES	SF	PSCF
1	01/01/2012 - 01/07/2012	0.99	1.12
2	01/08/2012 - 01/14/2012	0.95	1.08
* 3	01/15/2012 - 01/21/2012	0.91	1.03
* 4	01/22/2012 - 01/28/2012	0.90	1.02
* 5	01/29/2012 - 02/04/2012	0.89	1.01
* 6	02/05/2012 - 02/11/2012	0.88	1.00
* 7	02/12/2012 - 02/18/2012	0.87	0.99
* 8	02/19/2012 - 02/25/2012	0.86	0.97
* 9	02/26/2012 - 03/03/2012	0.86	0.97
*10	03/04/2012 - 03/10/2012	0.86	0.97
*11	03/11/2012 - 03/17/2012	0.86	0.97
*12	03/18/2012 - 03/24/2012	0.87	0.99
*13	03/25/2012 - 03/31/2012	0.89	1.01
*14	04/01/2012 - 04/07/2012	0.90	1.02
*15	04/08/2012 - 04/14/2012	0.92	1.04
16	04/15/2012 - 04/21/2012	0.93	1.05
17	04/22/2012 - 04/28/2012	0.95	1.08
18	04/29/2012 - 05/05/2012	0.98	1.11
19	05/06/2012 - 05/12/2012	1.00	1.13
20	05/13/2012 - 05/19/2012	1.03	1.17
21	05/20/2012 - 05/26/2012	1.04	1.18
22	05/27/2012 - 06/02/2012	1.06	1.20
23	06/03/2012 - 06/09/2012	1.07	1.21
24	06/10/2012 - 06/16/2012	1.09	1.24
25	06/17/2012 - 06/23/2012	1.09	1.24
26	06/24/2012 - 06/30/2012	1.10	1.25
27	07/01/2012 - 07/07/2012	1.10	1.25
28	07/08/2012 - 07/14/2012	1.11	1.26
29	07/15/2012 - 07/21/2012	1.12	1.27
30	07/22/2012 - 07/28/2012	1.12	1.27
31	07/29/2012 - 08/04/2012	1.12	1.27
32	08/05/2012 - 08/11/2012	1.13	1.28
33	08/12/2012 - 08/18/2012	1.13	1.28
34	08/19/2012 - 08/25/2012	1.13	1.28
35	08/26/2012 - 09/01/2012	1.13	1.28
36	09/02/2012 - 09/08/2012	1.13	1.28
37	09/09/2012 - 09/15/2012	1.13	1.28
38	09/16/2012 - 09/22/2012	1.11	1.26
39	09/23/2012 - 09/29/2012	1.10	1.25
40	09/30/2012 - 10/06/2012	1.09	1.24
41	10/07/2012 - 10/13/2012	1.08	1.22
42	10/14/2012 - 10/20/2012	1.06	1.20
43	10/21/2012 - 10/27/2012	1.05	1.19
44	10/28/2012 - 11/03/2012	1.04	1.18
45	11/04/2012 - 11/10/2012	1.03	1.17
46	11/11/2012 - 11/17/2012	1.01	1.14
47	11/18/2012 - 11/24/2012	1.01	1.14
48	11/25/2012 - 12/01/2012	1.00	1.13
49	12/02/2012 - 12/08/2012	0.99	1.12
50	12/09/2012 - 12/15/2012	0.99	1.12
51	12/16/2012 - 12/22/2012	0.96	1.09
52	12/23/2012 - 12/29/2012	0.93	1.05
53	12/30/2012 - 12/31/2012	0.91	1.03

* PEAK SEASON

08-FEB-2013 12:30:21 830UPD [1,0,0,1] 4_9300_PKSEASON.TXT

2012 PEAK SEASON FACTOR CATEGORY REPORT REPORT TYPE: ALL
CATEGORY: 9301 CEN.-W OF US1 TO SR7

MOCF: 0.96

WEEK	DATES	SF	PSCF
1	01/01/2012 - 01/07/2012	0.98	1.02
2	01/08/2012 - 01/14/2012	0.98	1.02
3	01/15/2012 - 01/21/2012	0.98	1.02
* 4	01/22/2012 - 01/28/2012	0.97	1.01
* 5	01/29/2012 - 02/04/2012	0.97	1.01
* 6	02/05/2012 - 02/11/2012	0.96	1.00
* 7	02/12/2012 - 02/18/2012	0.95	0.99
* 8	02/19/2012 - 02/25/2012	0.95	0.99
* 9	02/26/2012 - 03/03/2012	0.95	0.99
*10	03/04/2012 - 03/10/2012	0.95	0.99
*11	03/11/2012 - 03/17/2012	0.95	0.99
*12	03/18/2012 - 03/24/2012	0.96	1.00
*13	03/25/2012 - 03/31/2012	0.96	1.00
*14	04/01/2012 - 04/07/2012	0.97	1.01
*15	04/08/2012 - 04/14/2012	0.98	1.02
*16	04/15/2012 - 04/21/2012	0.98	1.02
17	04/22/2012 - 04/28/2012	0.99	1.03
18	04/29/2012 - 05/05/2012	1.00	1.04
19	05/06/2012 - 05/12/2012	1.01	1.05
20	05/13/2012 - 05/19/2012	1.01	1.05
21	05/20/2012 - 05/26/2012	1.02	1.06
22	05/27/2012 - 06/02/2012	1.03	1.07
23	06/03/2012 - 06/09/2012	1.04	1.08
24	06/10/2012 - 06/16/2012	1.04	1.08
25	06/17/2012 - 06/23/2012	1.05	1.09
26	06/24/2012 - 06/30/2012	1.05	1.09
27	07/01/2012 - 07/07/2012	1.06	1.10
28	07/08/2012 - 07/14/2012	1.06	1.10
29	07/15/2012 - 07/21/2012	1.07	1.11
30	07/22/2012 - 07/28/2012	1.07	1.11
31	07/29/2012 - 08/04/2012	1.07	1.11
32	08/05/2012 - 08/11/2012	1.06	1.10
33	08/12/2012 - 08/18/2012	1.06	1.10
34	08/19/2012 - 08/25/2012	1.06	1.10
35	08/26/2012 - 09/01/2012	1.05	1.09
36	09/02/2012 - 09/08/2012	1.04	1.08
37	09/09/2012 - 09/15/2012	1.03	1.07
38	09/16/2012 - 09/22/2012	1.02	1.06
39	09/23/2012 - 09/29/2012	1.02	1.06
40	09/30/2012 - 10/06/2012	1.01	1.05
41	10/07/2012 - 10/13/2012	1.00	1.04
42	10/14/2012 - 10/20/2012	0.99	1.03
43	10/21/2012 - 10/27/2012	0.99	1.03
44	10/28/2012 - 11/03/2012	0.98	1.02
45	11/04/2012 - 11/10/2012	0.97	1.01
46	11/11/2012 - 11/17/2012	0.96	1.00
47	11/18/2012 - 11/24/2012	0.97	1.01
48	11/25/2012 - 12/01/2012	0.97	1.01
49	12/02/2012 - 12/08/2012	0.98	1.02
50	12/09/2012 - 12/15/2012	0.98	1.02
51	12/16/2012 - 12/22/2012	0.98	1.02
52	12/23/2012 - 12/29/2012	0.98	1.02
53	12/30/2012 - 12/31/2012	0.98	1.02

* PEAK SEASON

08-FEB-2013 12:30:21 830UPD [1,0,0,1] 4_9301_PKSEASON.TXT

2012 PEAK SEASON FACTOR CATEGORY REPORT REPORT TYPE: ALL
CATEGORY: 9327 WEST-W OF SR7

MOCF: 0.92

WEEK	DATES	SF	PSCF
1	01/01/2012 - 01/07/2012	0.98	1.07
2	01/08/2012 - 01/14/2012	0.96	1.05
* 3	01/15/2012 - 01/21/2012	0.94	1.03
* 4	01/22/2012 - 01/28/2012	0.93	1.01
* 5	01/29/2012 - 02/04/2012	0.93	1.01
* 6	02/05/2012 - 02/11/2012	0.92	1.00
* 7	02/12/2012 - 02/18/2012	0.91	0.99
* 8	02/19/2012 - 02/25/2012	0.90	0.98
* 9	02/26/2012 - 03/03/2012	0.90	0.98
*10	03/04/2012 - 03/10/2012	0.89	0.97
*11	03/11/2012 - 03/17/2012	0.88	0.96
*12	03/18/2012 - 03/24/2012	0.90	0.98
*13	03/25/2012 - 03/31/2012	0.92	1.00
*14	04/01/2012 - 04/07/2012	0.94	1.03
*15	04/08/2012 - 04/14/2012	0.96	1.05
16	04/15/2012 - 04/21/2012	0.98	1.07
17	04/22/2012 - 04/28/2012	0.98	1.07
18	04/29/2012 - 05/05/2012	0.99	1.08
19	05/06/2012 - 05/12/2012	0.99	1.08
20	05/13/2012 - 05/19/2012	1.00	1.09
21	05/20/2012 - 05/26/2012	1.01	1.10
22	05/27/2012 - 06/02/2012	1.03	1.12
23	06/03/2012 - 06/09/2012	1.05	1.15
24	06/10/2012 - 06/16/2012	1.07	1.17
25	06/17/2012 - 06/23/2012	1.07	1.17
26	06/24/2012 - 06/30/2012	1.07	1.17
27	07/01/2012 - 07/07/2012	1.08	1.18
28	07/08/2012 - 07/14/2012	1.08	1.18
29	07/15/2012 - 07/21/2012	1.09	1.19
30	07/22/2012 - 07/28/2012	1.09	1.19
31	07/29/2012 - 08/04/2012	1.10	1.20
32	08/05/2012 - 08/11/2012	1.11	1.21
33	08/12/2012 - 08/18/2012	1.11	1.21
34	08/19/2012 - 08/25/2012	1.10	1.20
35	08/26/2012 - 09/01/2012	1.09	1.19
36	09/02/2012 - 09/08/2012	1.08	1.18
37	09/09/2012 - 09/15/2012	1.07	1.17
38	09/16/2012 - 09/22/2012	1.06	1.16
39	09/23/2012 - 09/29/2012	1.05	1.15
40	09/30/2012 - 10/06/2012	1.04	1.13
41	10/07/2012 - 10/13/2012	1.03	1.12
42	10/14/2012 - 10/20/2012	1.02	1.11
43	10/21/2012 - 10/27/2012	1.01	1.10
44	10/28/2012 - 11/03/2012	1.00	1.09
45	11/04/2012 - 11/10/2012	0.98	1.07
46	11/11/2012 - 11/17/2012	0.97	1.06
47	11/18/2012 - 11/24/2012	0.97	1.06
48	11/25/2012 - 12/01/2012	0.98	1.07
49	12/02/2012 - 12/08/2012	0.98	1.07
50	12/09/2012 - 12/15/2012	0.98	1.07
51	12/16/2012 - 12/22/2012	0.97	1.06
52	12/23/2012 - 12/29/2012	0.95	1.04
53	12/30/2012 - 12/31/2012	0.94	1.03

* PEAK SEASON

08-FEB-2013 12:30:22 830UPD [1,0,0,1] 4_9327_PKSEASON.TXT

2012 PEAK SEASON FACTOR CATEGORY REPORT REPORT TYPE: ALL
CATEGORY: 9395 PALM BEACH I95

MOCF: 0.95

WEEK	DATES	SF	PSCF
1	01/01/2012 - 01/07/2012	0.98	1.03
2	01/08/2012 - 01/14/2012	0.99	1.04
3	01/15/2012 - 01/21/2012	0.99	1.04
* 4	01/22/2012 - 01/28/2012	0.98	1.03
* 5	01/29/2012 - 02/04/2012	0.97	1.02
* 6	02/05/2012 - 02/11/2012	0.96	1.01
* 7	02/12/2012 - 02/18/2012	0.94	0.99
* 8	02/19/2012 - 02/25/2012	0.94	0.99
* 9	02/26/2012 - 03/03/2012	0.94	0.99
*10	03/04/2012 - 03/10/2012	0.93	0.98
*11	03/11/2012 - 03/17/2012	0.93	0.98
*12	03/18/2012 - 03/24/2012	0.94	0.99
*13	03/25/2012 - 03/31/2012	0.95	1.00
*14	04/01/2012 - 04/07/2012	0.96	1.01
*15	04/08/2012 - 04/14/2012	0.96	1.01
*16	04/15/2012 - 04/21/2012	0.97	1.02
17	04/22/2012 - 04/28/2012	0.98	1.03
18	04/29/2012 - 05/05/2012	0.99	1.04
19	05/06/2012 - 05/12/2012	1.00	1.05
20	05/13/2012 - 05/19/2012	1.01	1.06
21	05/20/2012 - 05/26/2012	1.02	1.07
22	05/27/2012 - 06/02/2012	1.02	1.07
23	06/03/2012 - 06/09/2012	1.03	1.08
24	06/10/2012 - 06/16/2012	1.03	1.08
25	06/17/2012 - 06/23/2012	1.03	1.08
26	06/24/2012 - 06/30/2012	1.03	1.08
27	07/01/2012 - 07/07/2012	1.04	1.09
28	07/08/2012 - 07/14/2012	1.04	1.09
29	07/15/2012 - 07/21/2012	1.04	1.09
30	07/22/2012 - 07/28/2012	1.04	1.09
31	07/29/2012 - 08/04/2012	1.05	1.10
32	08/05/2012 - 08/11/2012	1.05	1.10
33	08/12/2012 - 08/18/2012	1.06	1.11
34	08/19/2012 - 08/25/2012	1.06	1.11
35	08/26/2012 - 09/01/2012	1.06	1.11
36	09/02/2012 - 09/08/2012	1.06	1.11
37	09/09/2012 - 09/15/2012	1.06	1.11
38	09/16/2012 - 09/22/2012	1.05	1.10
39	09/23/2012 - 09/29/2012	1.05	1.10
40	09/30/2012 - 10/06/2012	1.04	1.09
41	10/07/2012 - 10/13/2012	1.03	1.08
42	10/14/2012 - 10/20/2012	1.02	1.07
43	10/21/2012 - 10/27/2012	1.01	1.06
44	10/28/2012 - 11/03/2012	1.00	1.05
45	11/04/2012 - 11/10/2012	0.99	1.04
46	11/11/2012 - 11/17/2012	0.98	1.03
47	11/18/2012 - 11/24/2012	0.98	1.03
48	11/25/2012 - 12/01/2012	0.98	1.03
49	12/02/2012 - 12/08/2012	0.98	1.03
50	12/09/2012 - 12/15/2012	0.98	1.03
51	12/16/2012 - 12/22/2012	0.98	1.03
52	12/23/2012 - 12/29/2012	0.99	1.04
53	12/30/2012 - 12/31/2012	0.99	1.04

* PEAK SEASON

08-FEB-2013 12:30:22 830UPD [1,0,0,1] 4_9395_PKSEASON.TXT

APPENDIX C

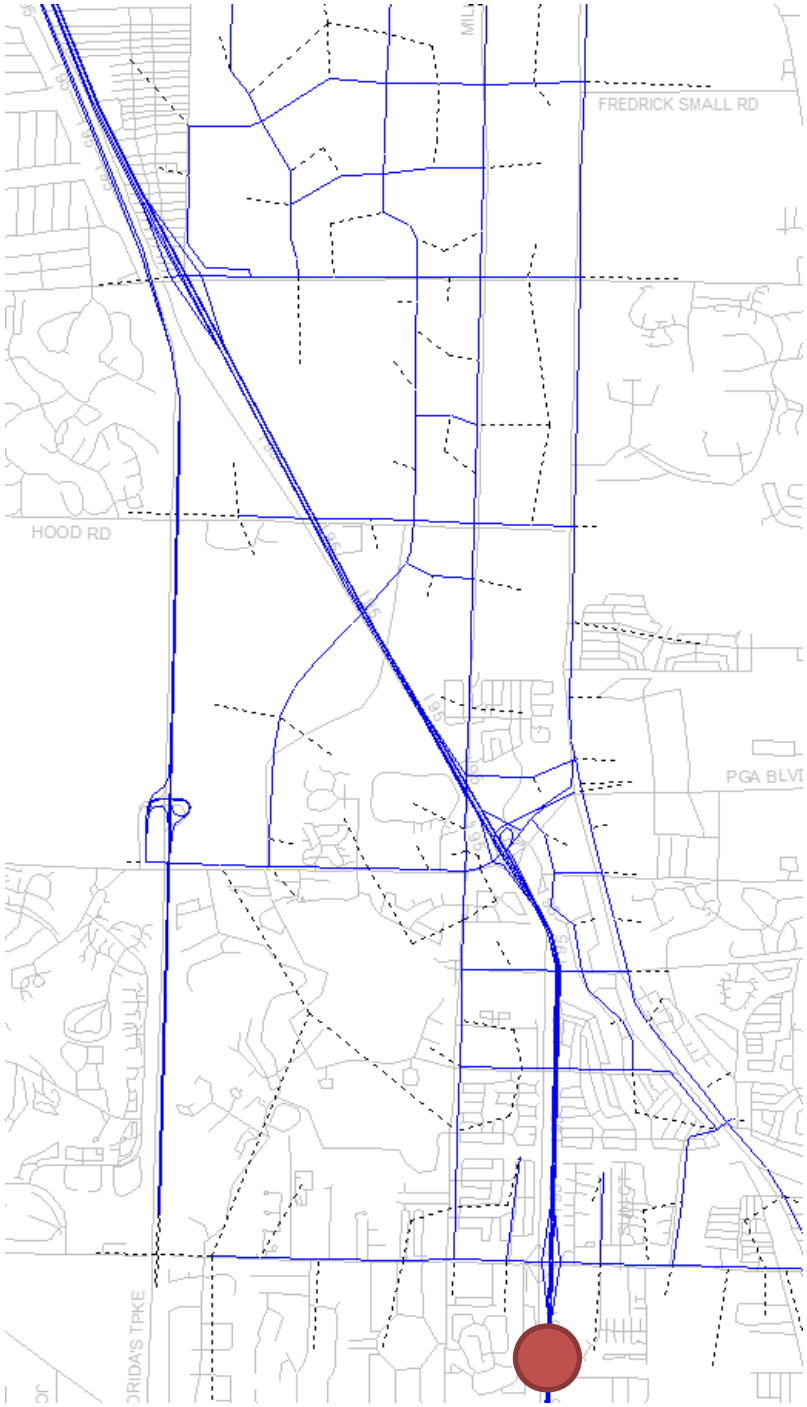
FSUTMS VOLUME PLOTS

No-Build Alternative - 2040 Peak Period Volumes

Mainline and Ramps

Red: AM

Black PM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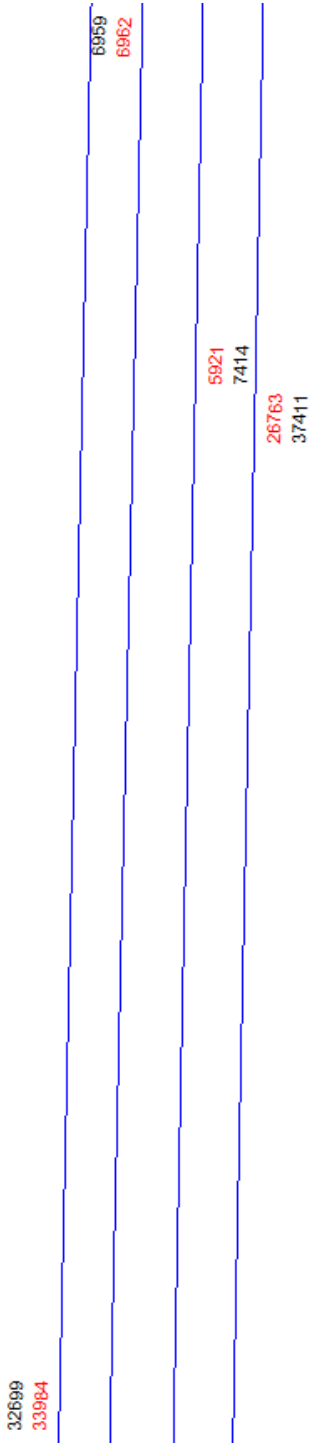
HOOD RD
PGA BLVD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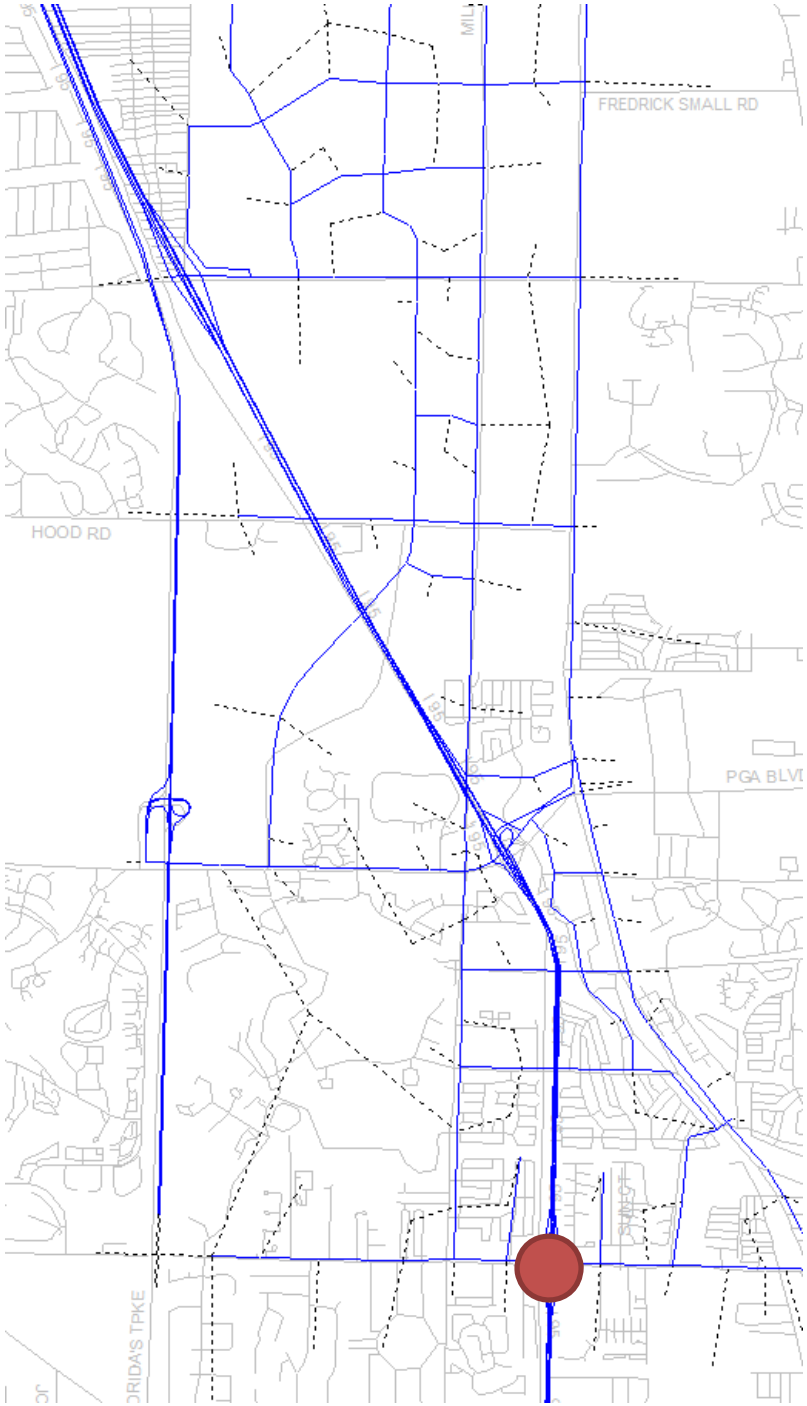
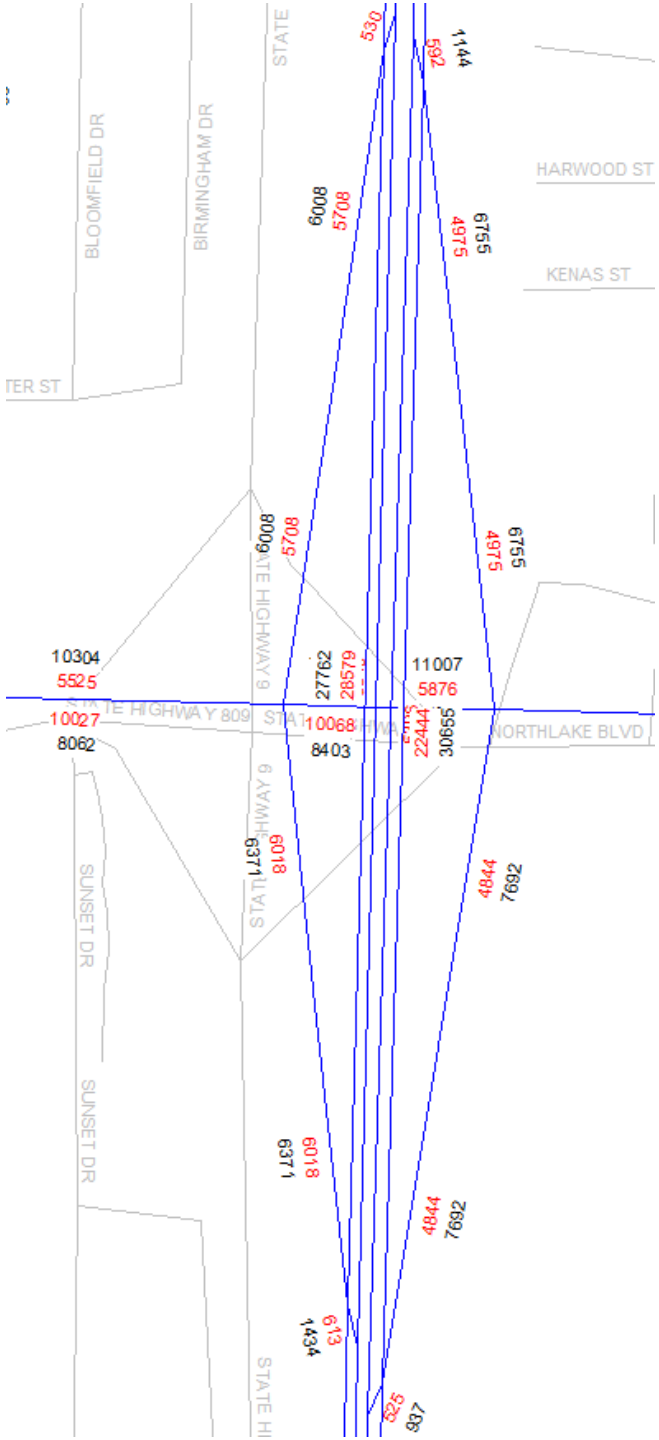
7414
26763
37411
32699
33984


FREDRICK SMALL RD
HOOD RD
PGA BLVD


BLOOMFIELD DR
BIRMINGHAM DR
HARWOOD ST
KENAS ST
NORTHLAKE BLVD
SUNSET DR
10304
5525
10027
8062
11007
5876
10068
8403
6008
5708
6755
4975
6018
6371
4844
7692
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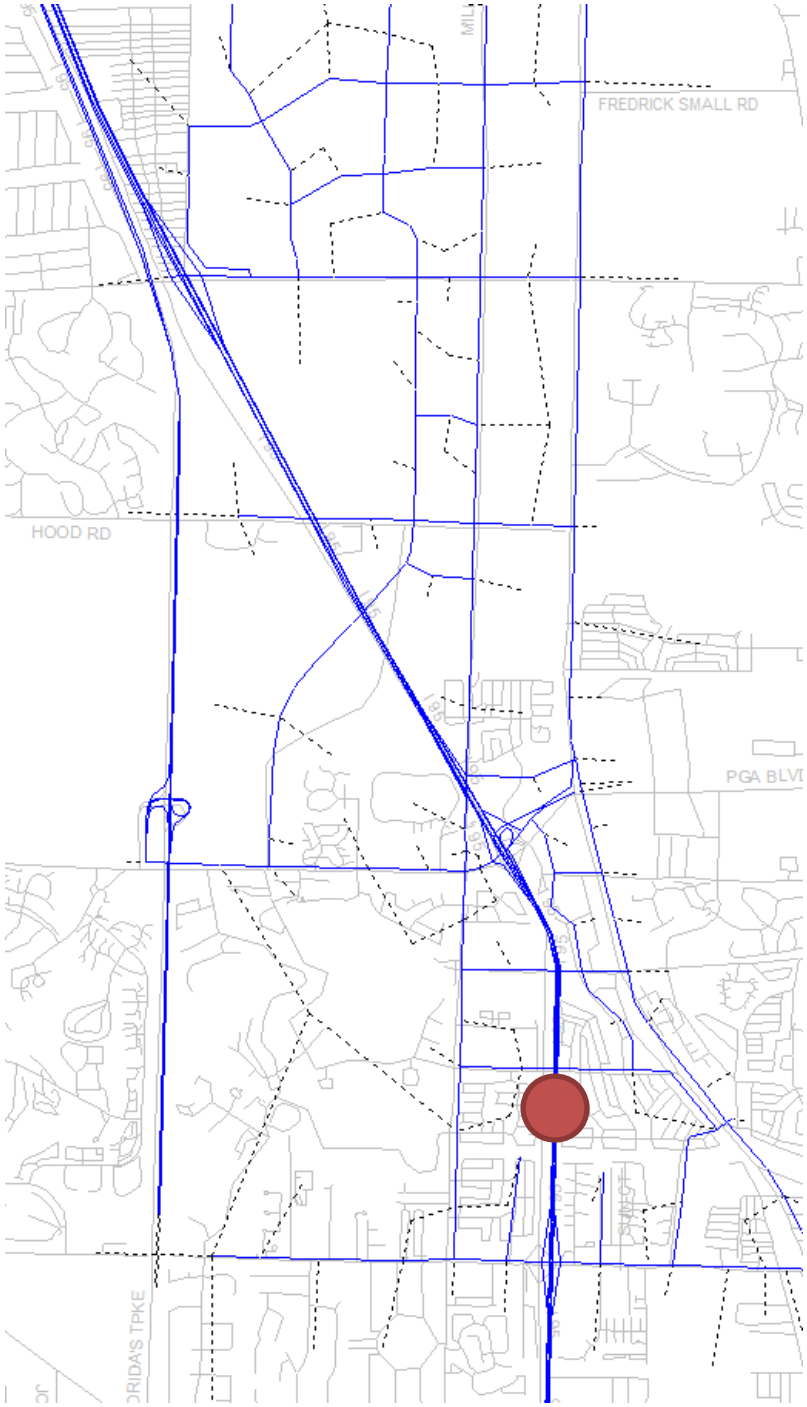
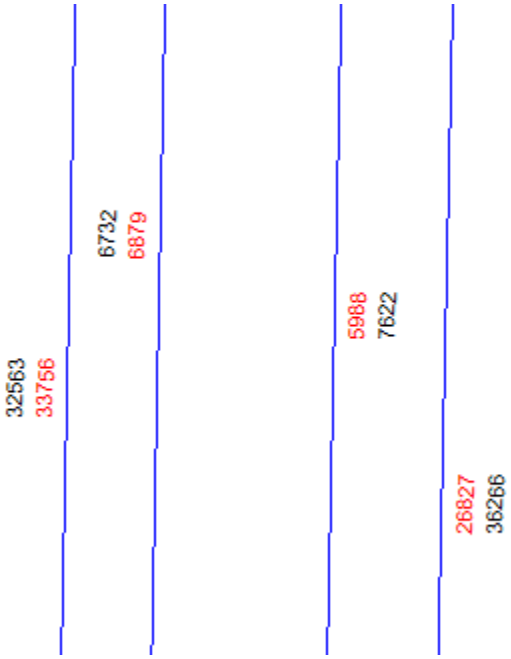
530
692
27762
28579
30655
22444
1434
613
825
937


FREDRICK SMALL RD
HOOD RD
PGA BLVD
FLORIDA'S TPKE


32563
33756
6732
6879
5988
7622
26827
36266

FREDRICK SMALL I
HOOD RD
STATE HIGHWAY 9
STATE HIGHWAY 9 / I 95
PGA BLVD
CANYON DR
FLORIDA'S TPKE
945
407
864
388
2591
393
5898
5760
24177
15732
6589
2671
12197
10310
5230
6223
4586
2291
12211
10897
2233
1150
10809
7522
23556
22137
7896
7762
4449
3001
5592
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4341
11386
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9338
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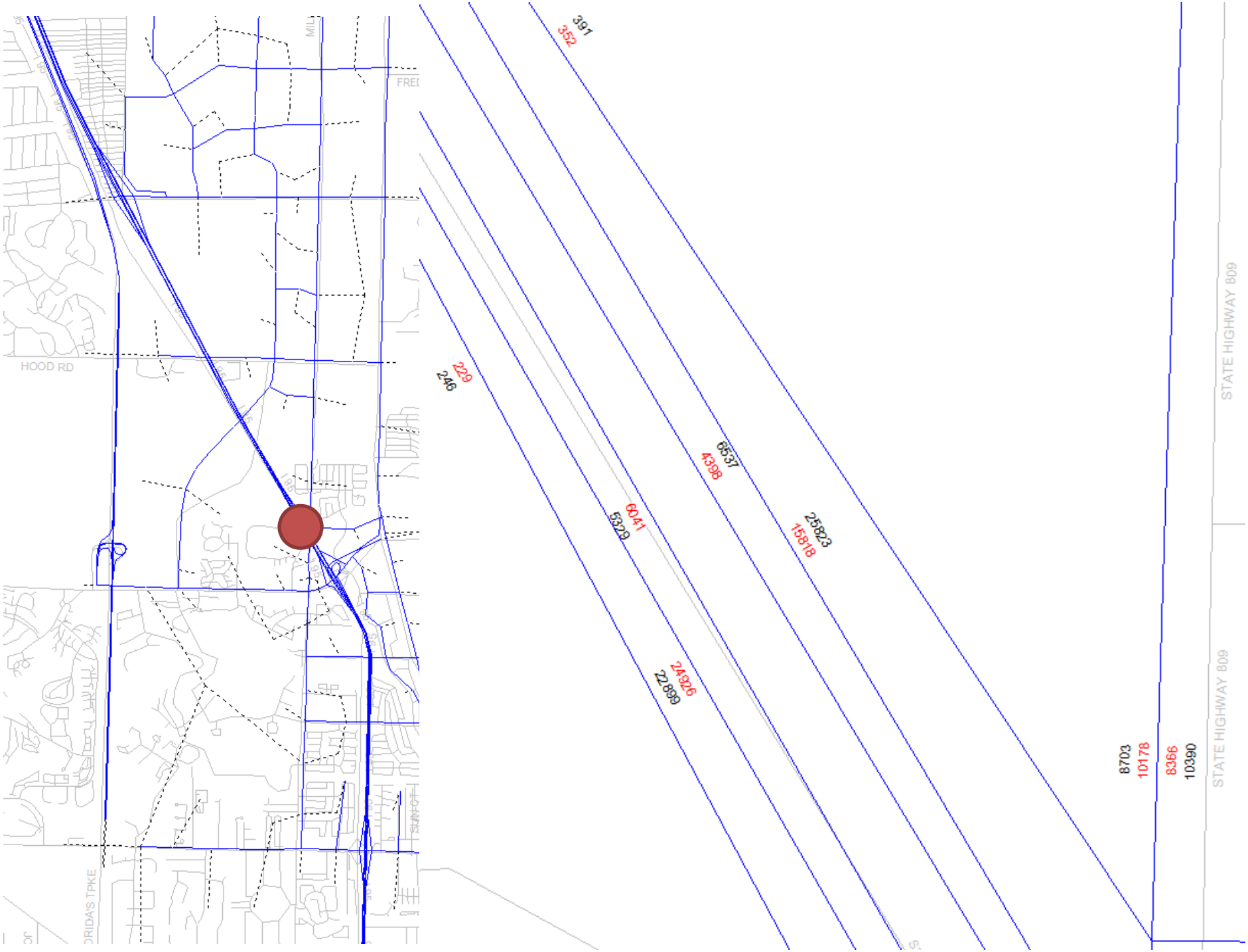
30400
20982


HOOD RD
STATE HIGHWAY 809
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352
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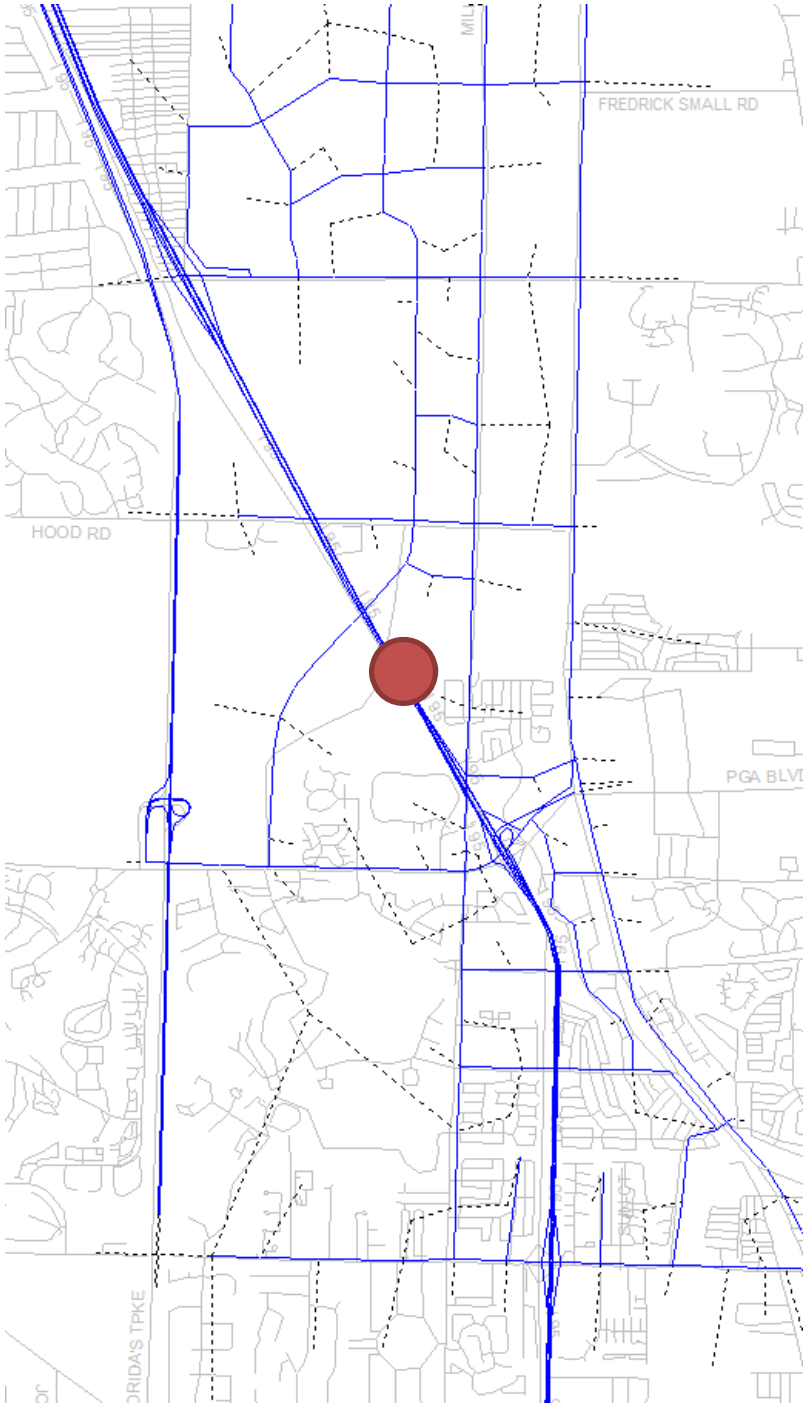
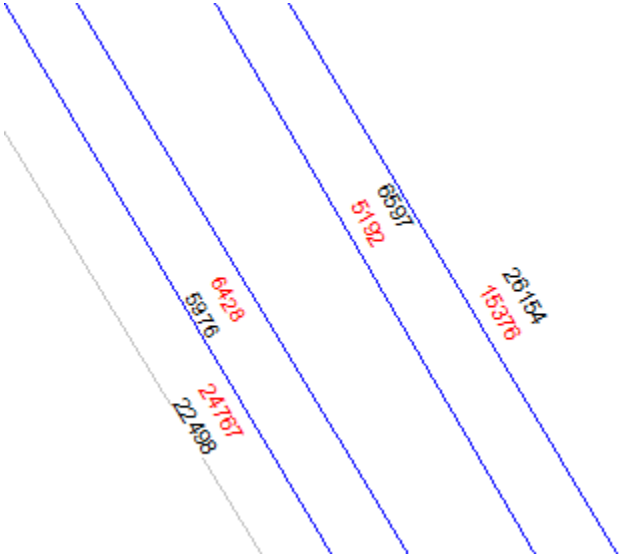
246
6537
4398
6041
5329
25823
15818
24926
22869
8703
10178
8366
10390


FREDRICK SMALL RD
HOOD RD
PGA BLVD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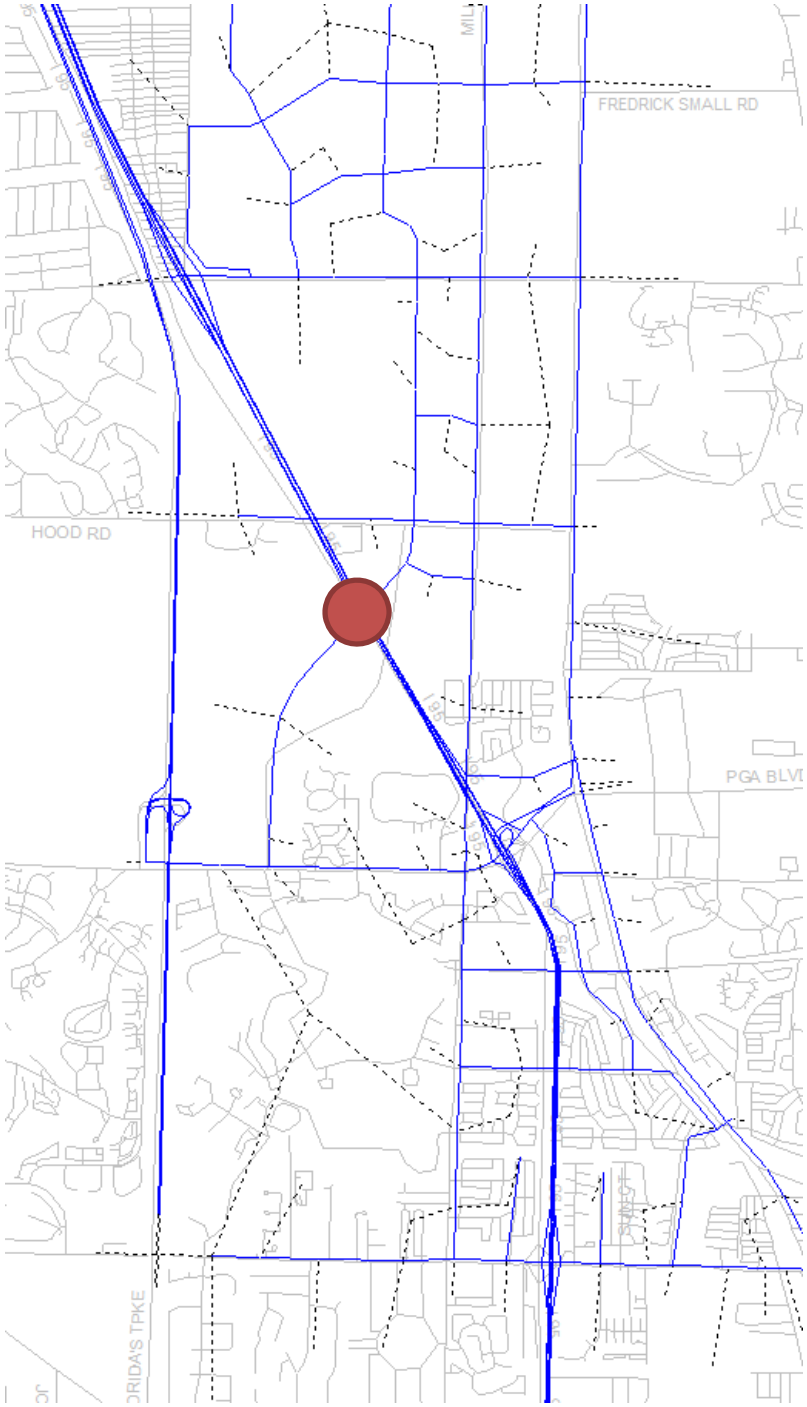
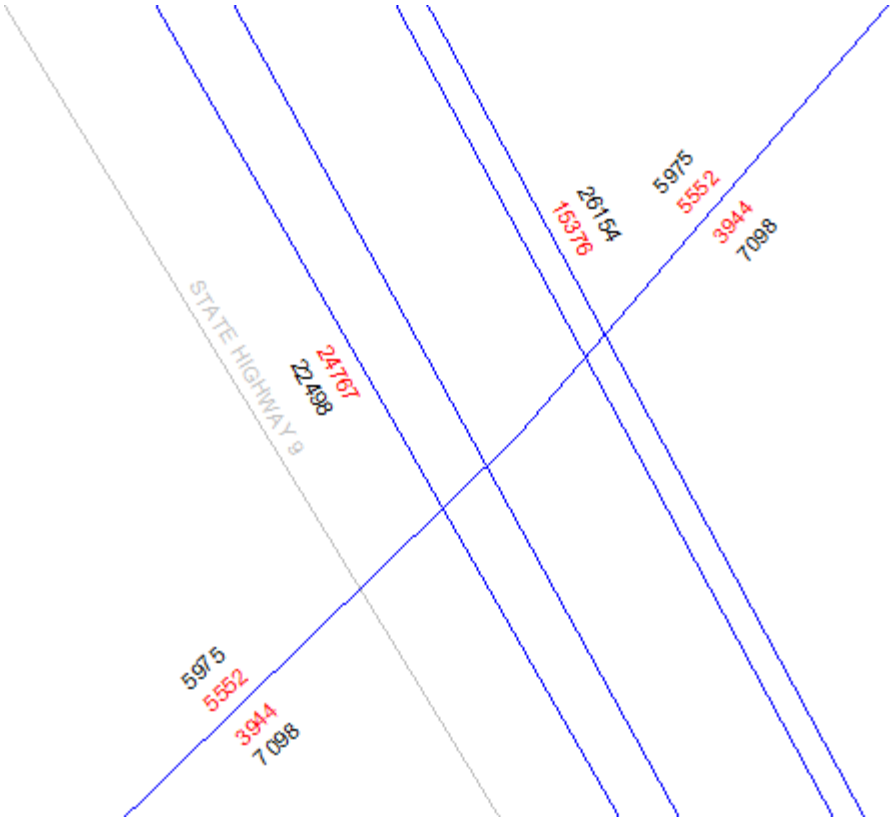
15376
6428
5376
24767
22498


FREDRICK SMALL RD
HOOD RD
PGA BLVD
FLORIDA'S TPKE


STATE HIGHWAY 9
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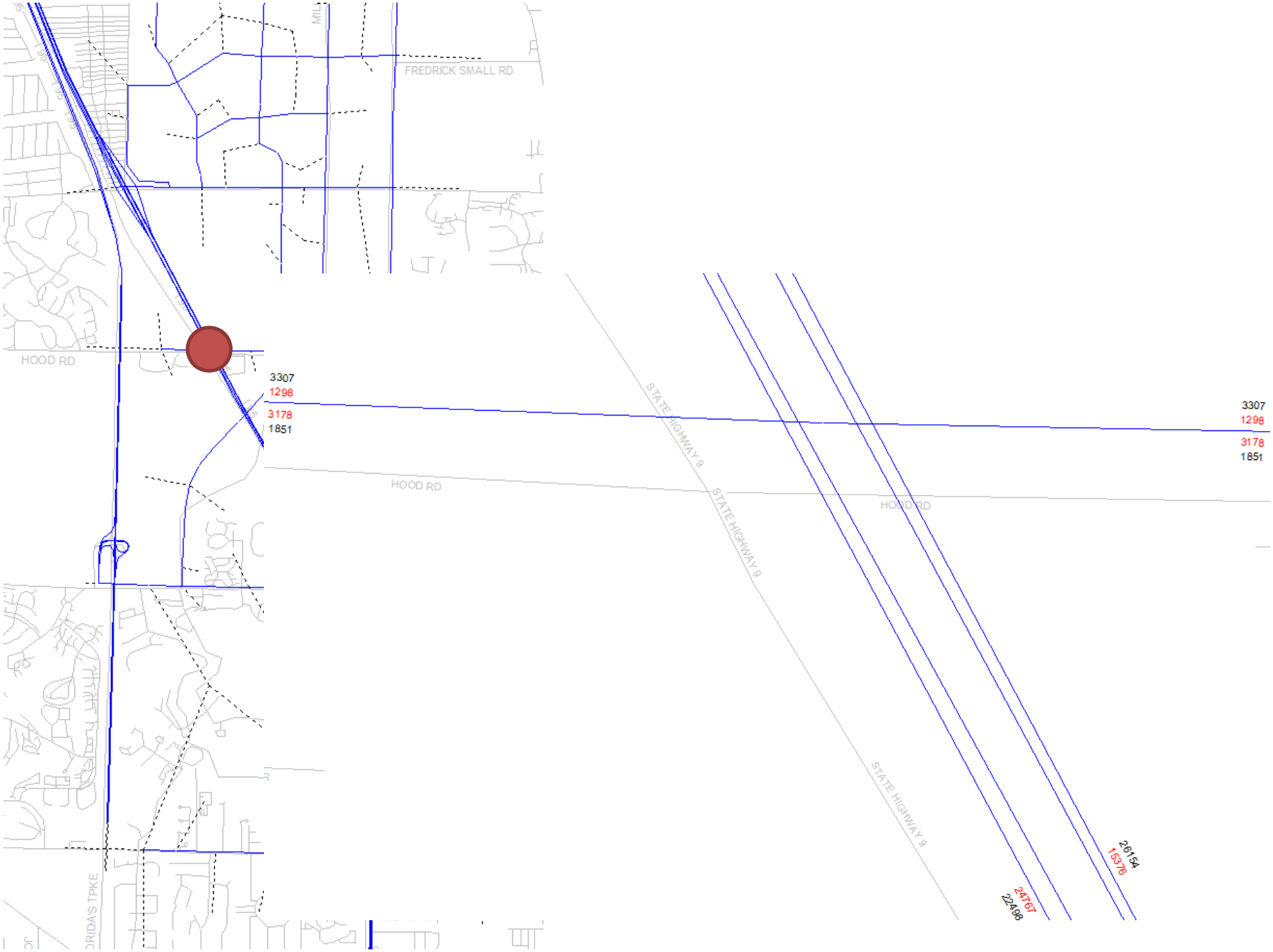
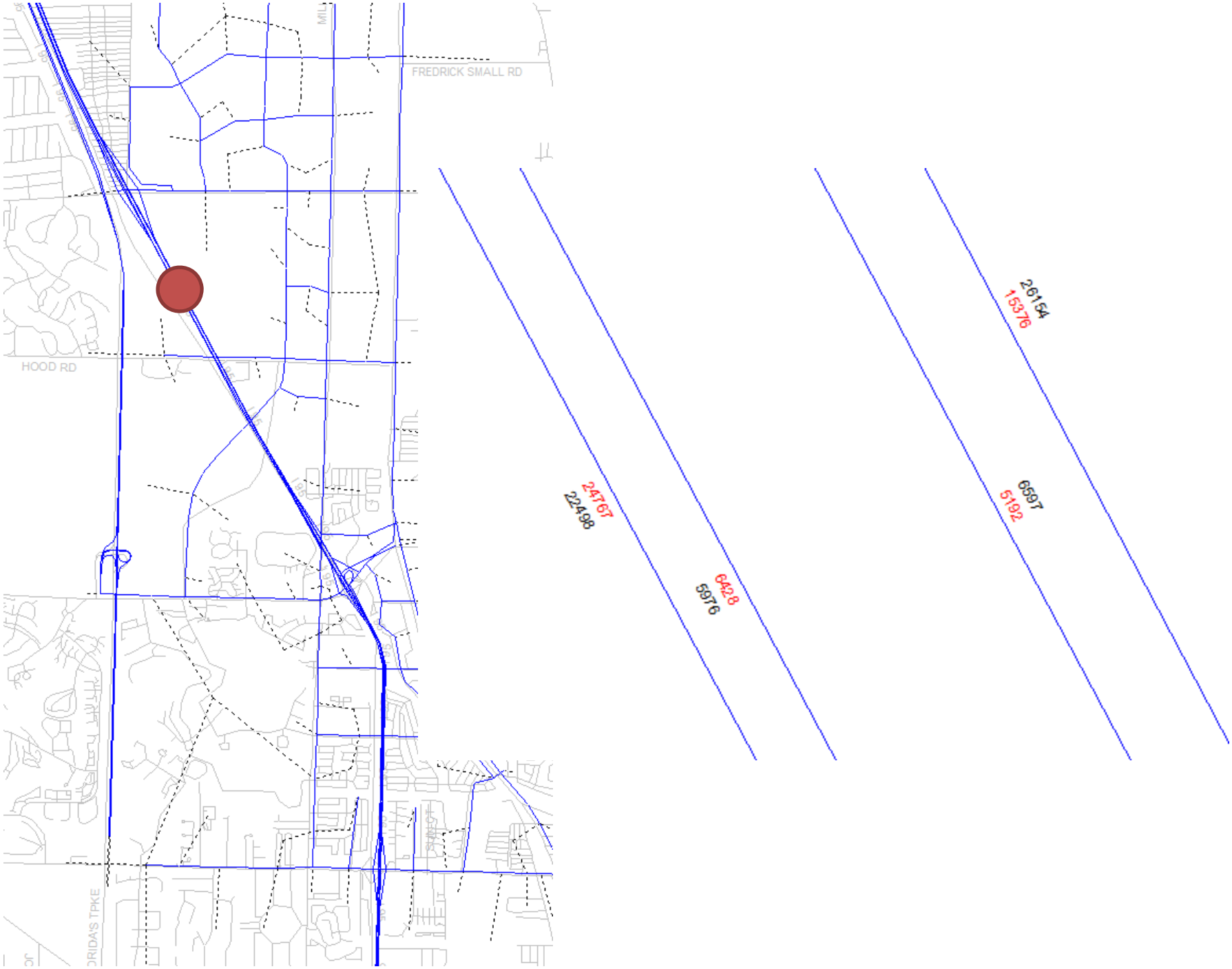
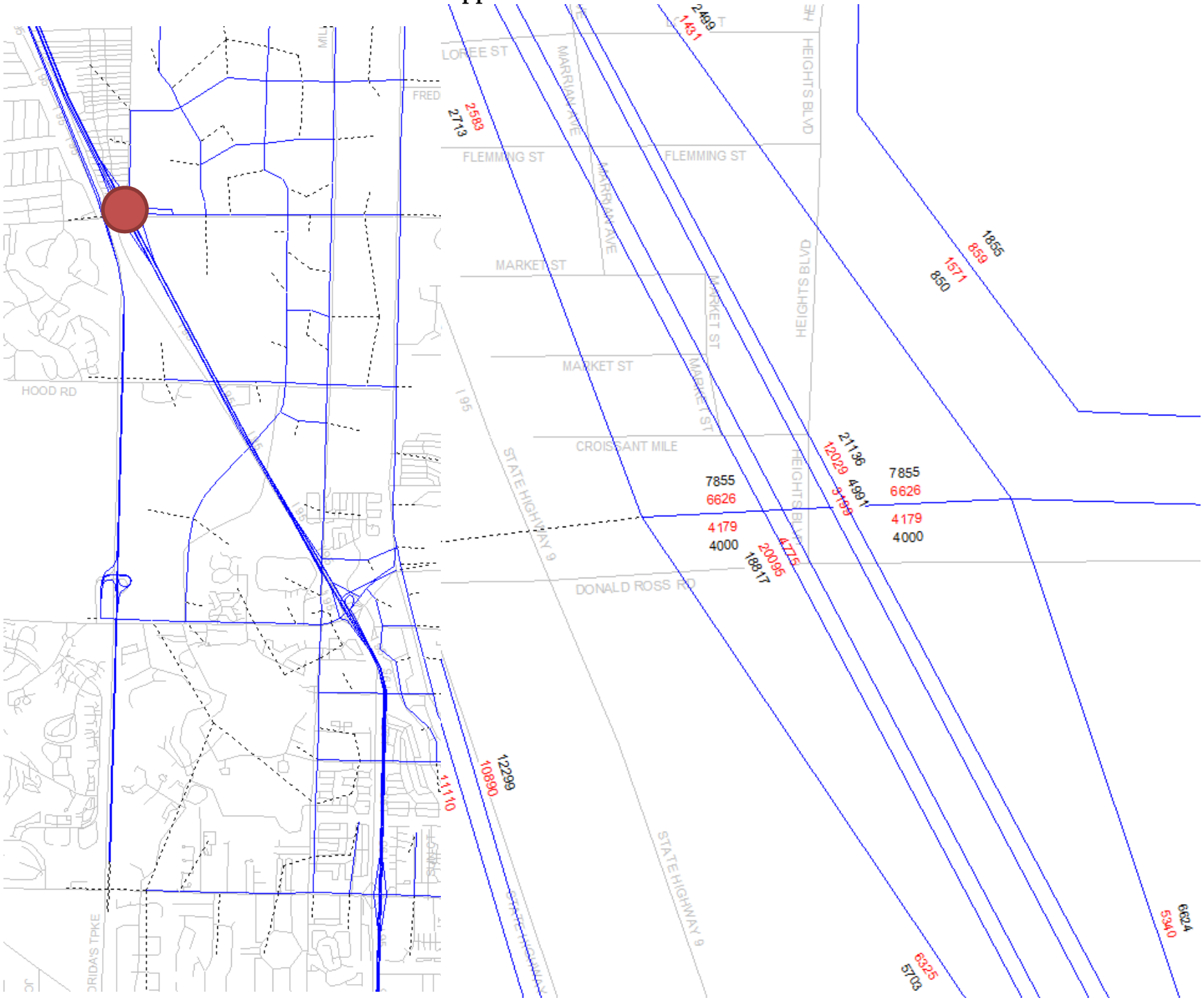
22498
26154
15376
5975
5552
3944
7098
5975
5552
3944
7098


FREDRICK SMALL RD
HOOD RD
3307
1298
3178
1851
HOOD RD
STATE HIGHWAY 9
STATE HIGHWAY 9
STATE HIGHWAY 9
3307
1298
3178
1851
HOOD RD
26154
15376
24767
22499


FREDRICK SMALL RD
HOOD RD
26154
15376
24767
22498
6428
5976
6597
5192


LORREE ST
FLEMMING ST
MARKET ST
CROISSANT MILE
DONALD ROSS RD
HOOD RD
HEIGHTS BLVD
MARRIANA AVE
STATE HIGHWAY 9
I 95
2499
1431
2583
2713
1856
859
1571
850
21136
12029
4991
9159
7855
6626
4179
4000
20095
18817
4775
12299
10690
11110
6624
5340
6325
5703

FREDRICK SMALL RD
HOOD RD
PGA BLVD
DIAMOND
5841
4791
22785
11867
5522
5357
21932
20127

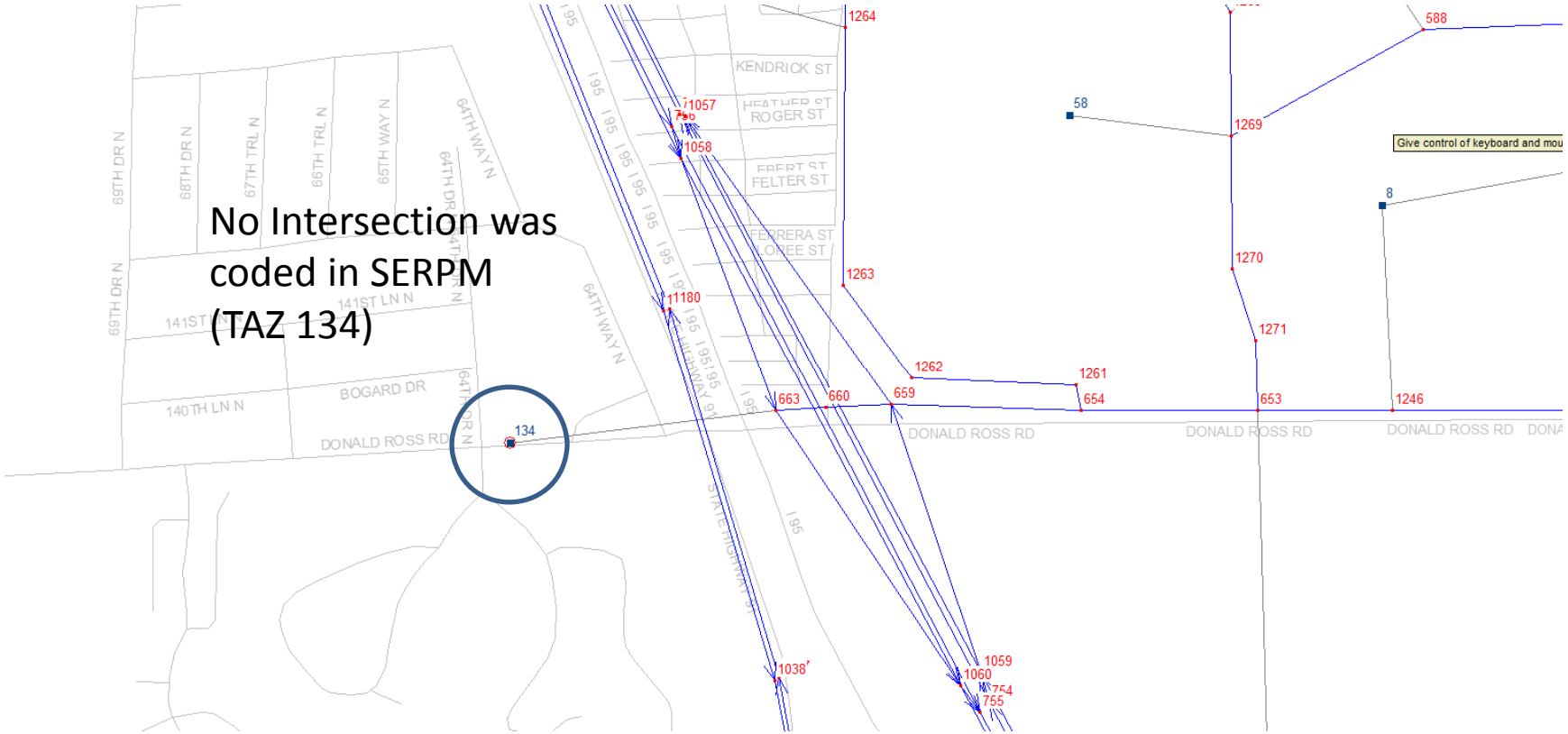
No-Build Alternative - 2040 Peak Period Volumes

Missing Intersections

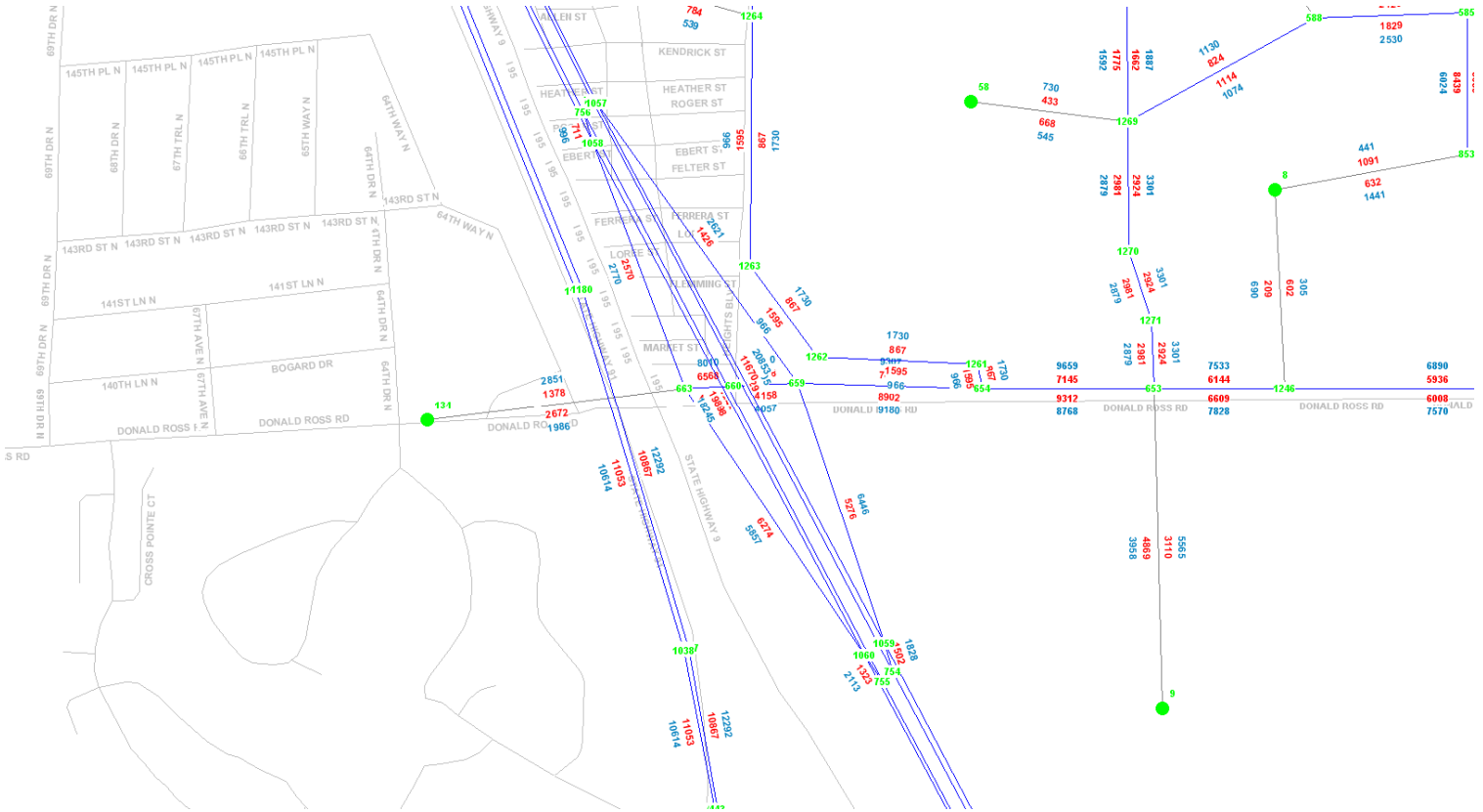
Red: AM

Blue PM

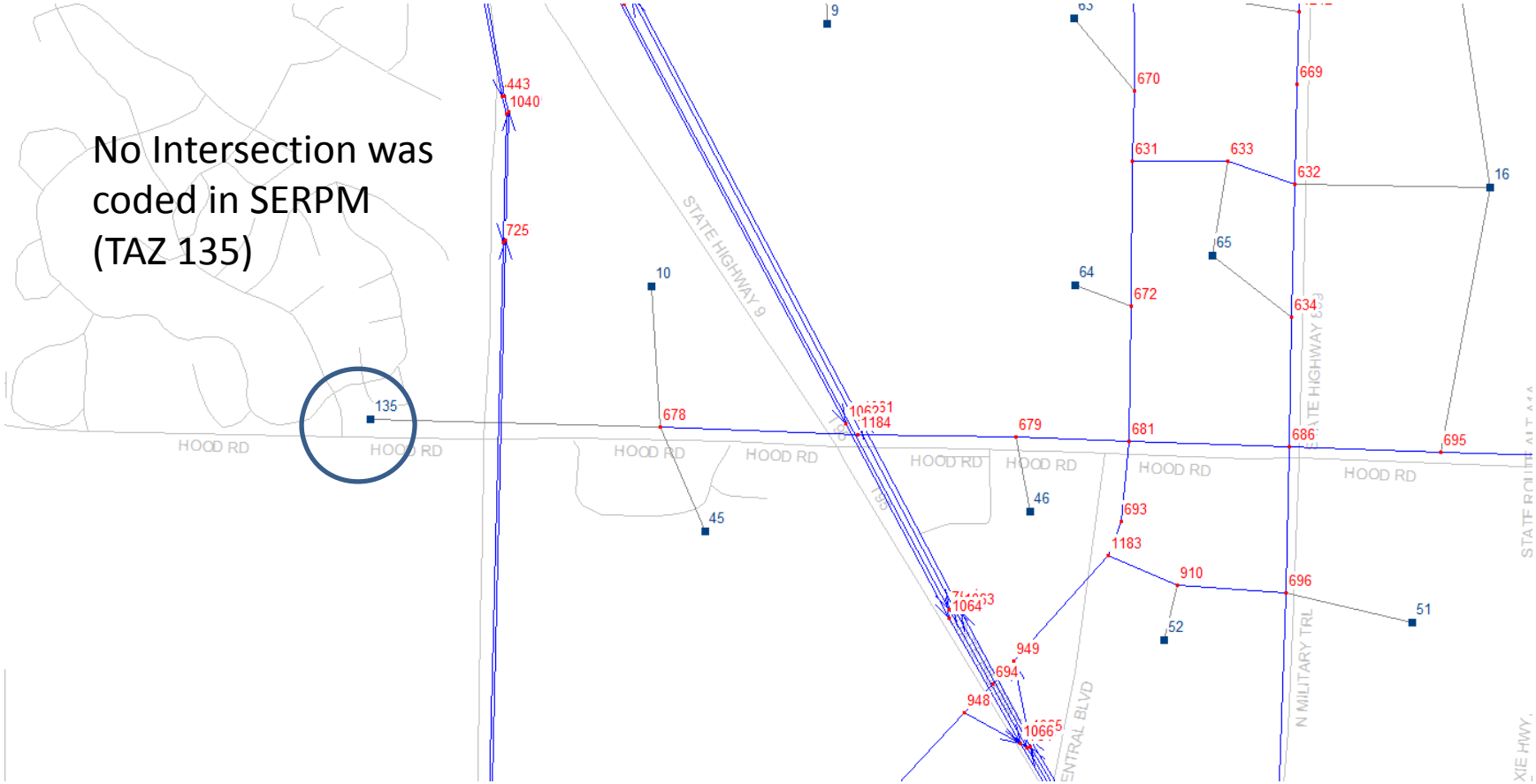
4. Donald Ross Road and 64th Drive North (TAZ 134)



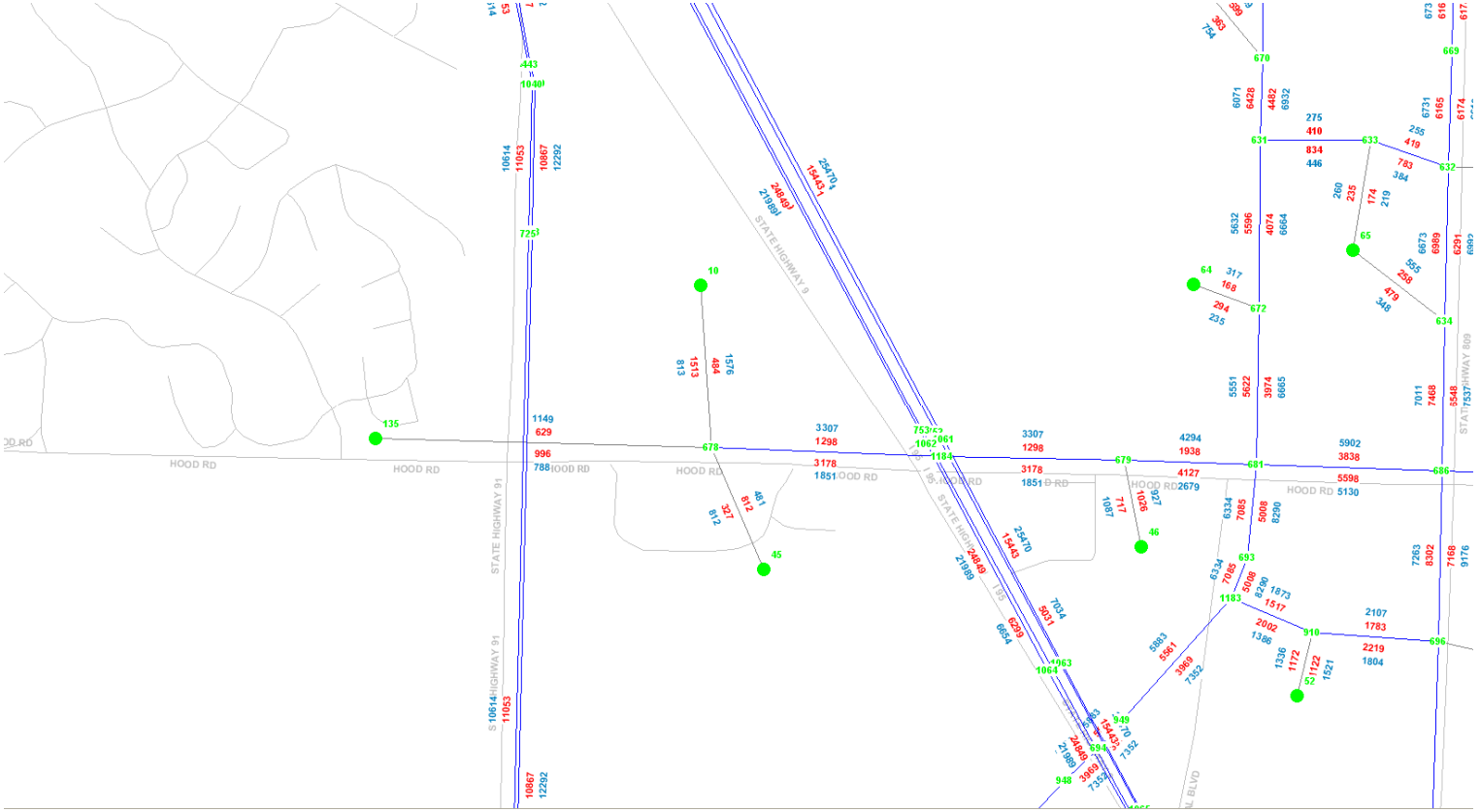
4. Donald Ross Road and 64th Drive North (TAZ 134) **DDHV AM(red)/PM(blue)**



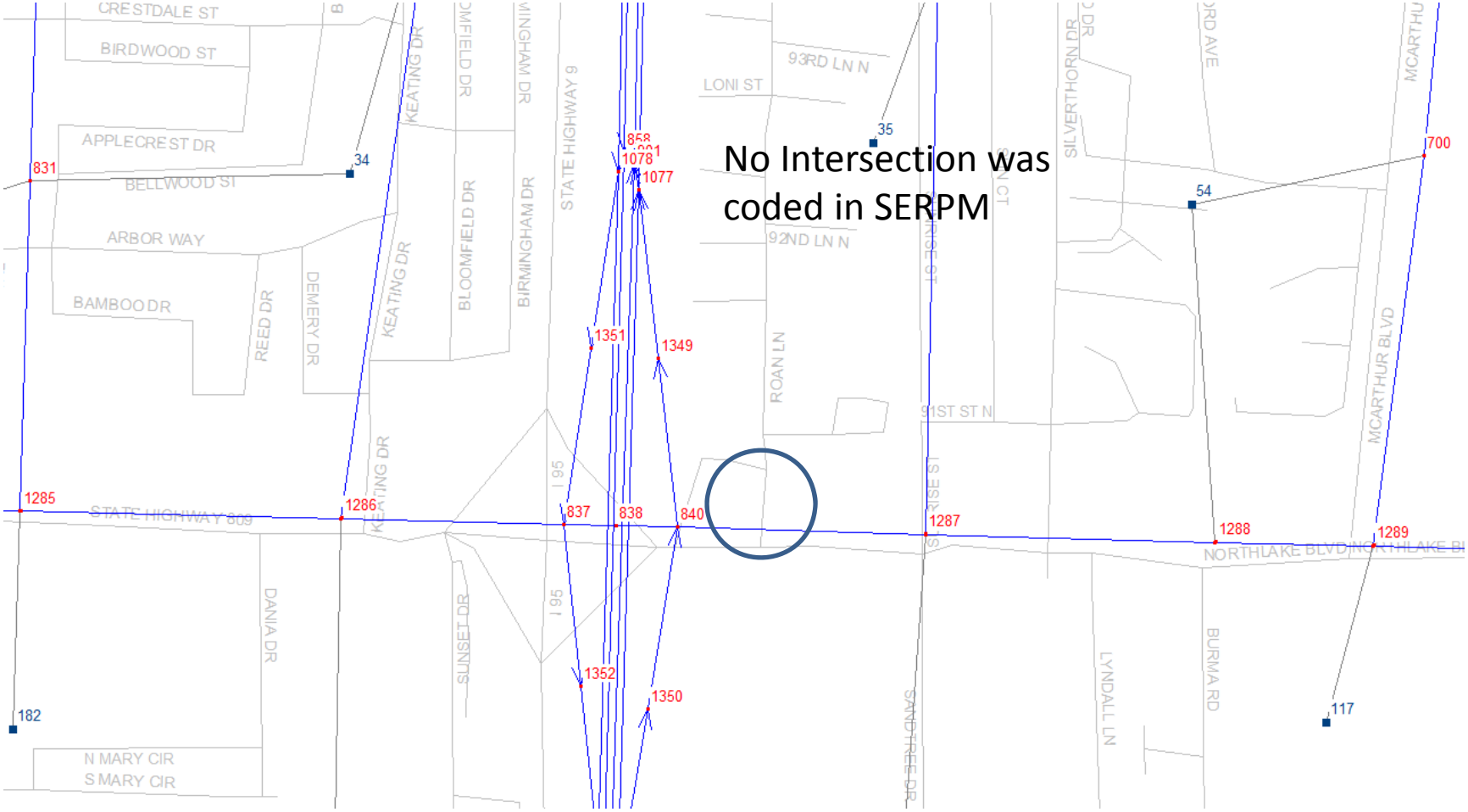
10. Hood Road at Eastpoint Blvd (TAZ 135)



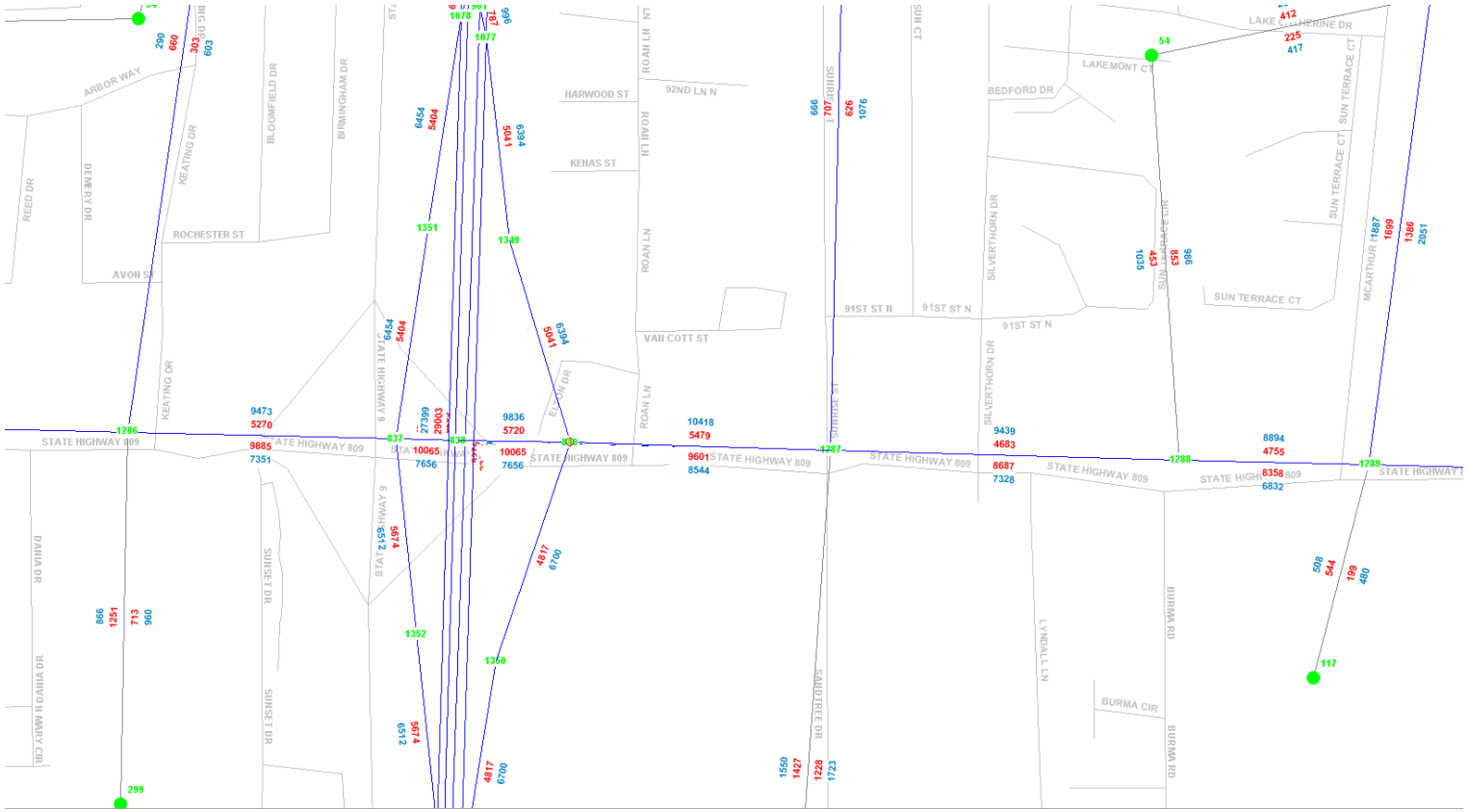
10. Hood Road at Eastpoint Blvd (TAZ 135) **DDHV AM(red)/PM(blue)**



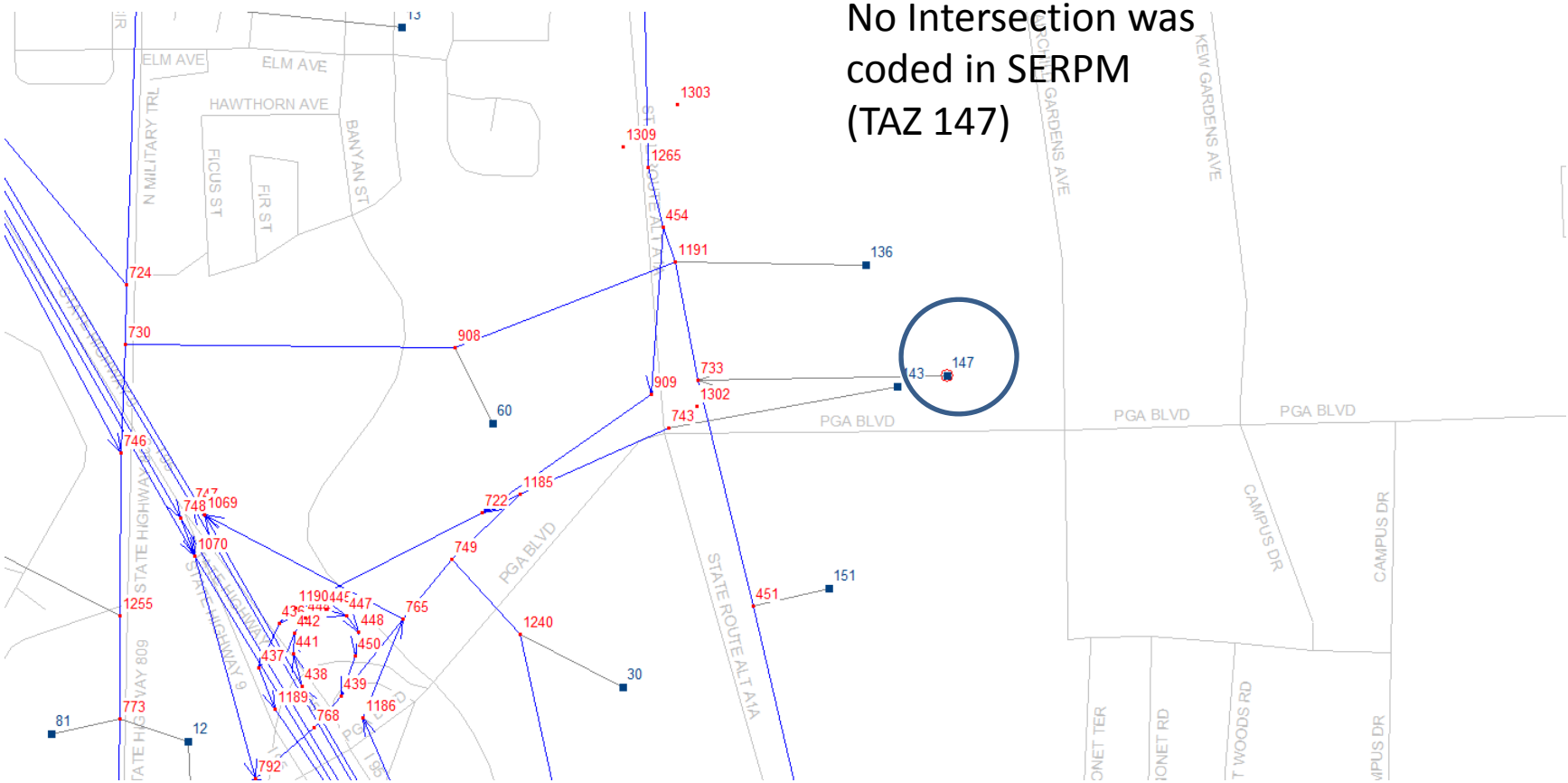
15. I-95 and Northlake Boulevard and Roan Lane



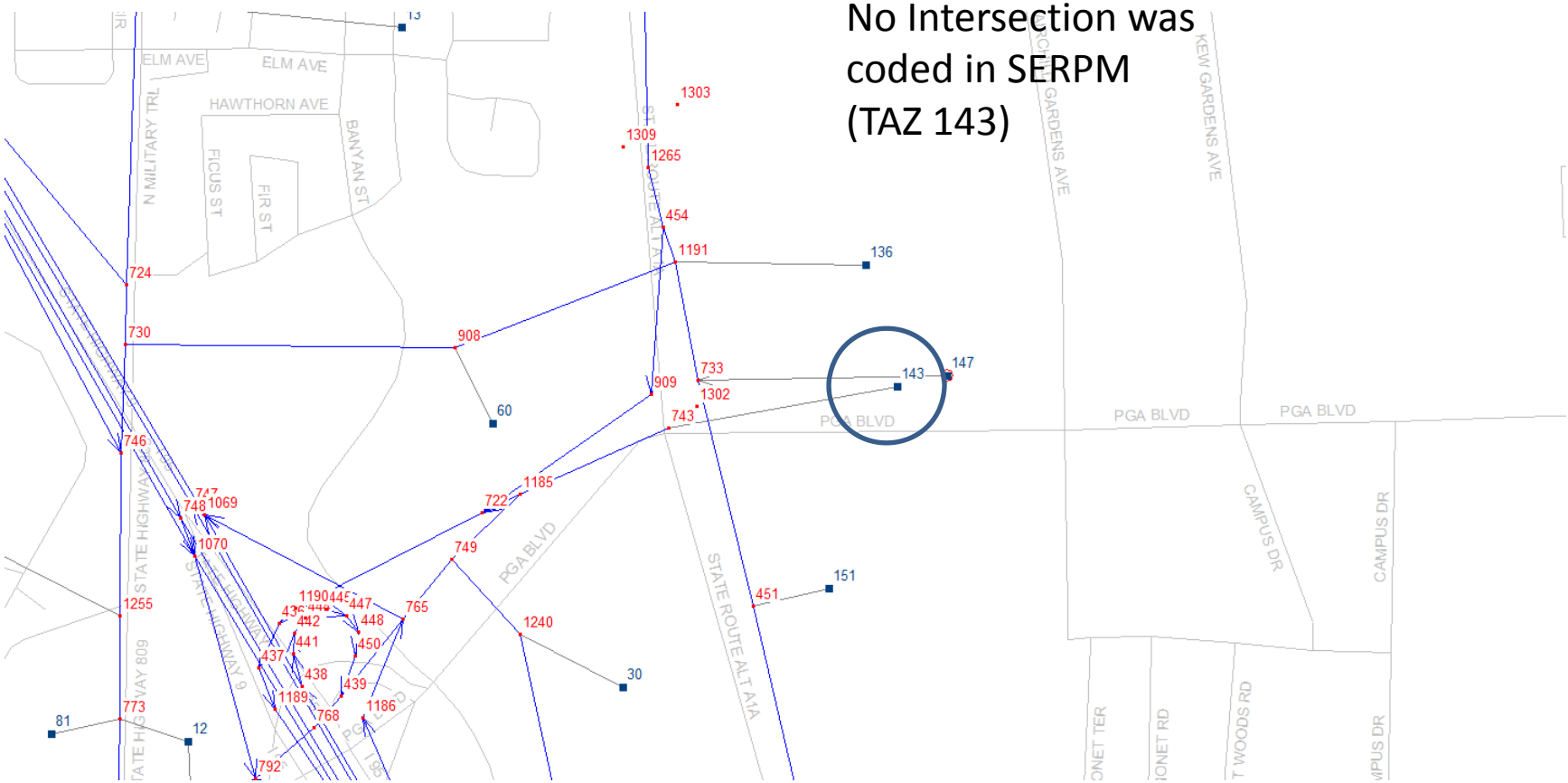
15. I-95 and Northlake Boulevard and Roan Lane
DDHV AM(red)/PM(blue)



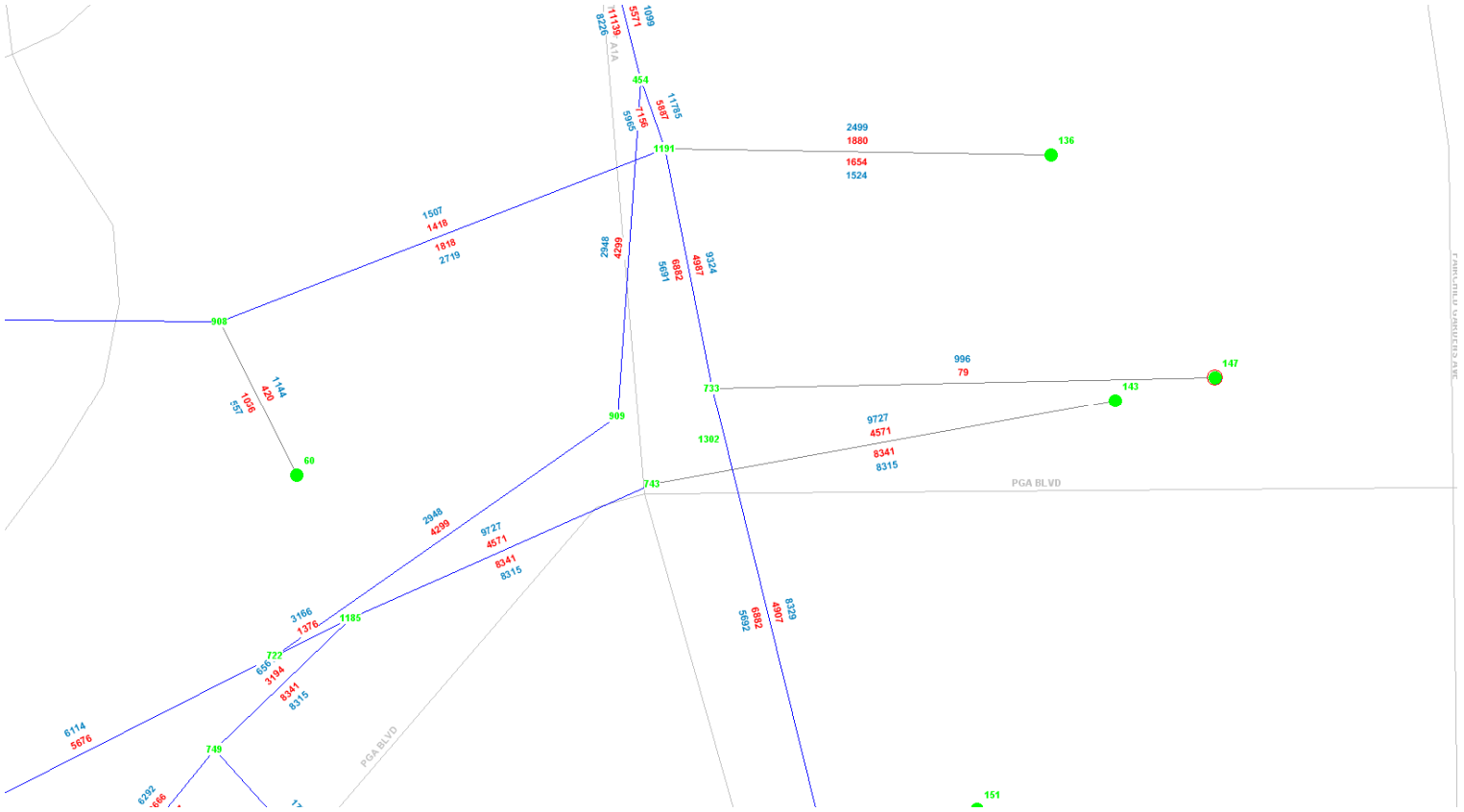
20. PGA Boulevard and Lake Victoria Gardens(TAZ 147)



22.PGA Pass at Lake Victoria Gardens Avenue (TAZ 143)



20/22. PGA Boulevard and Lake Victoria Gardens(TAZ 147) **DDHV AM(red)/PM(blue)**

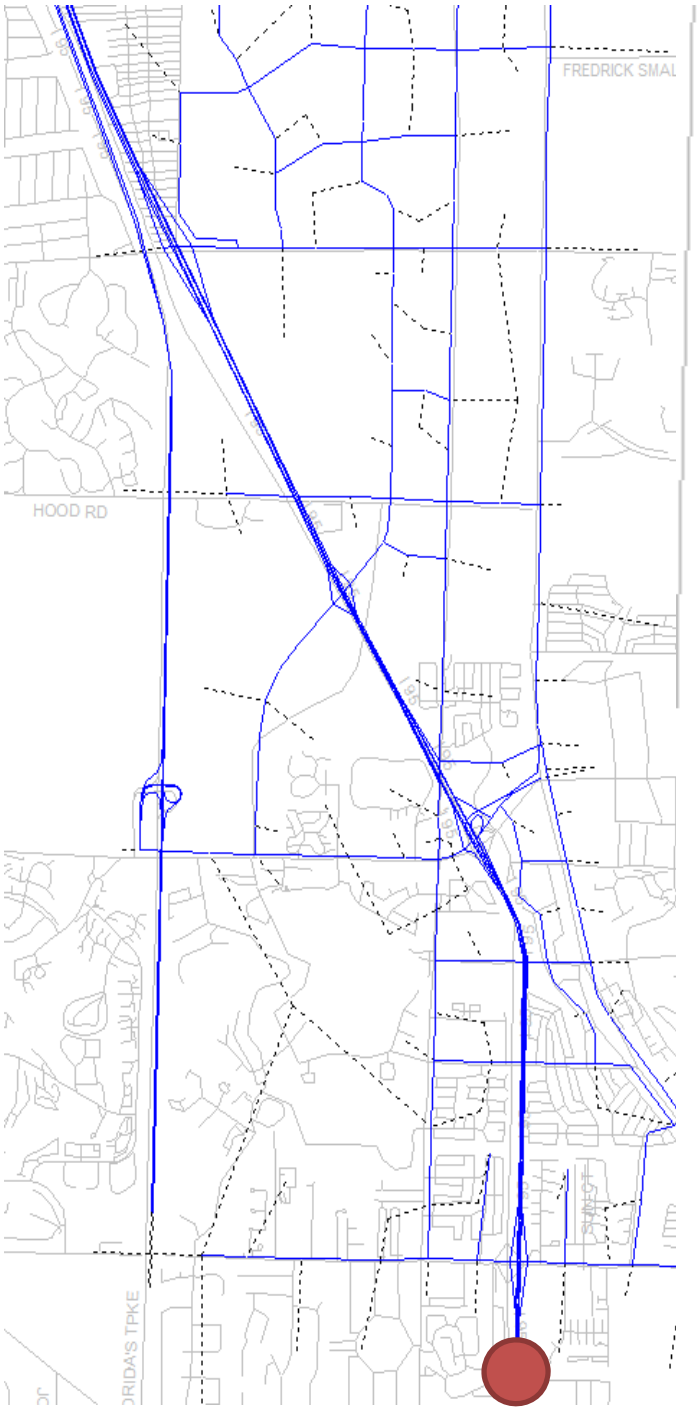


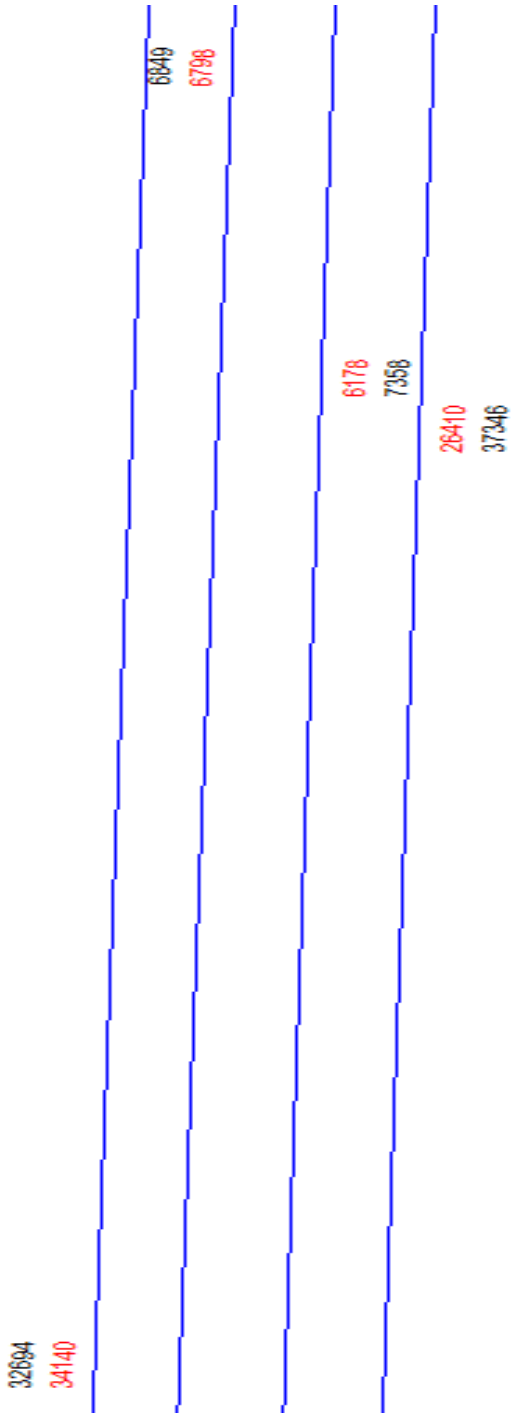
Build Alternative 1 - 2040 Peak Period Volumes

Mainline and Ramps

Red: AM

Black PM


FREDRICK SMAL
HOOD RD
RIDA'S TPKE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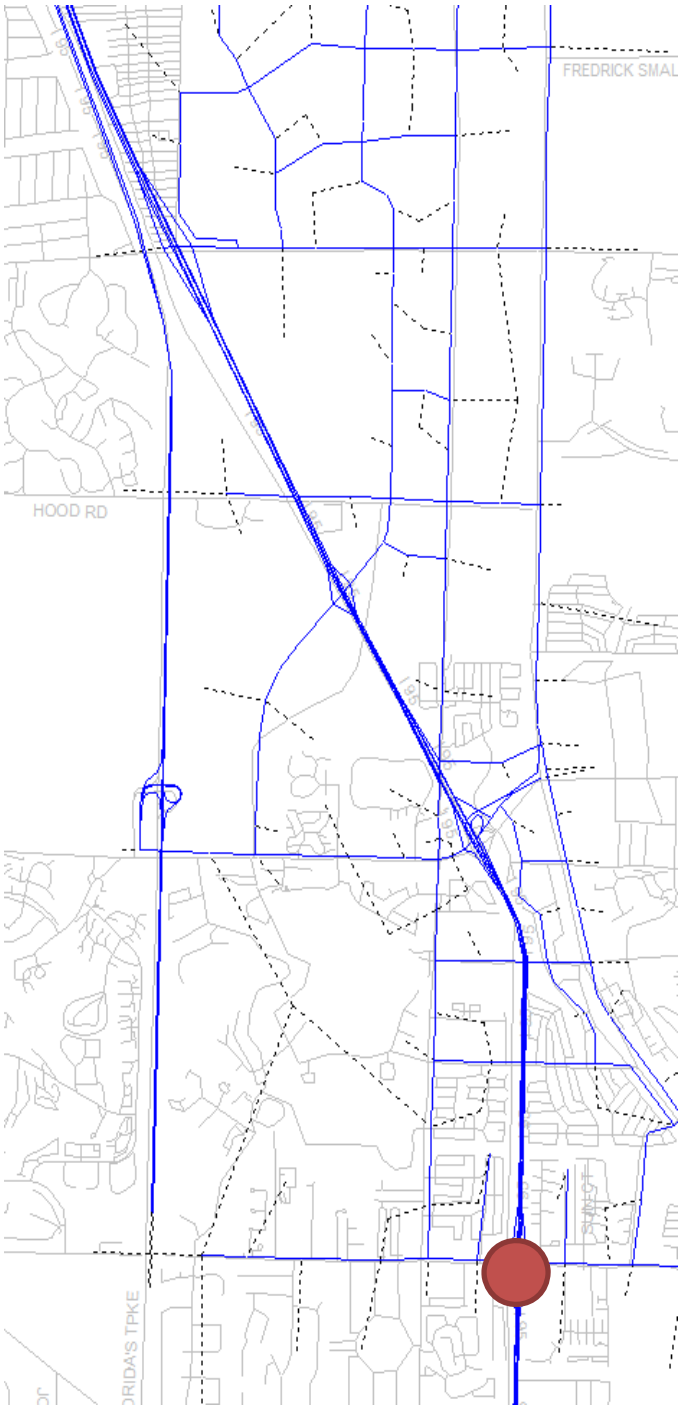
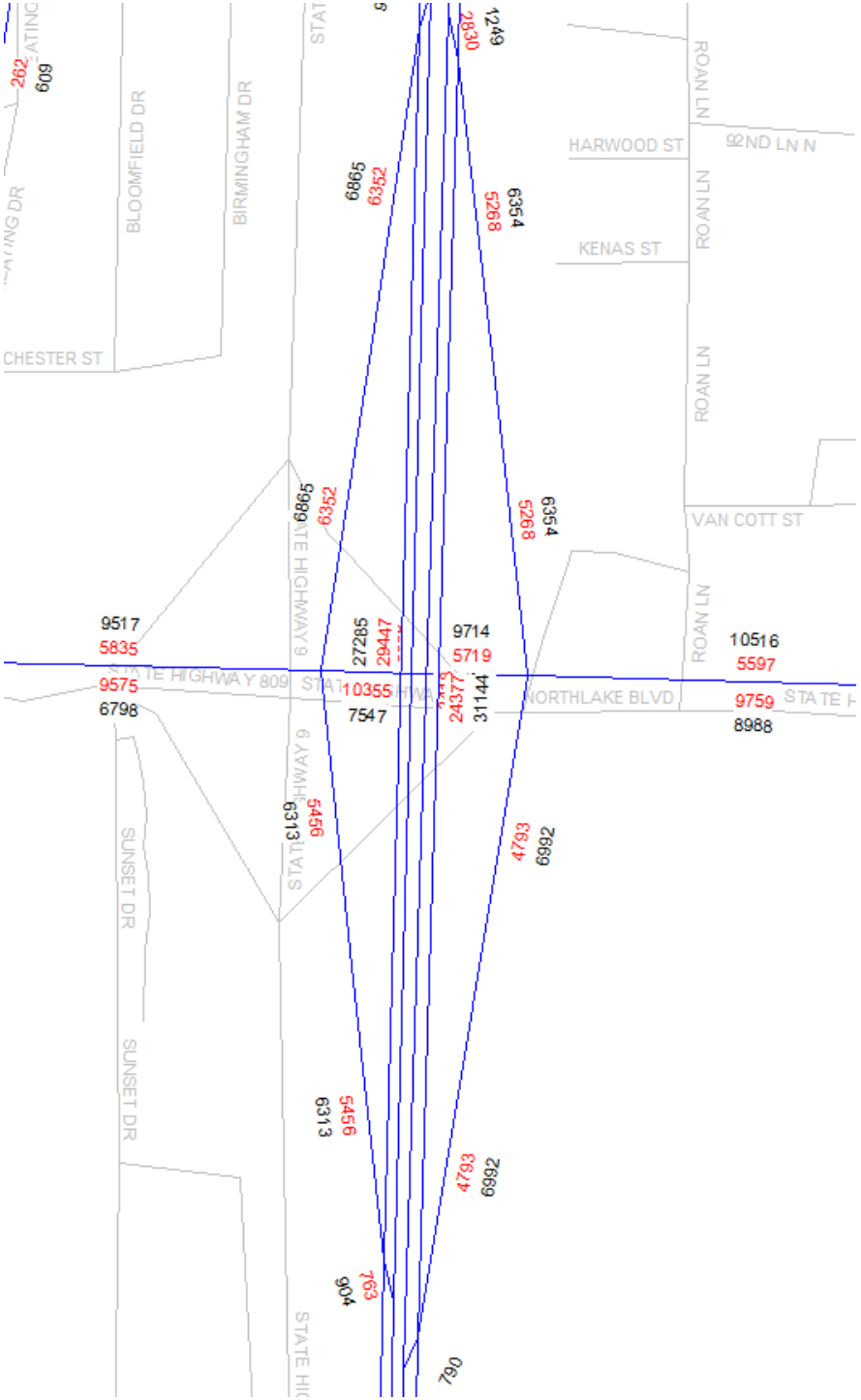
32894
34140


FREDRICK SMAL
HOOD RD
RIDA'S TPKE


BLOOMFIELD DR
BIRMINGHAM DR
CHESTER ST
HARWOOD ST
KENAS ST
92ND LN N
ROAN LN
VAN COTT ST
NORTHLAKE BLVD
SUNSET DR
STATE HIGHWAY 9
STATE HIGHWAY 809
9517
5835
9575
6798
27285
29447
10355
7547
9714
5719
31144
24377
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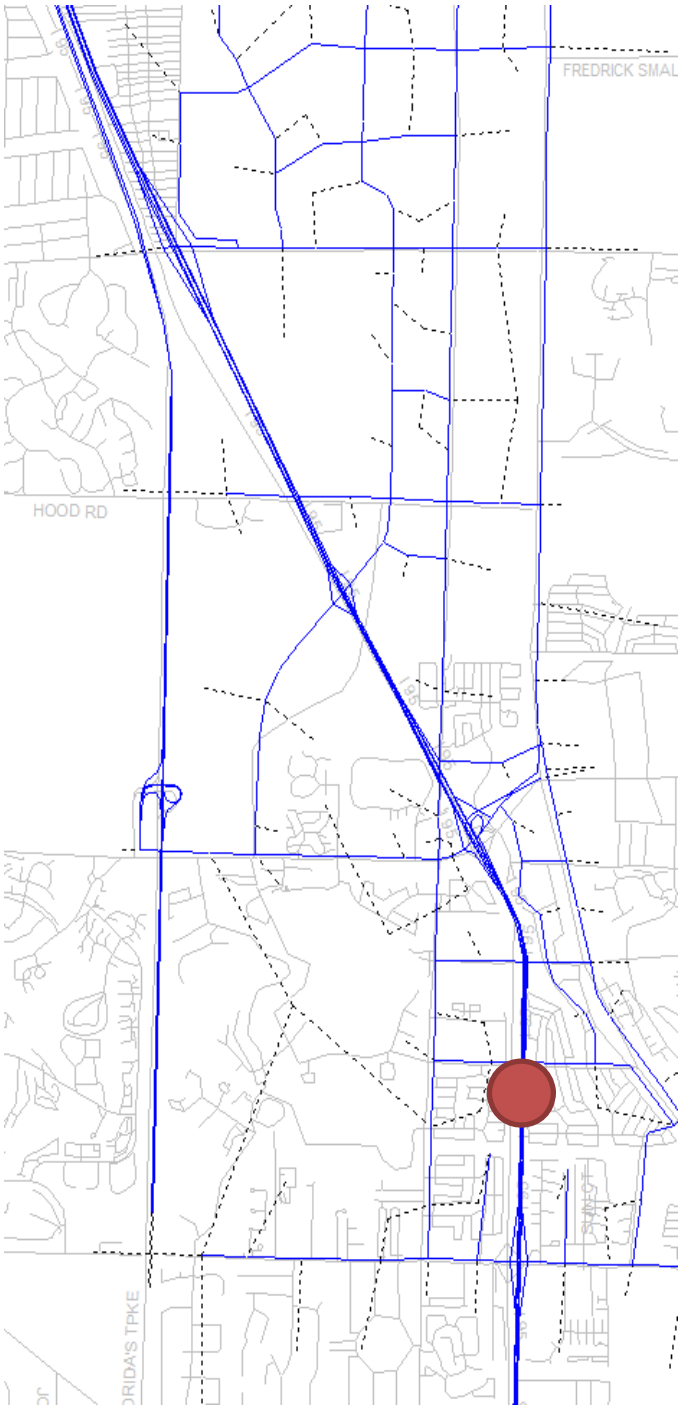
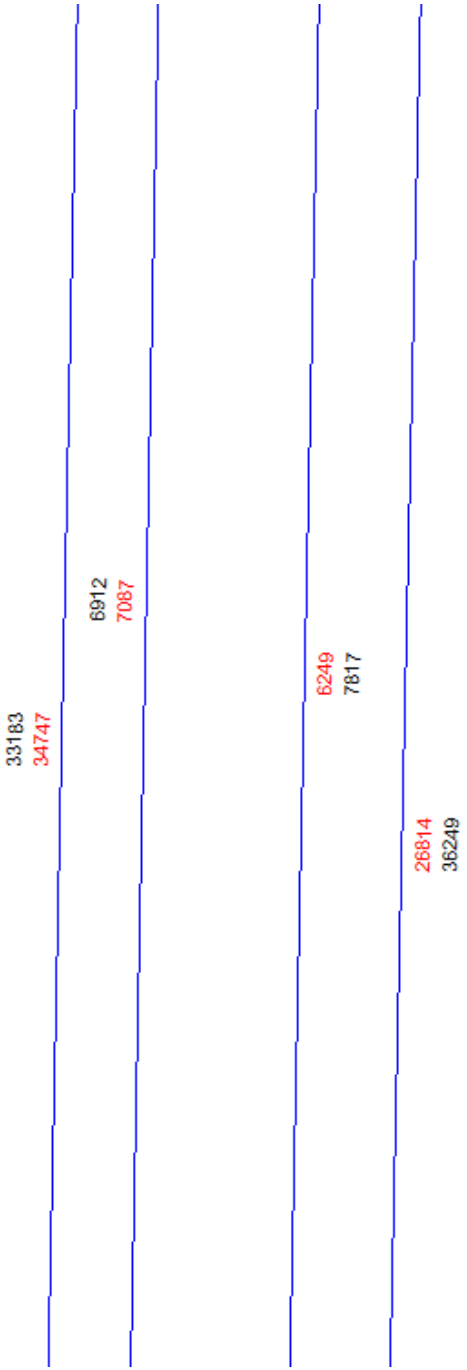
763
790


FREDRICK SMAL
HOOD RD
RIDA'S TPKE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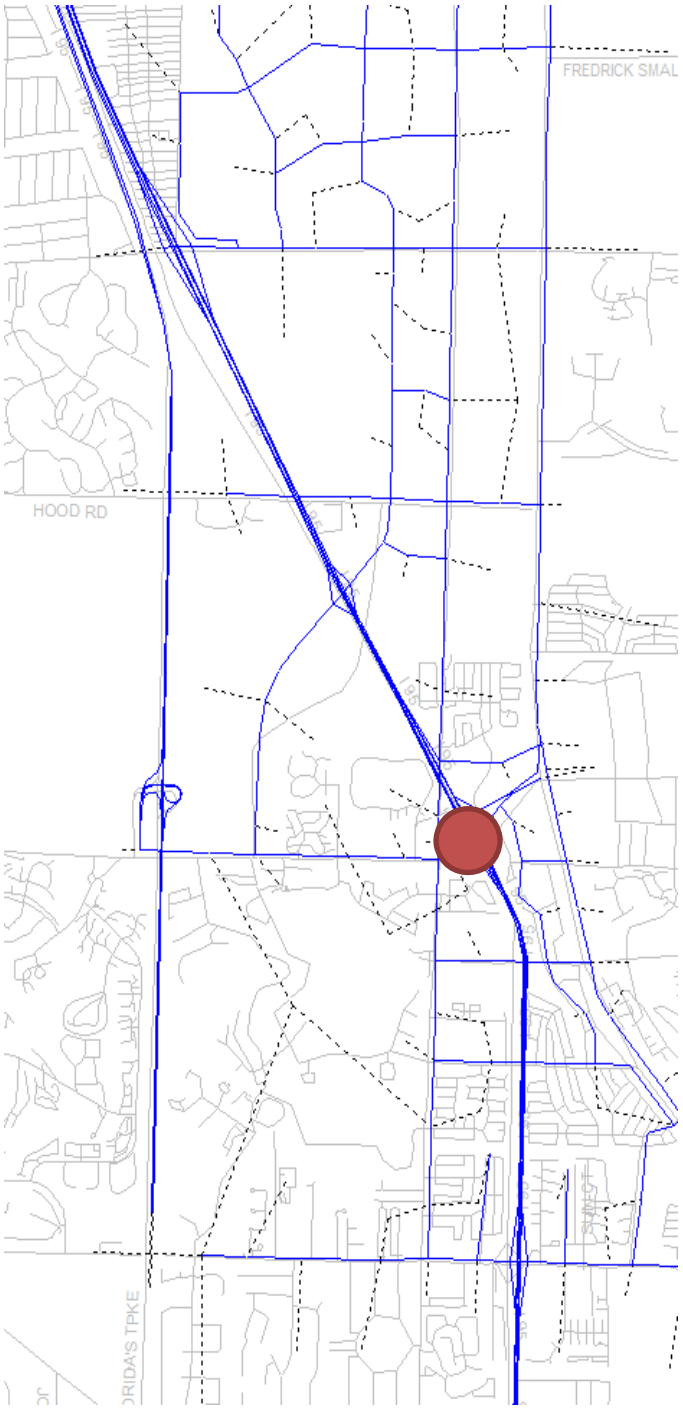
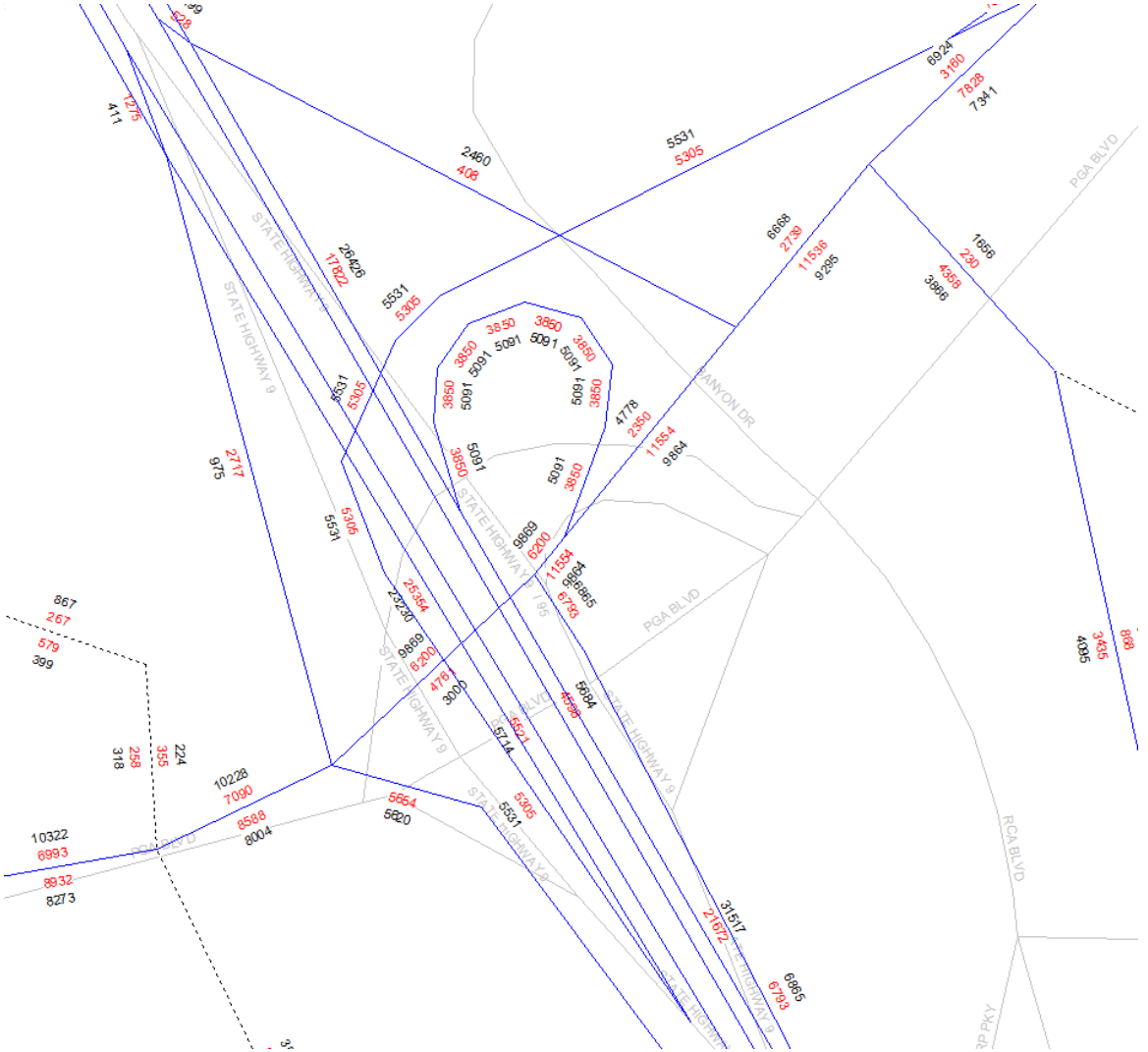
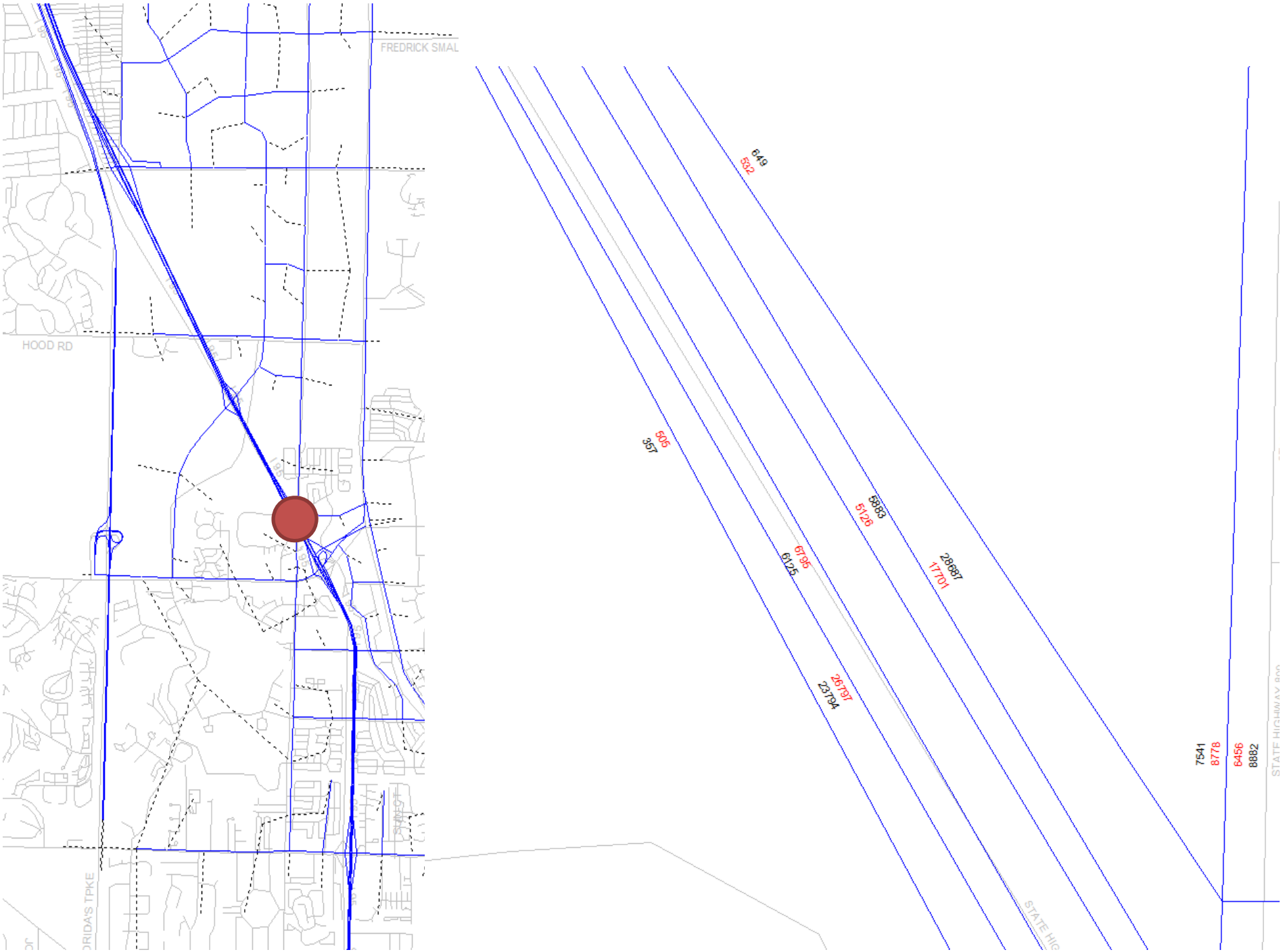
34747
6912
7087
6249
7817
26814
36249


FREDRICK SMAL
HOOD RD
FLORIDA'S TPKE


STATE HIGHWAY 9
PGA BLVD
CANYON DR
RCA BLVD


FREDRICK SMAL
HOOD RD
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532
605
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6125
28687
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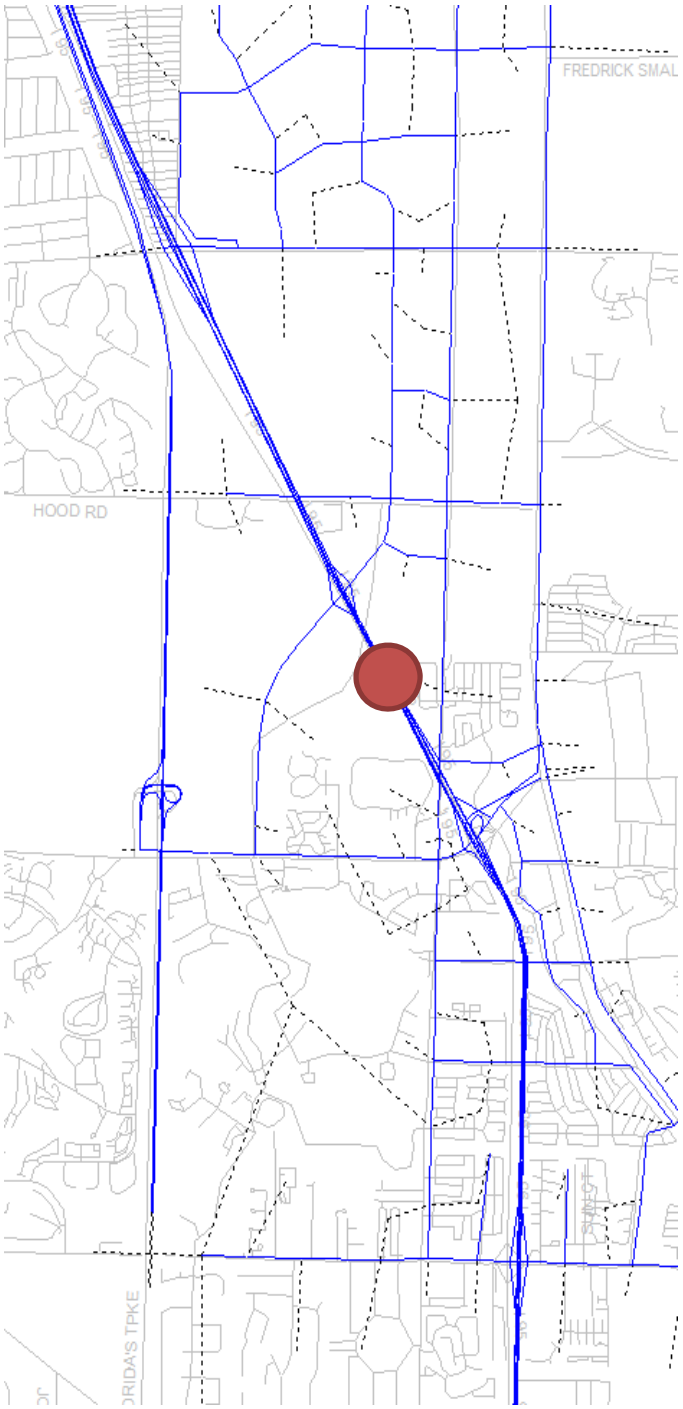
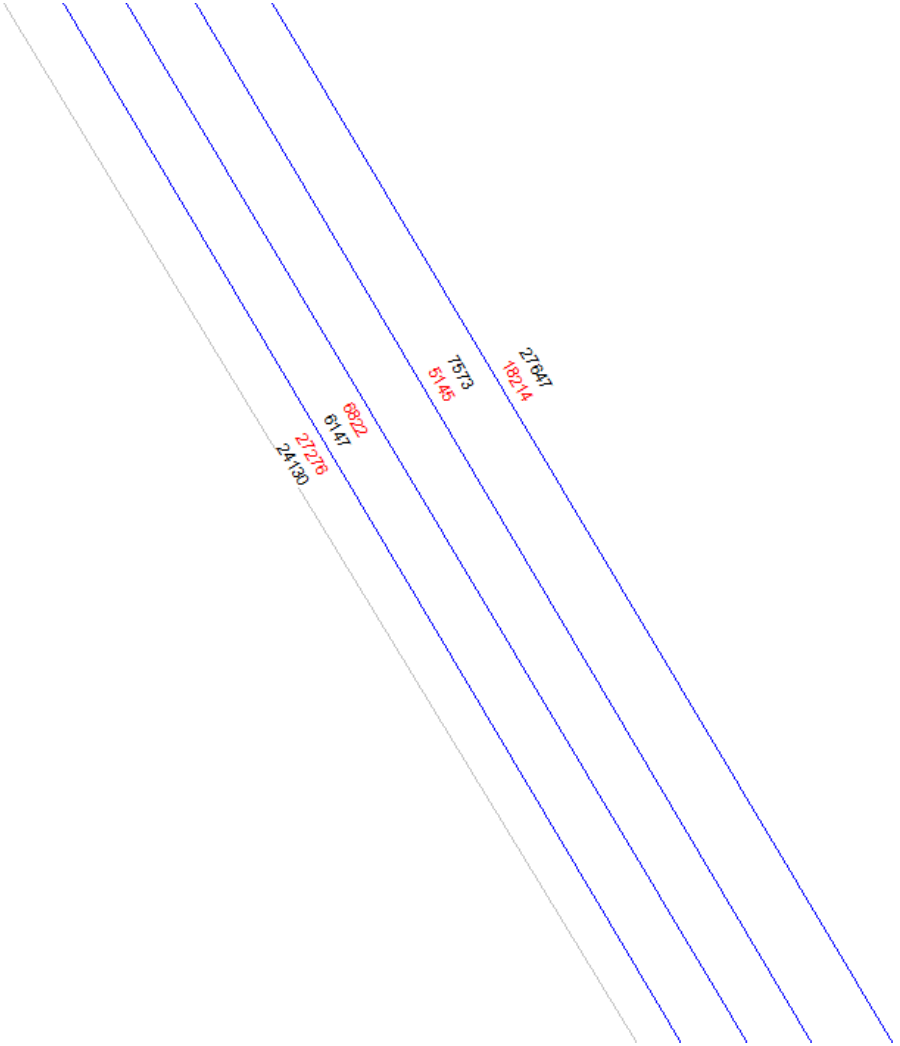
26797
23794
7541
8778
6456
8882


FREDRICK SMAL
HOOD RD
RIDA'S TPKE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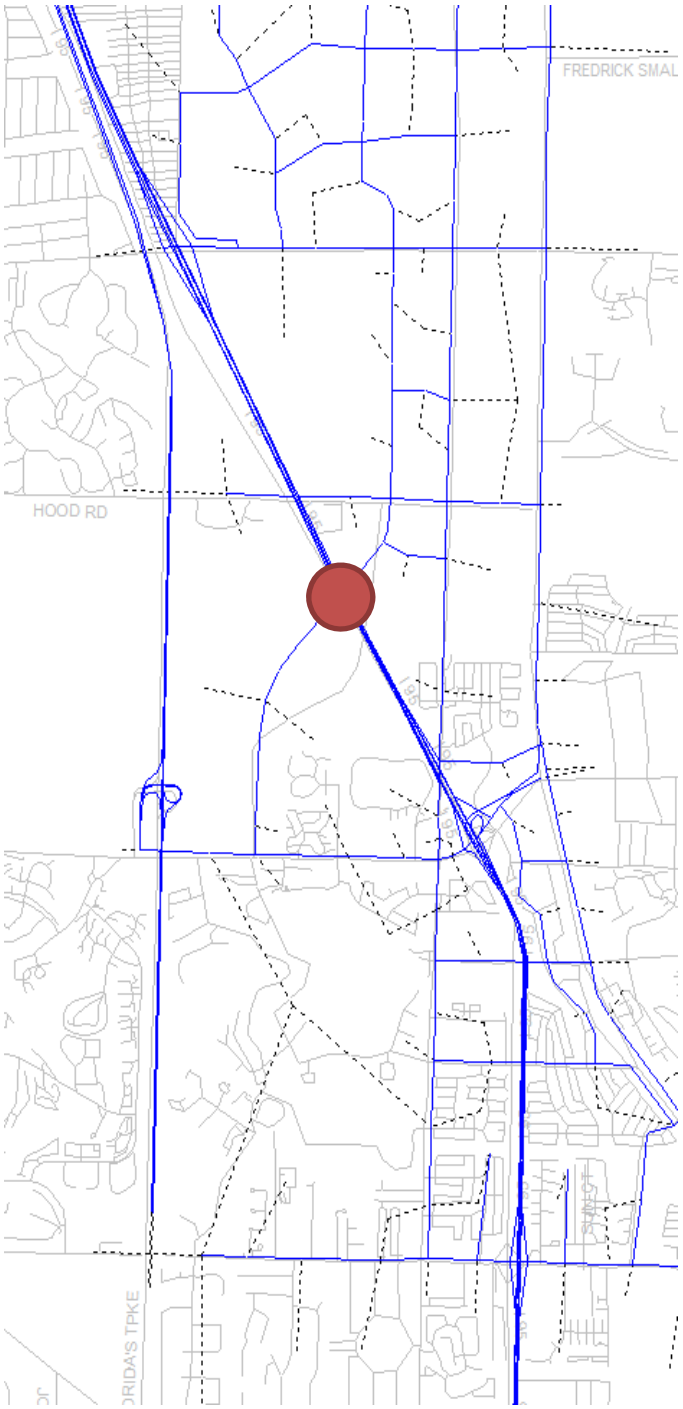
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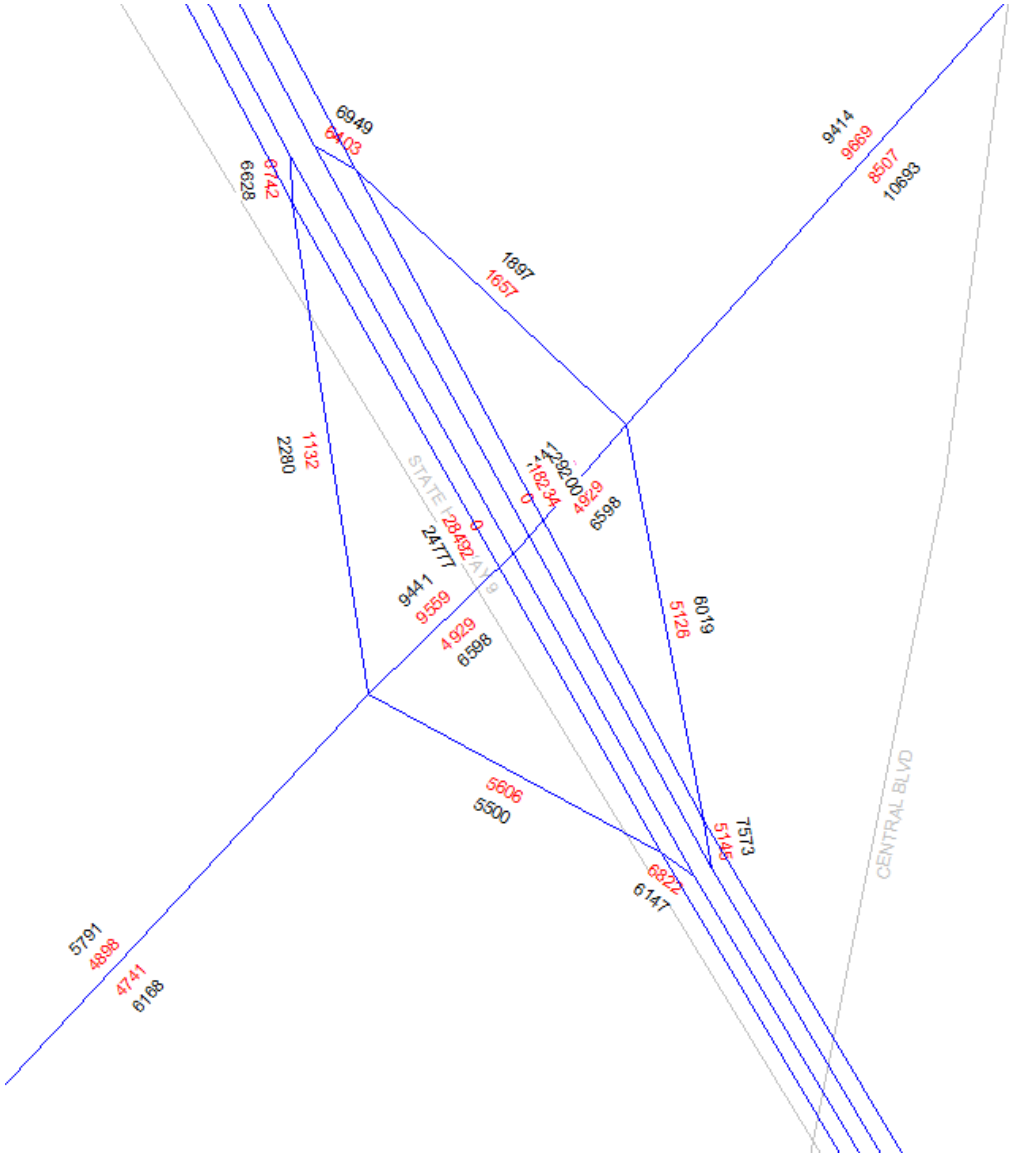
HOOD RD
TPKE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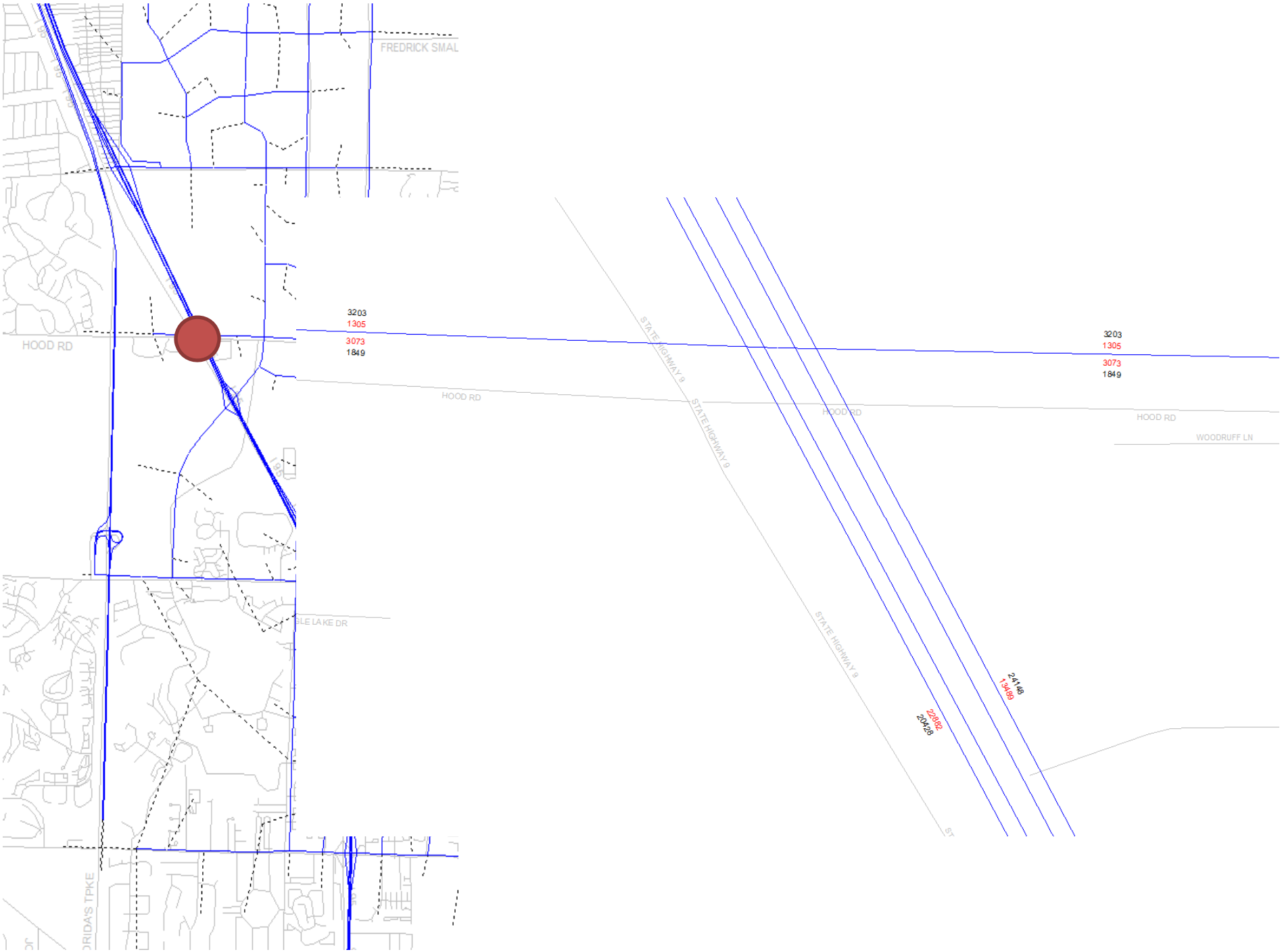
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STATE HIGHWAY 9
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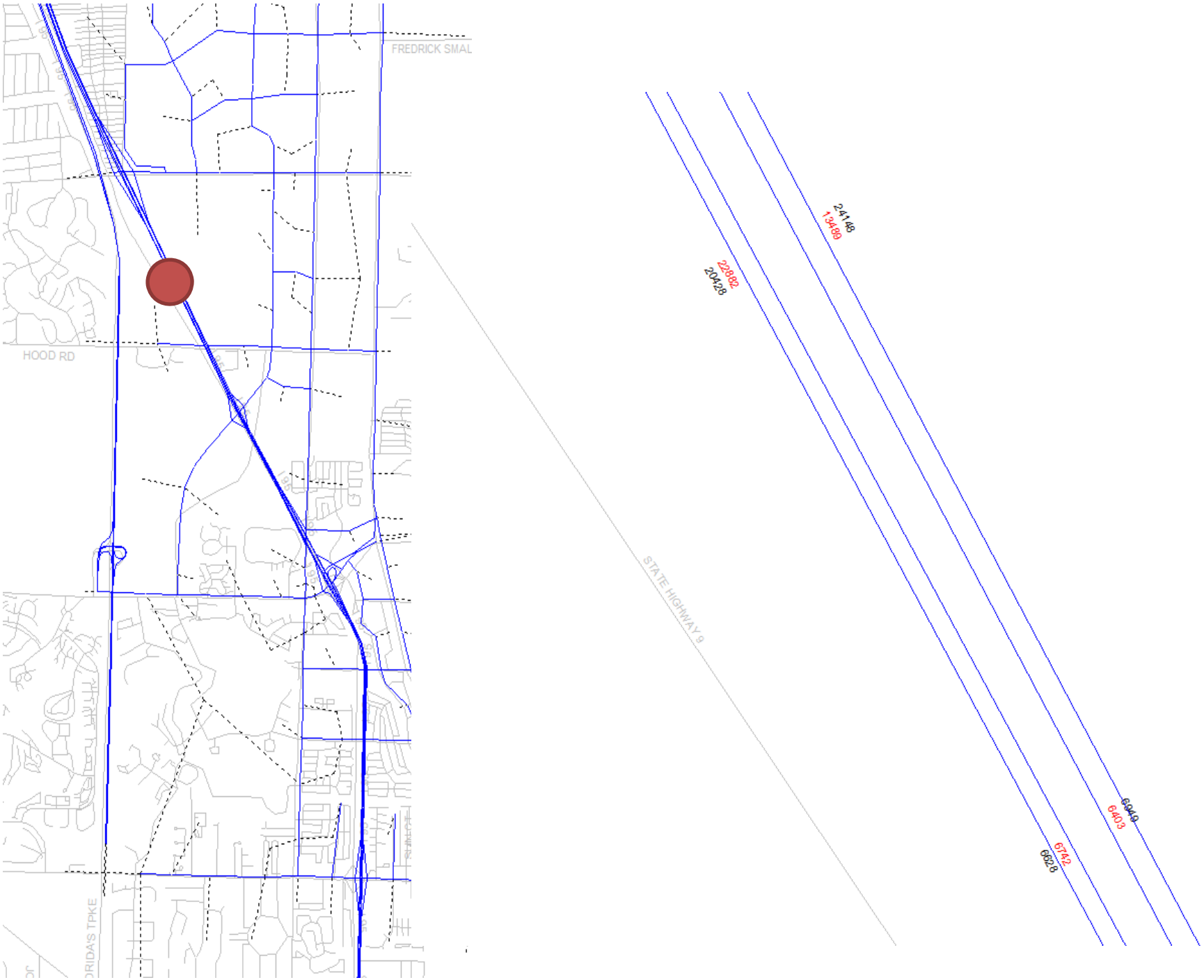
BLE LAKE DR
RIDA'S TPKE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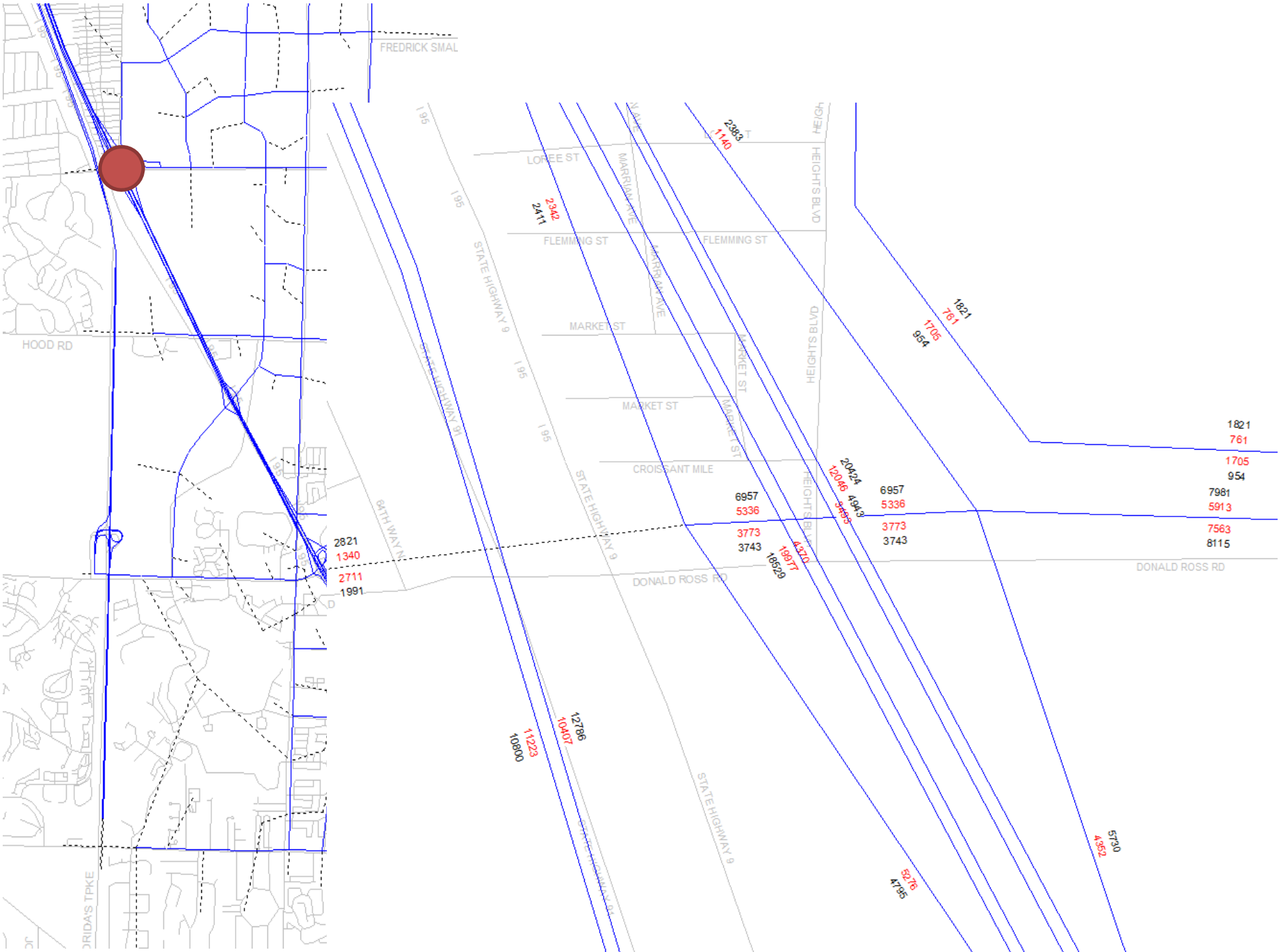
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HOOD RD
LOREE ST
FLEMMING ST
MARKET ST
CROISSANT MILE
DONALD ROSS RD
HEIGHTS BLVD
MARRIANA AVE
STATE HIGHWAY 9
I 95
84TH WAY
2821
1340
2711
1991
2383
1140
2342
2411
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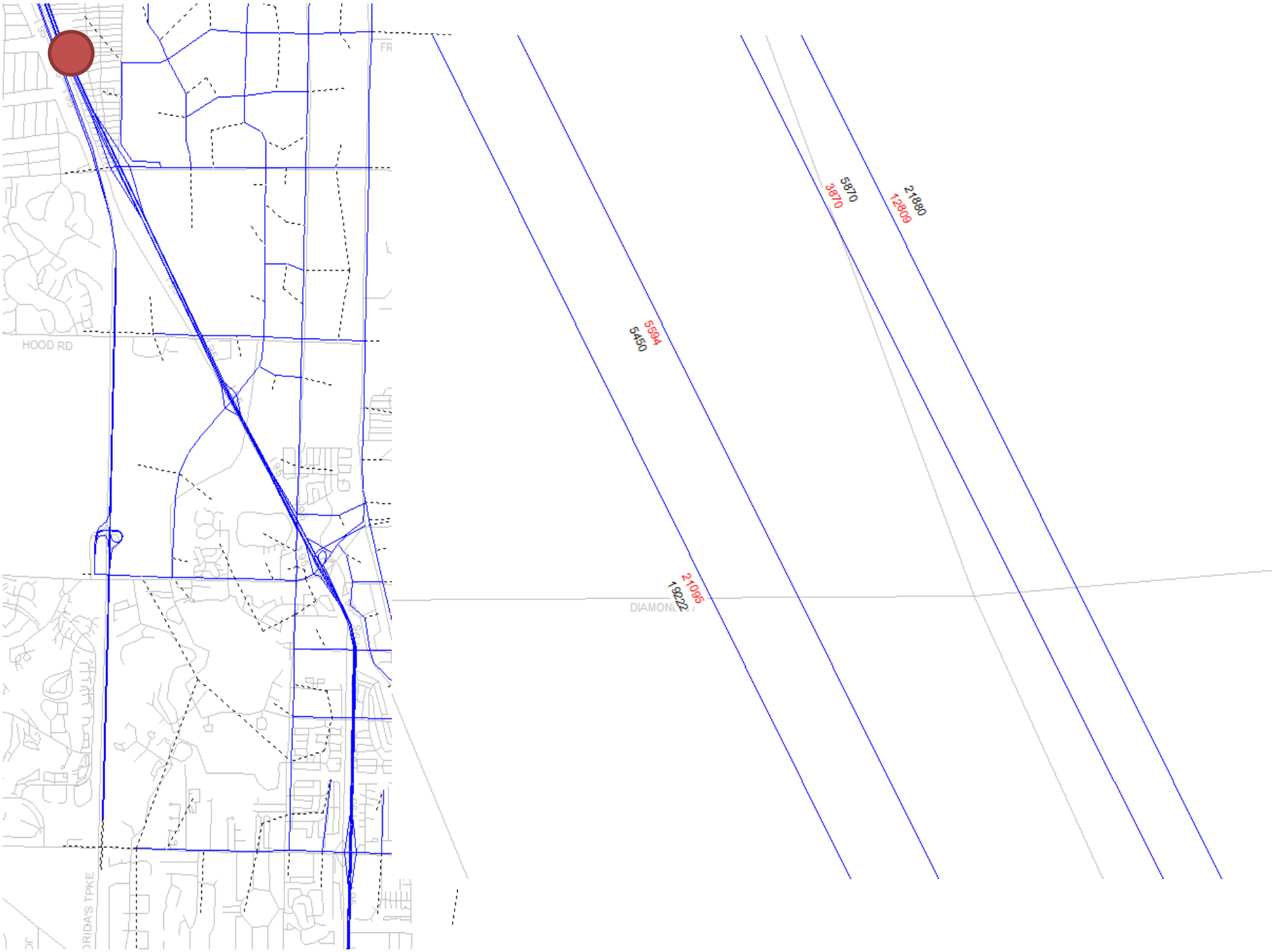
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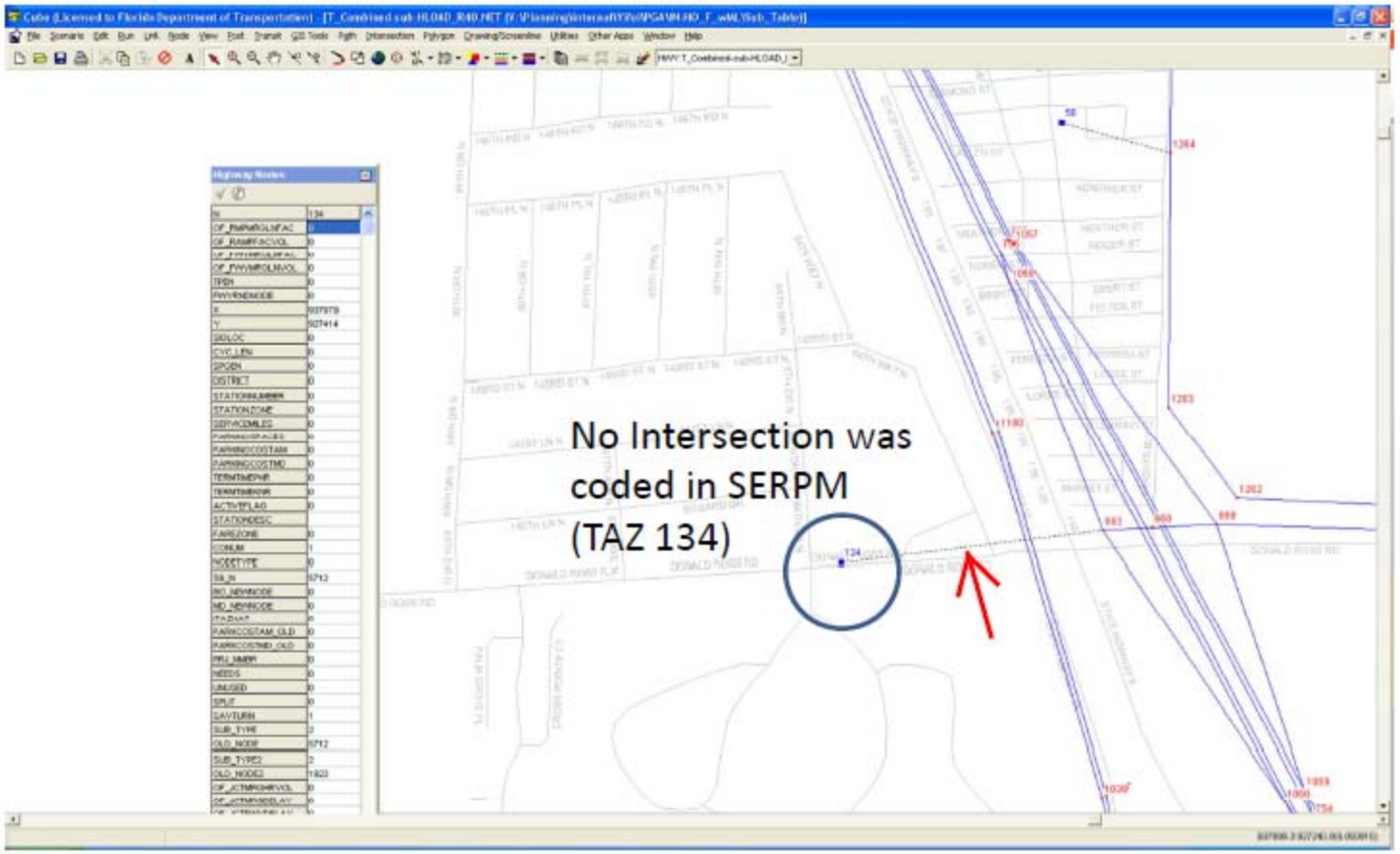
Build Alternative 1 - 2040 Peak Period Volumes

Missing Intersections

Red: AM

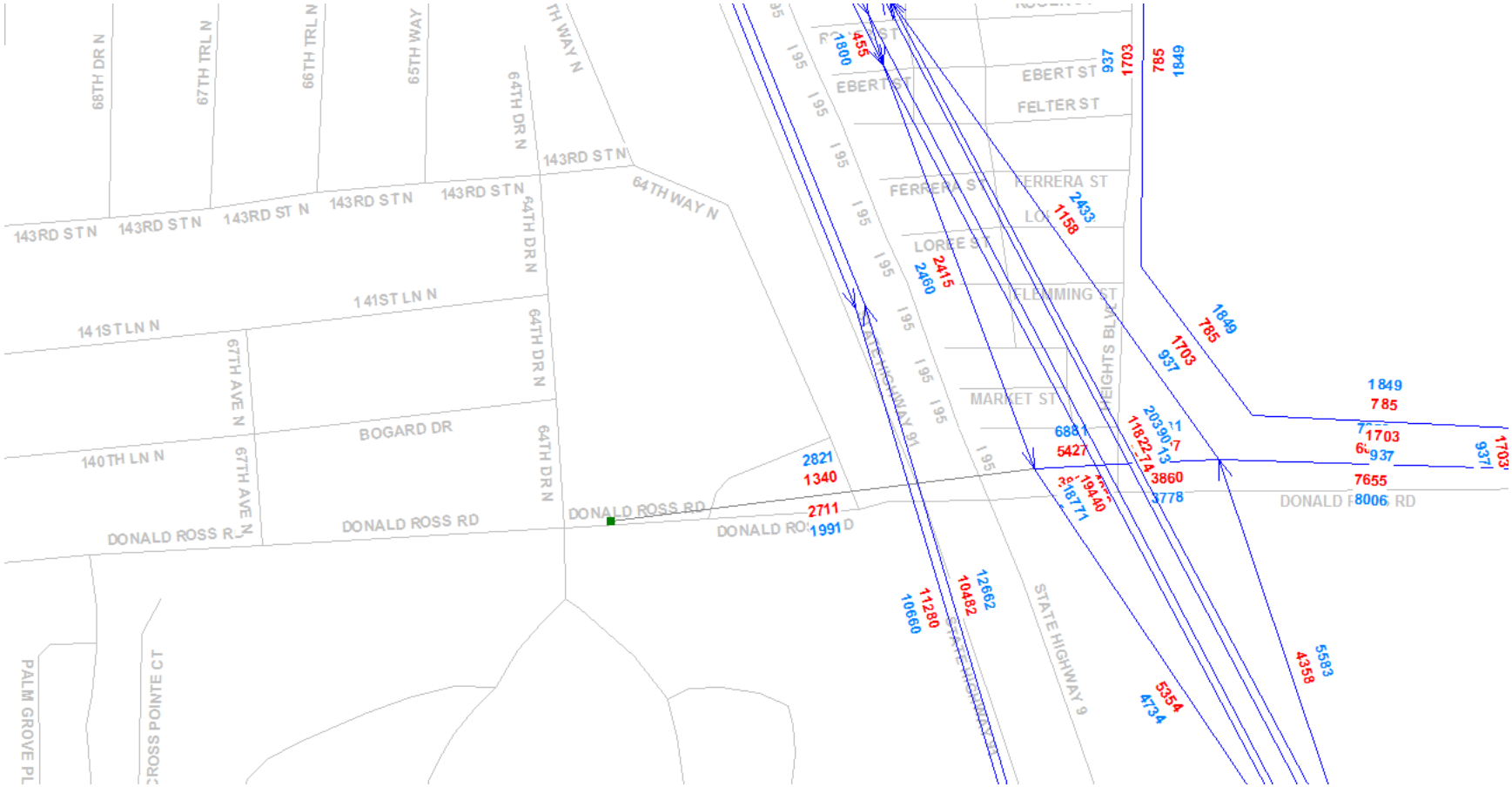
Blue PM

4: Donald Ross Road and 64th Drive North

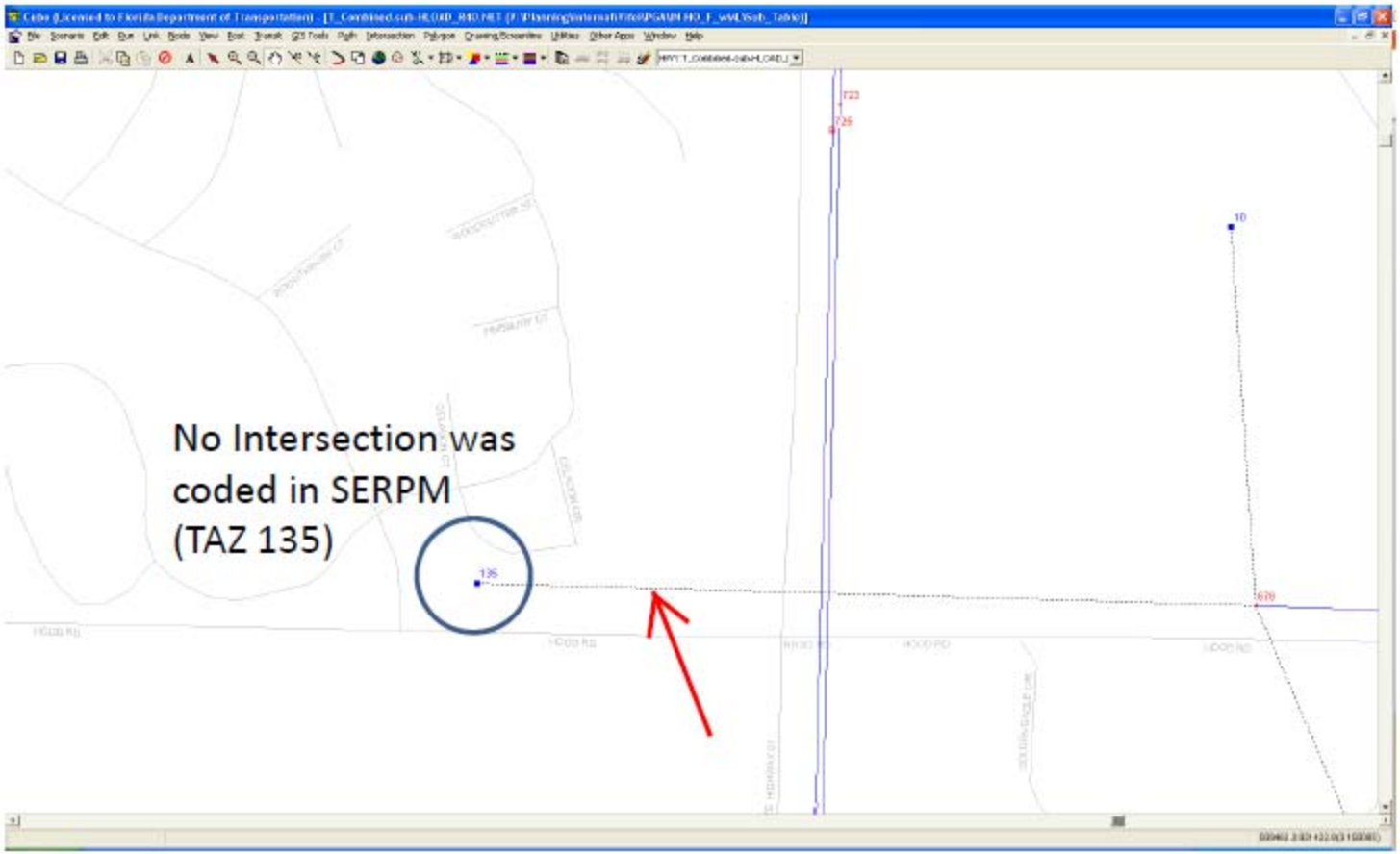


4. Donald Ross Road and 64th Drive North (TAZ 134)

DDHV



10: Hood Road at Eastpoint Blvd



10. Hood Road at Eastpoint Blvd (TAZ 135)

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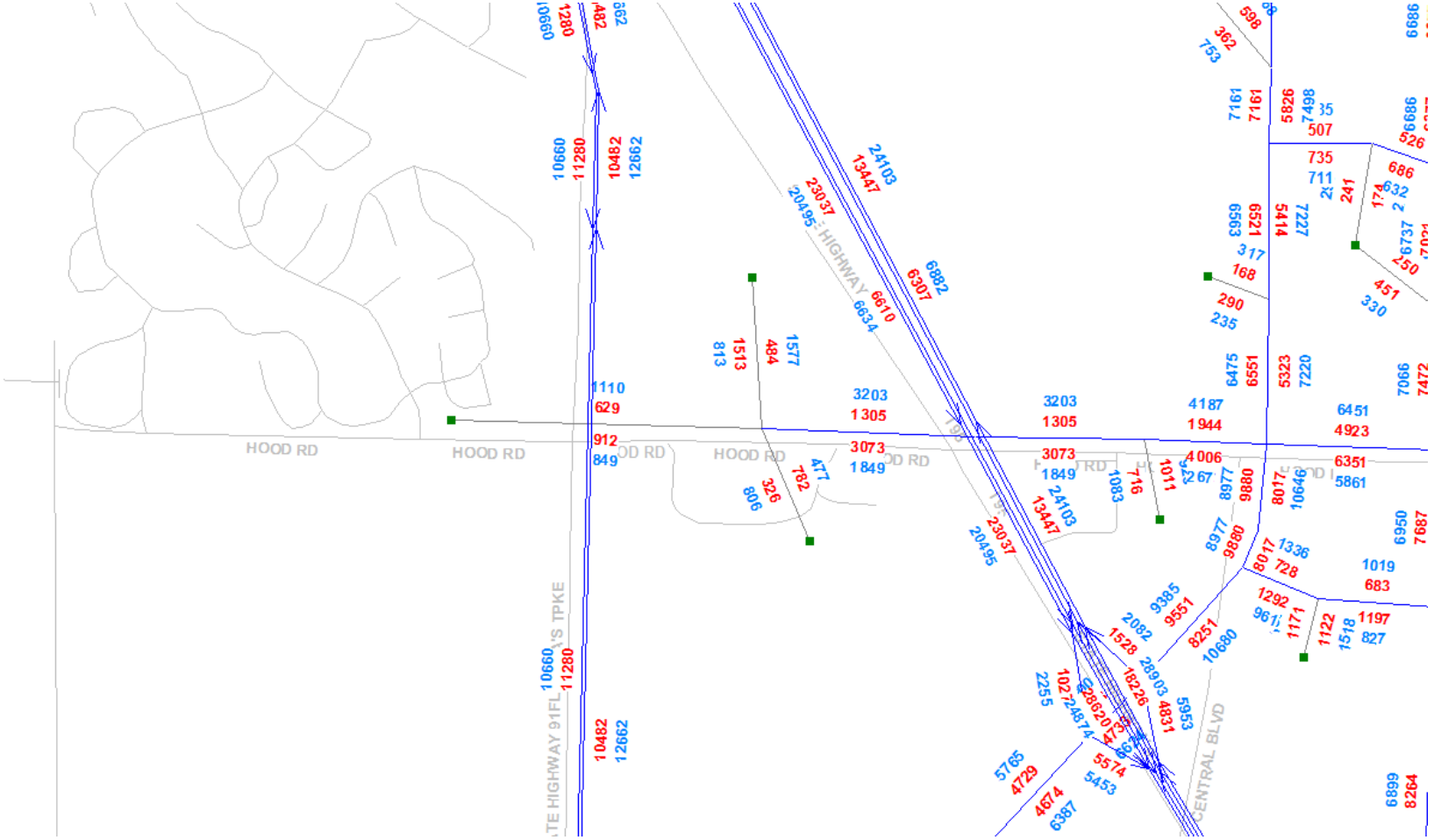
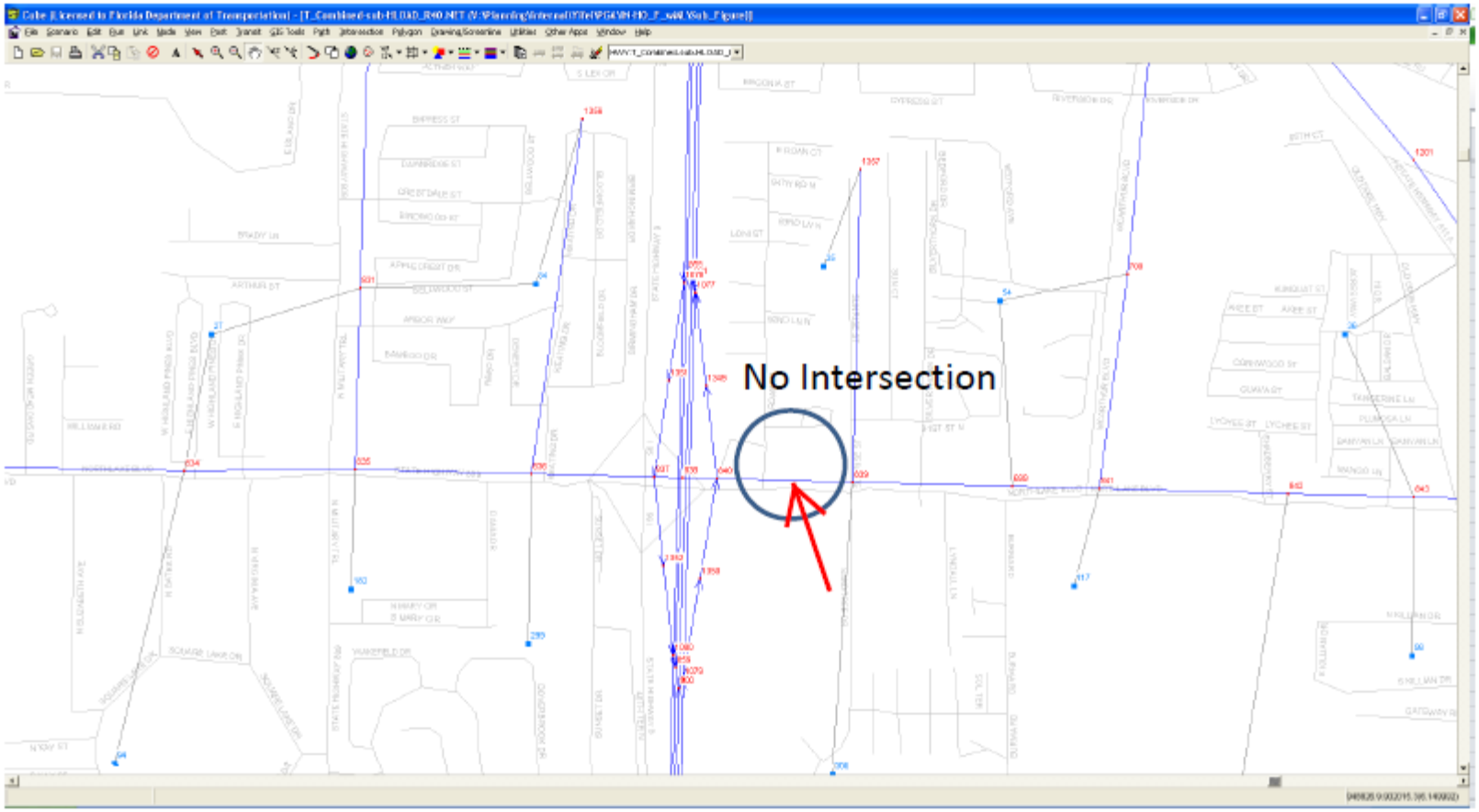
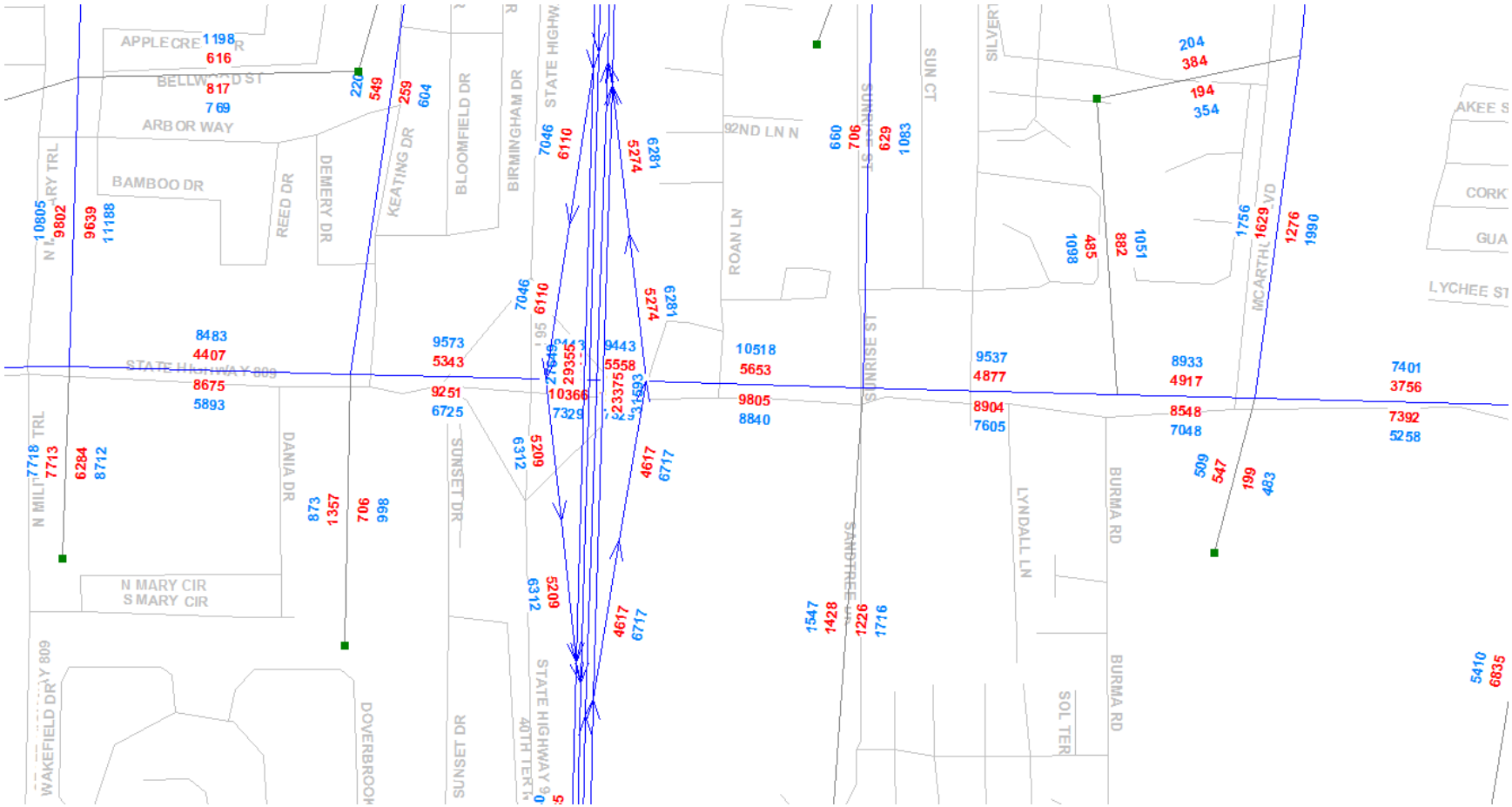


15: I-95 and Northlake Boulevard and Roan Lane

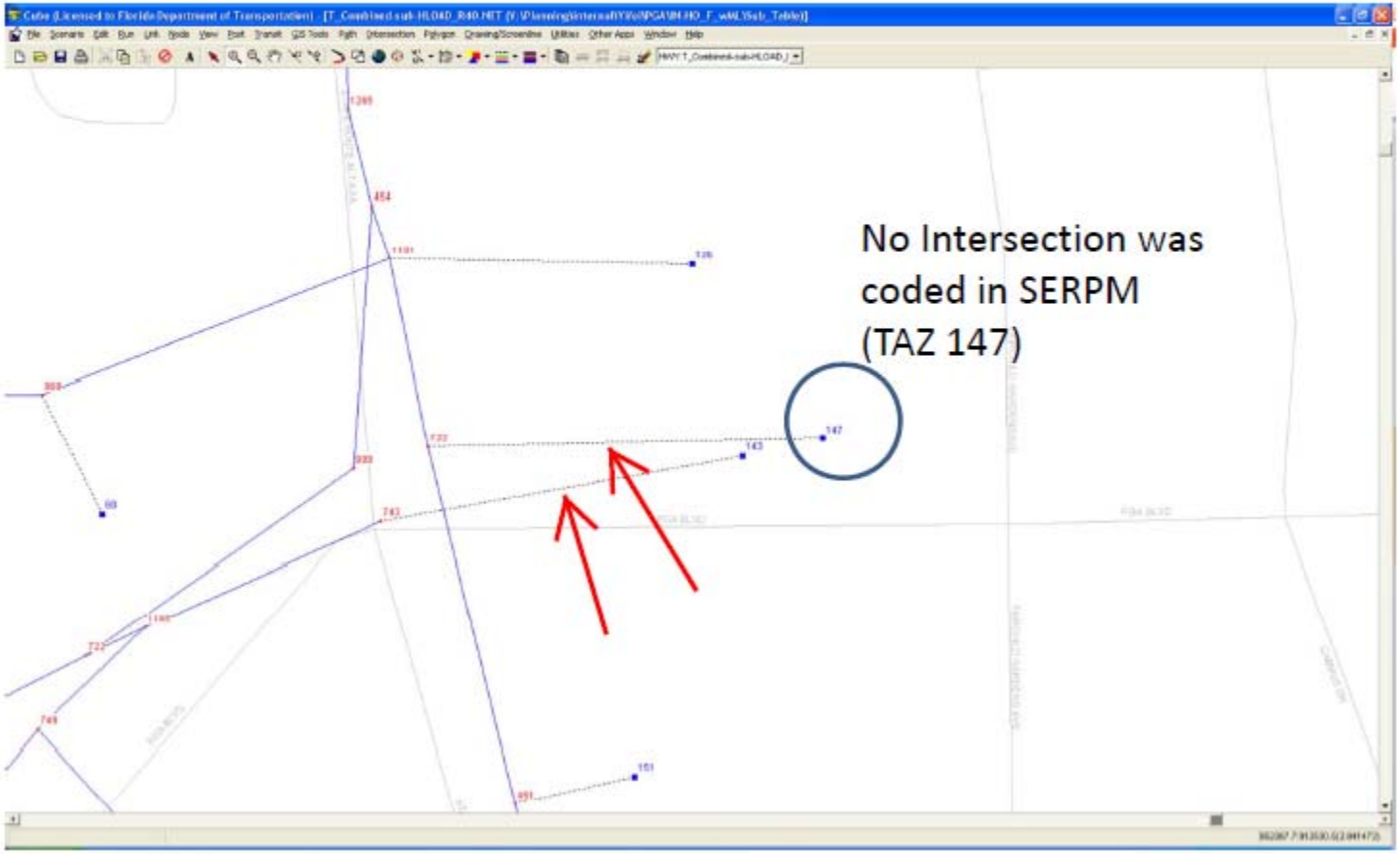


15. I-95 and Northlake Boulevard and Roan Lane

DDHV

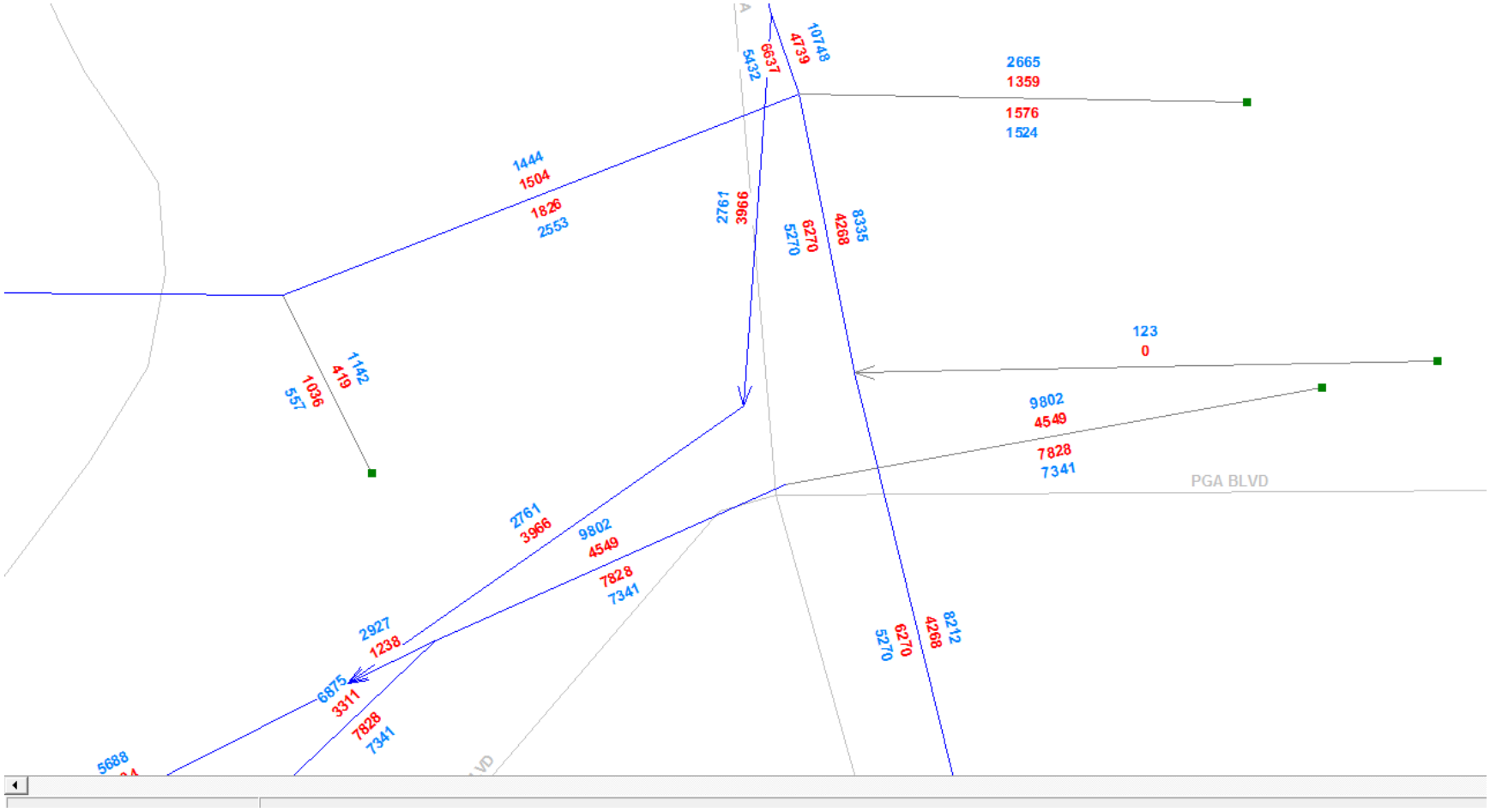


20: PGA Boulevard and Lake Victoria Gardens ????



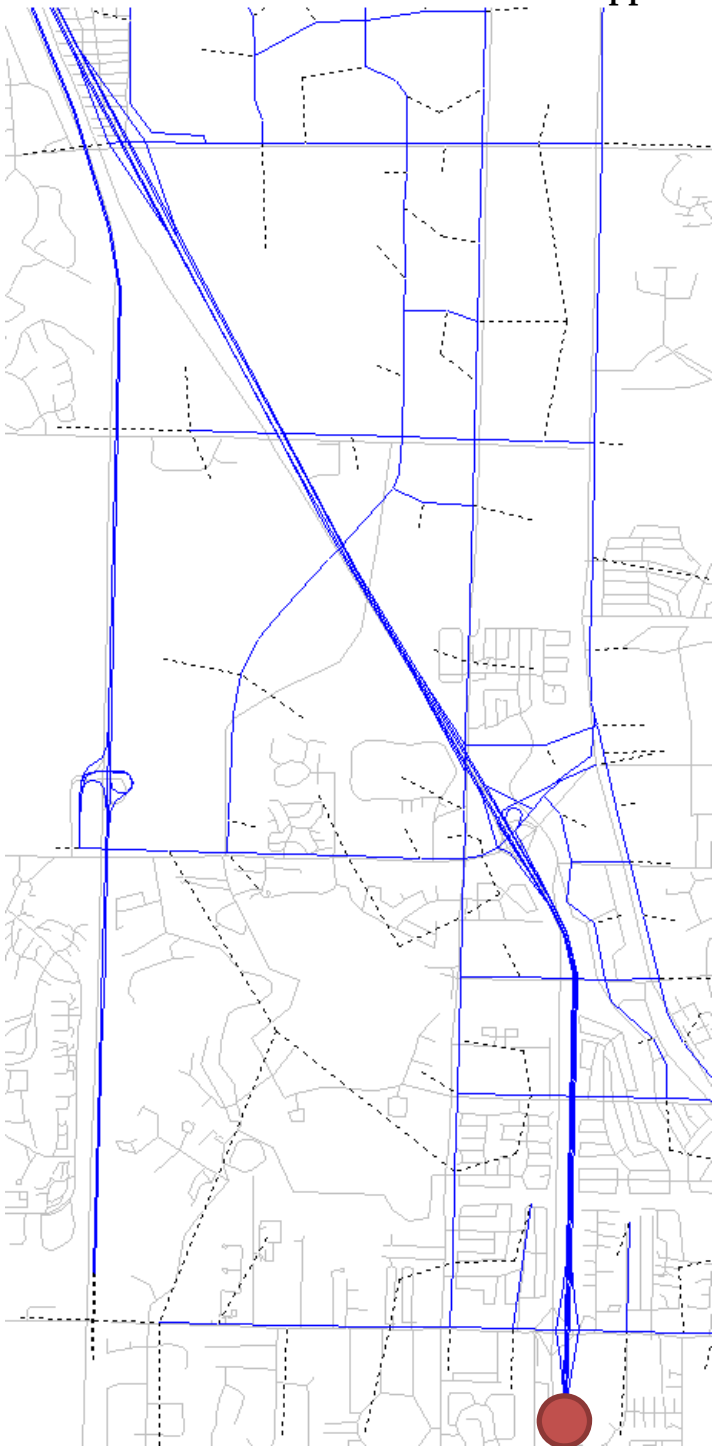
20. PGA Boulevard and Lake Victoria Gardens(TAZ 147)

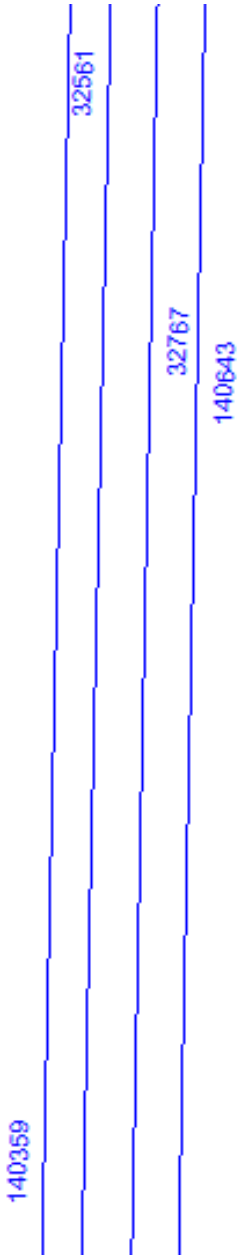
DDHV



No-Build Alternative – 2040 AADT

Mainline and Ramps

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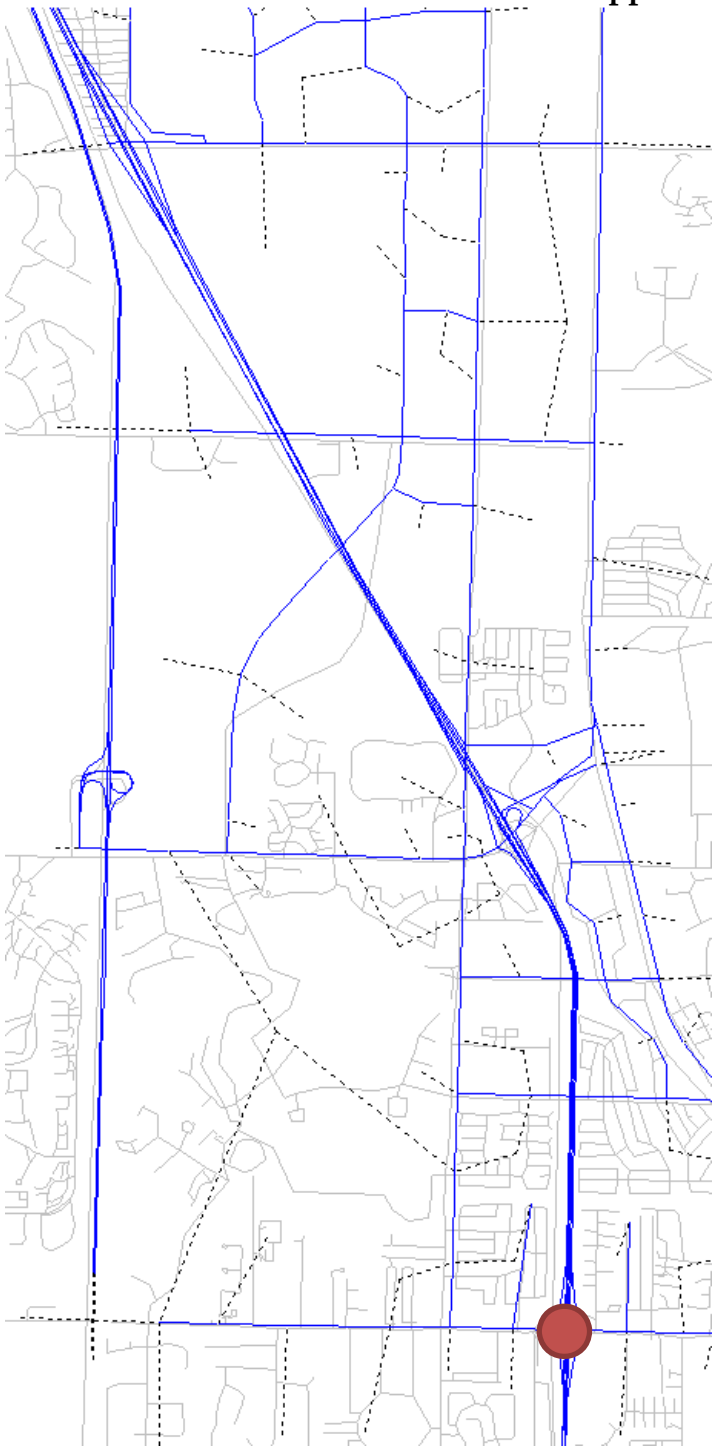

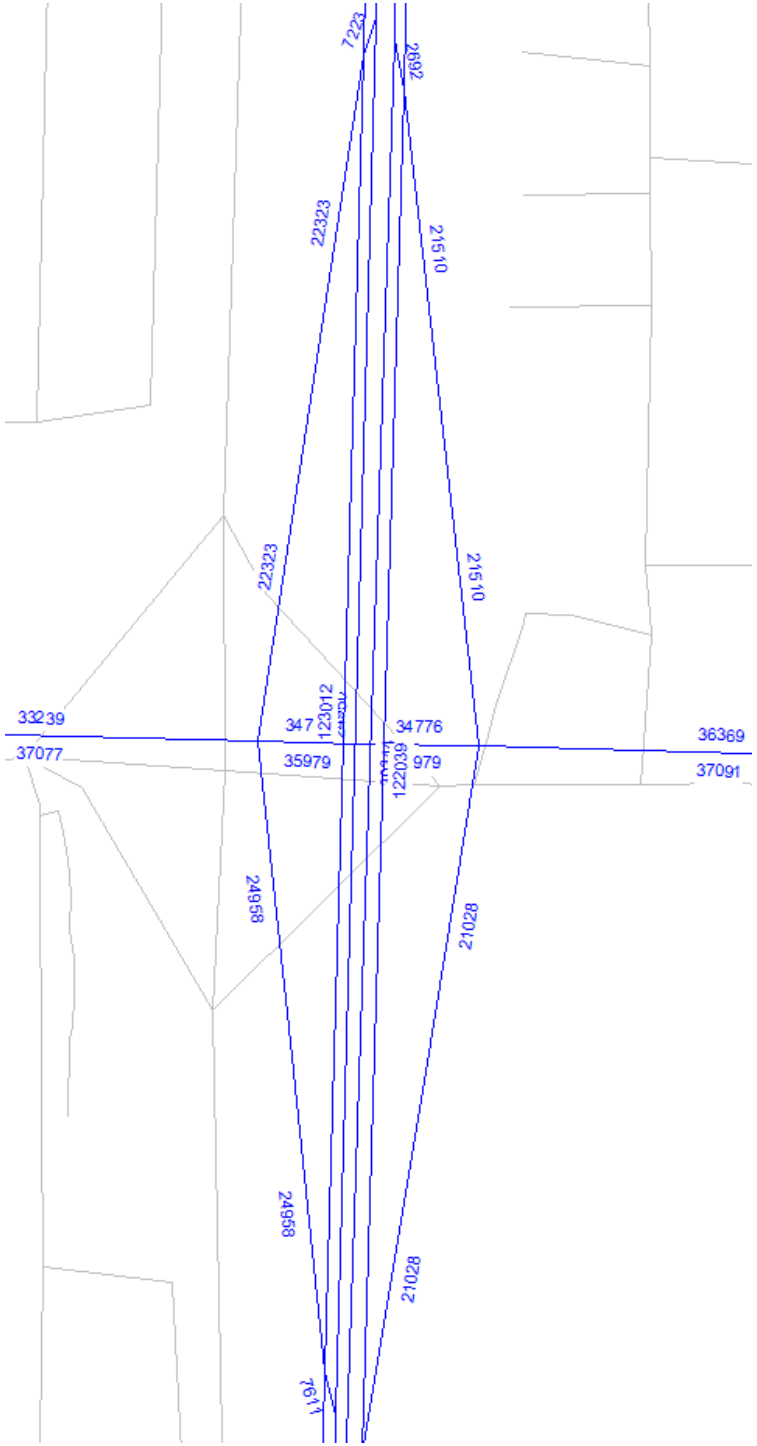
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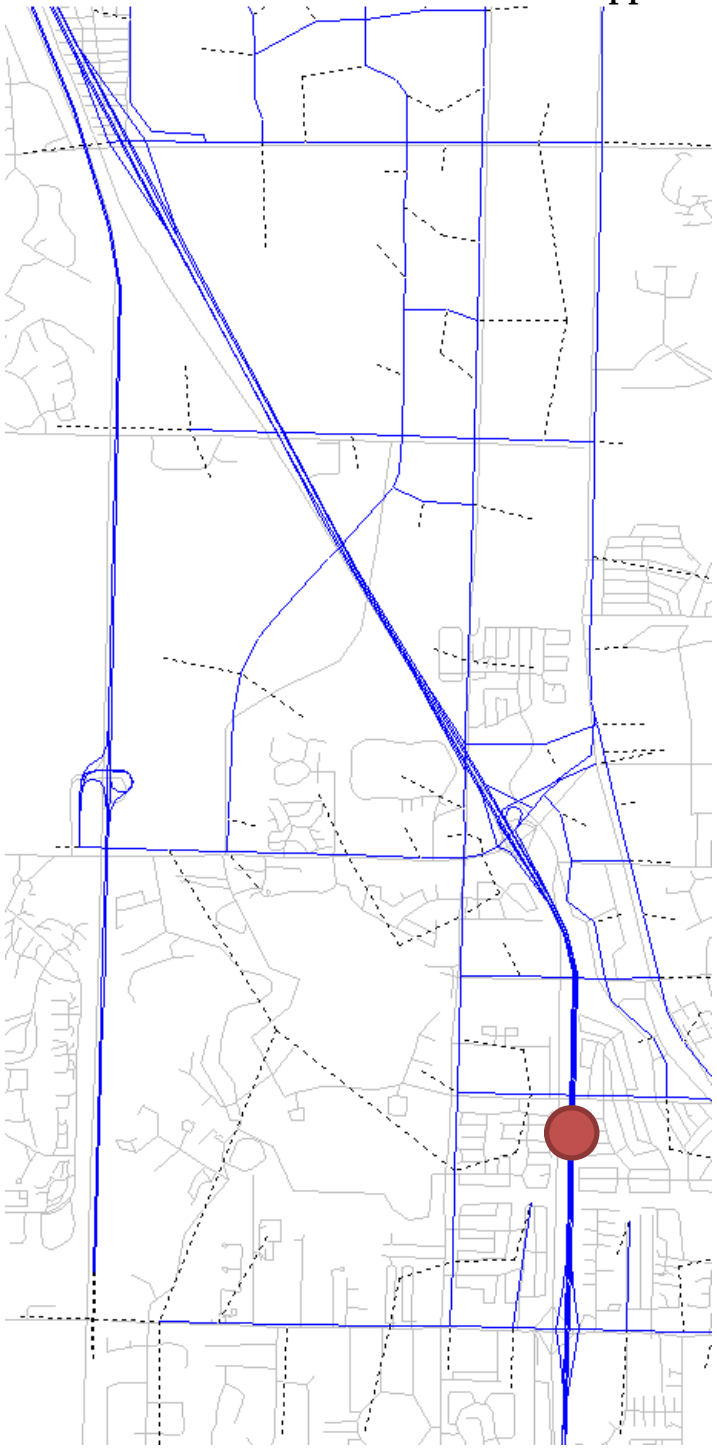

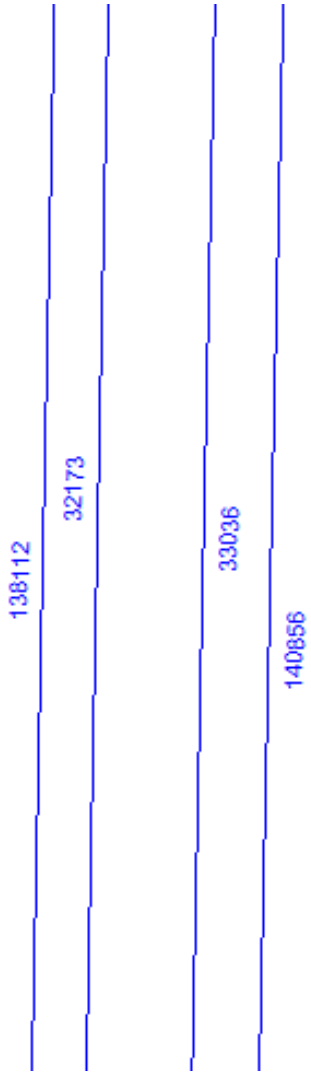
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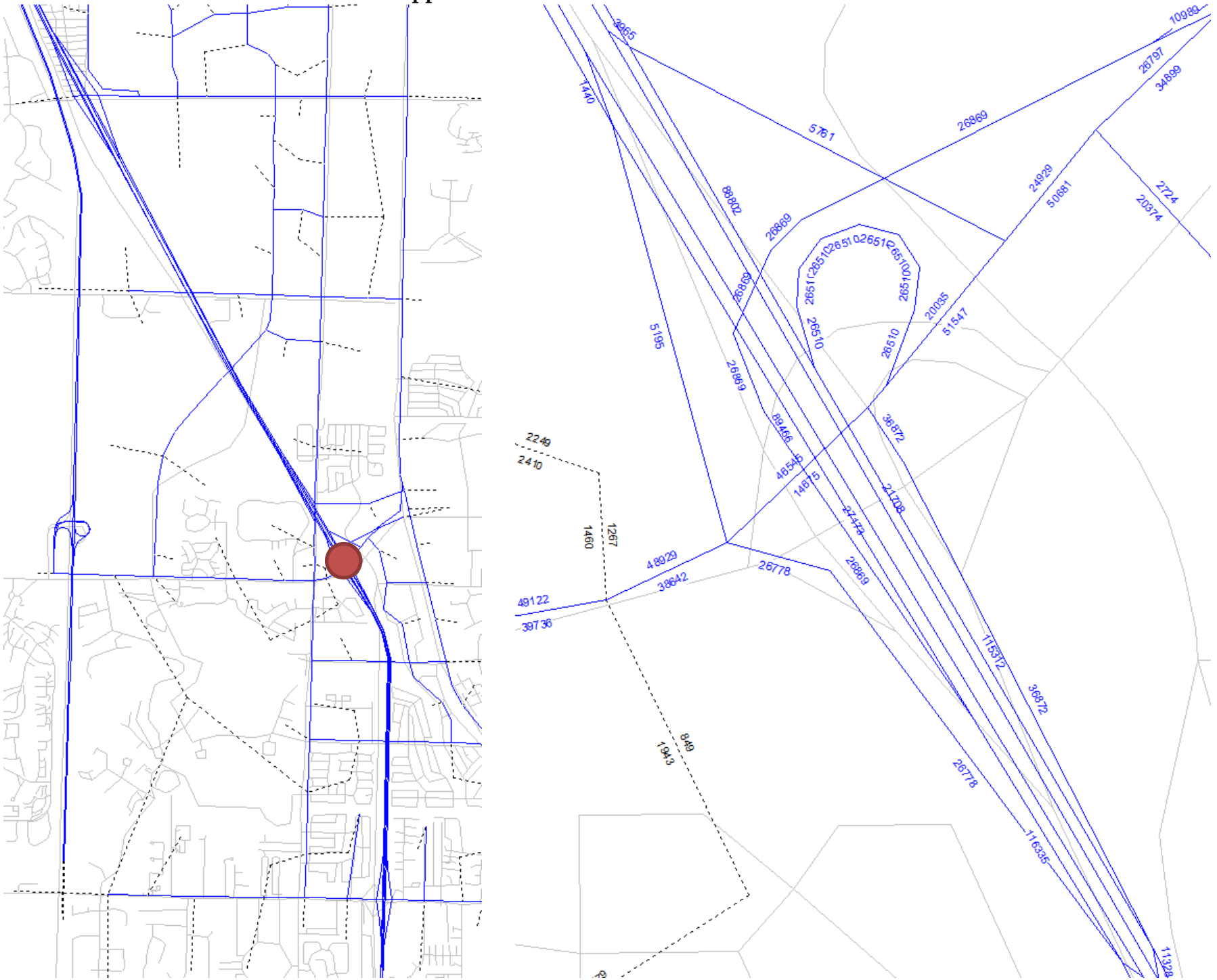
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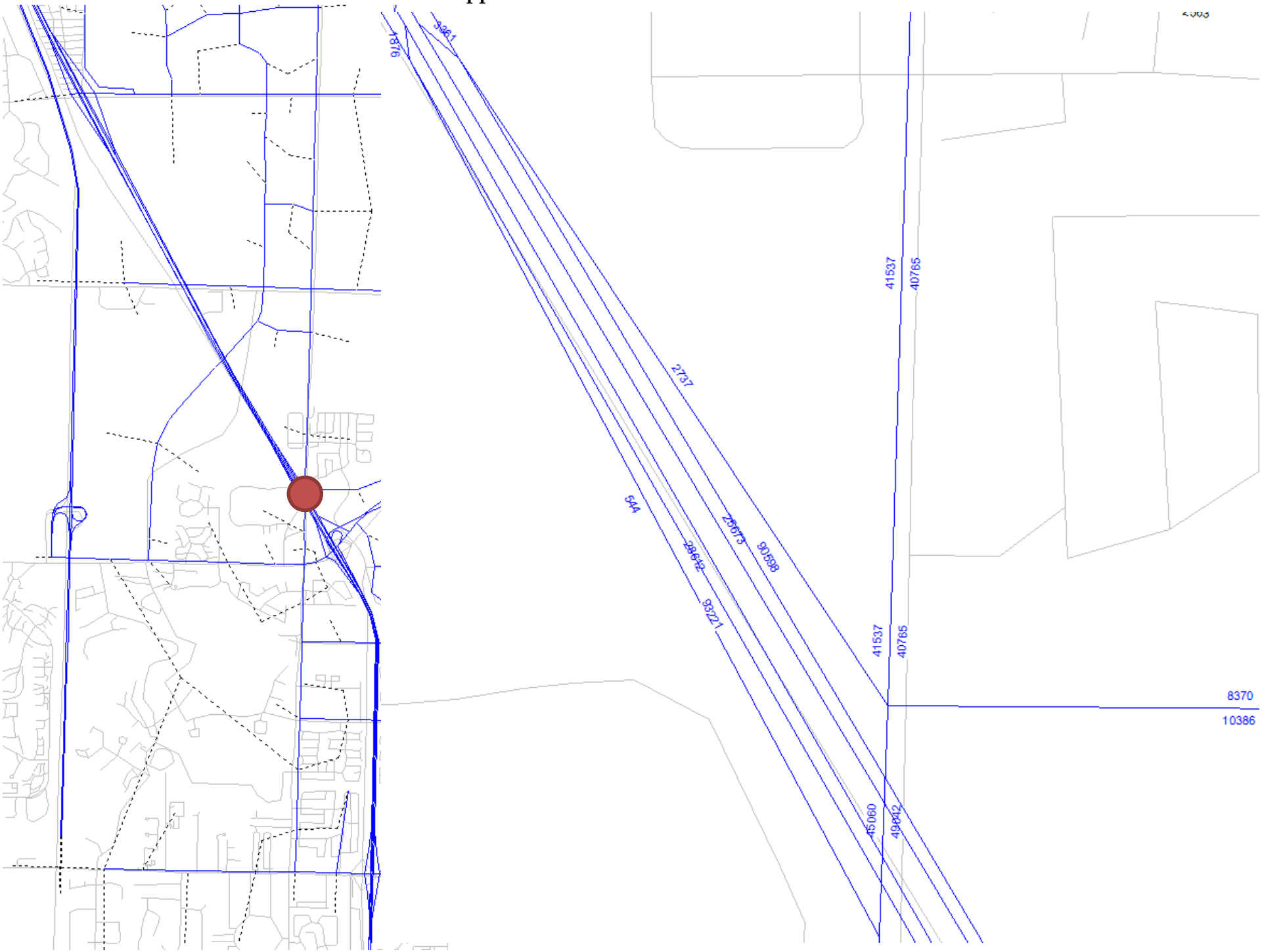
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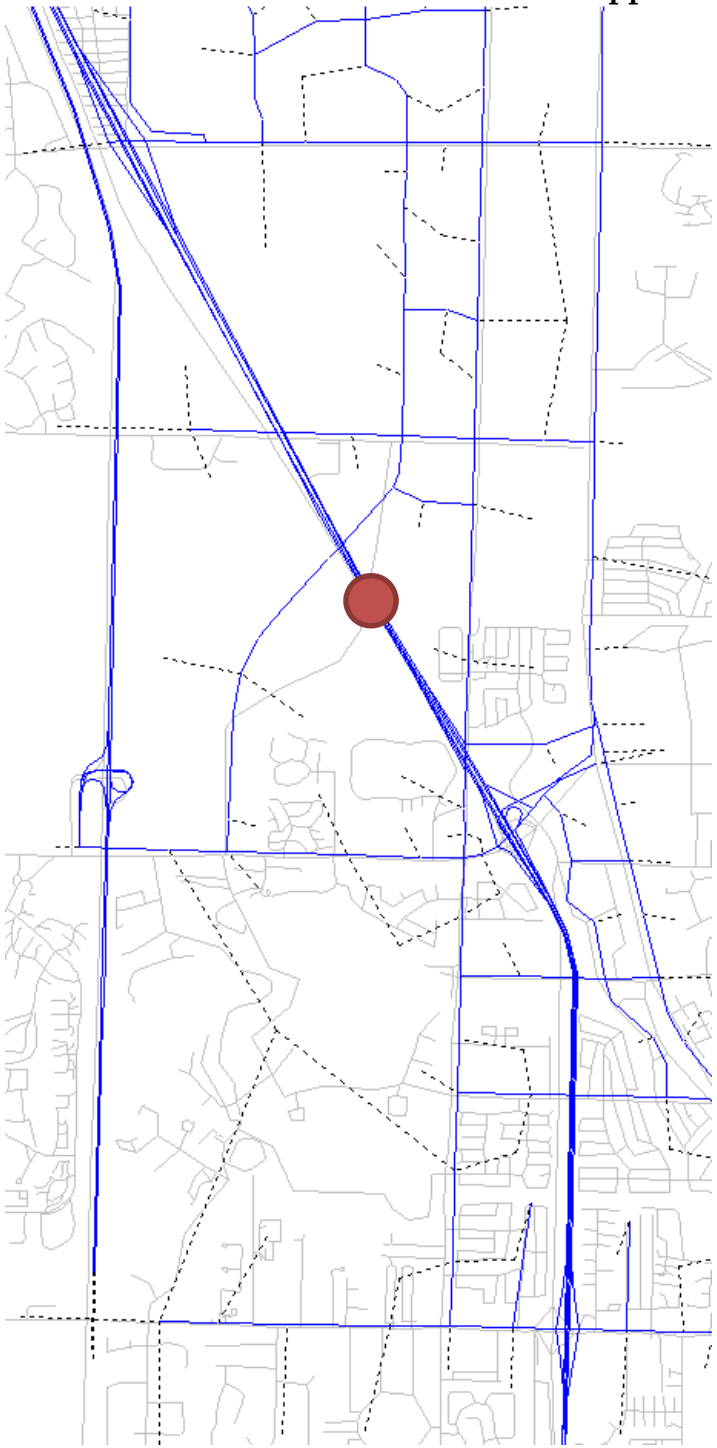

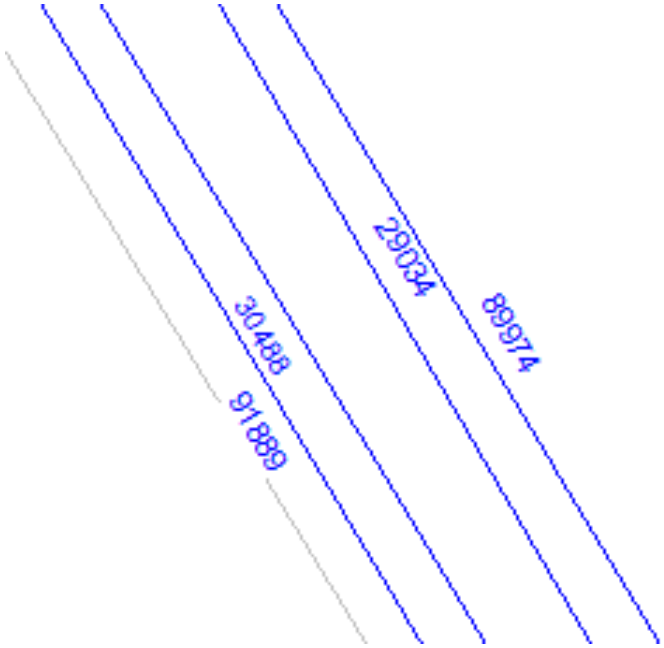
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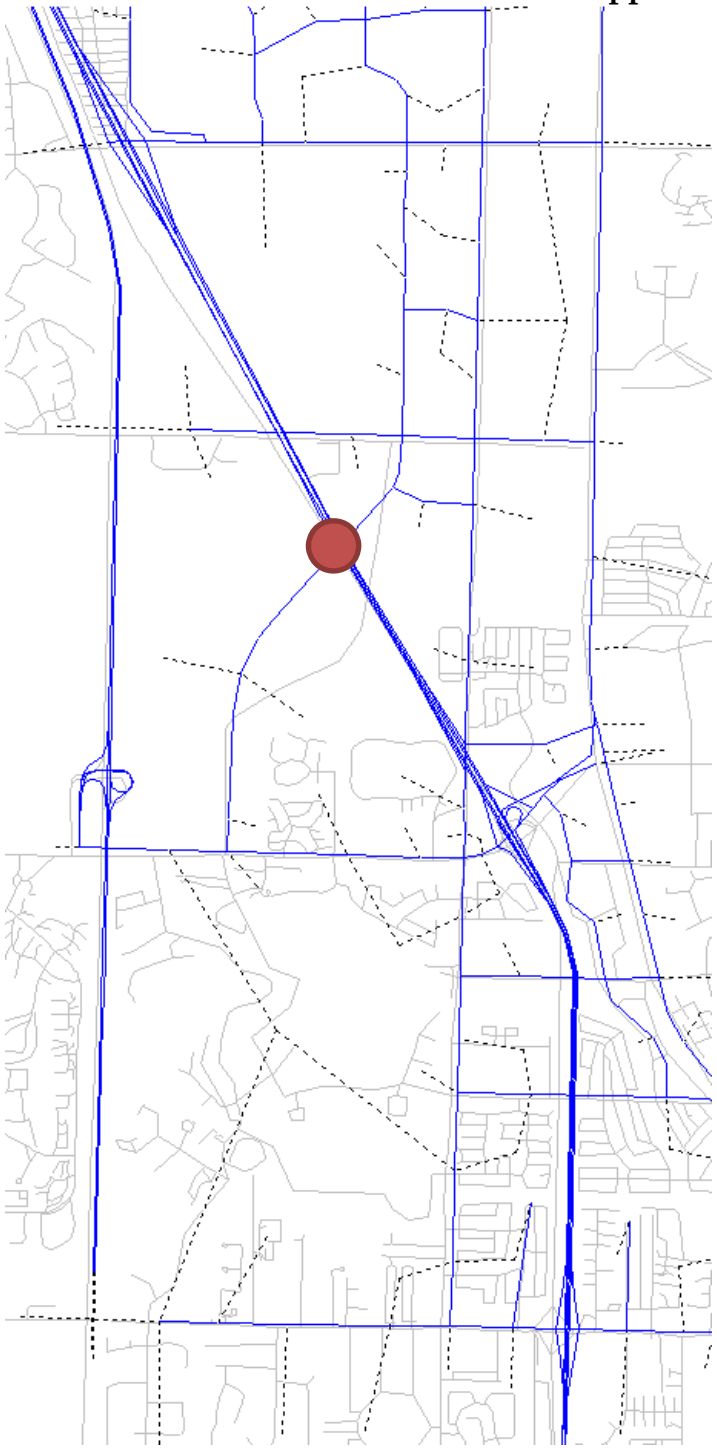

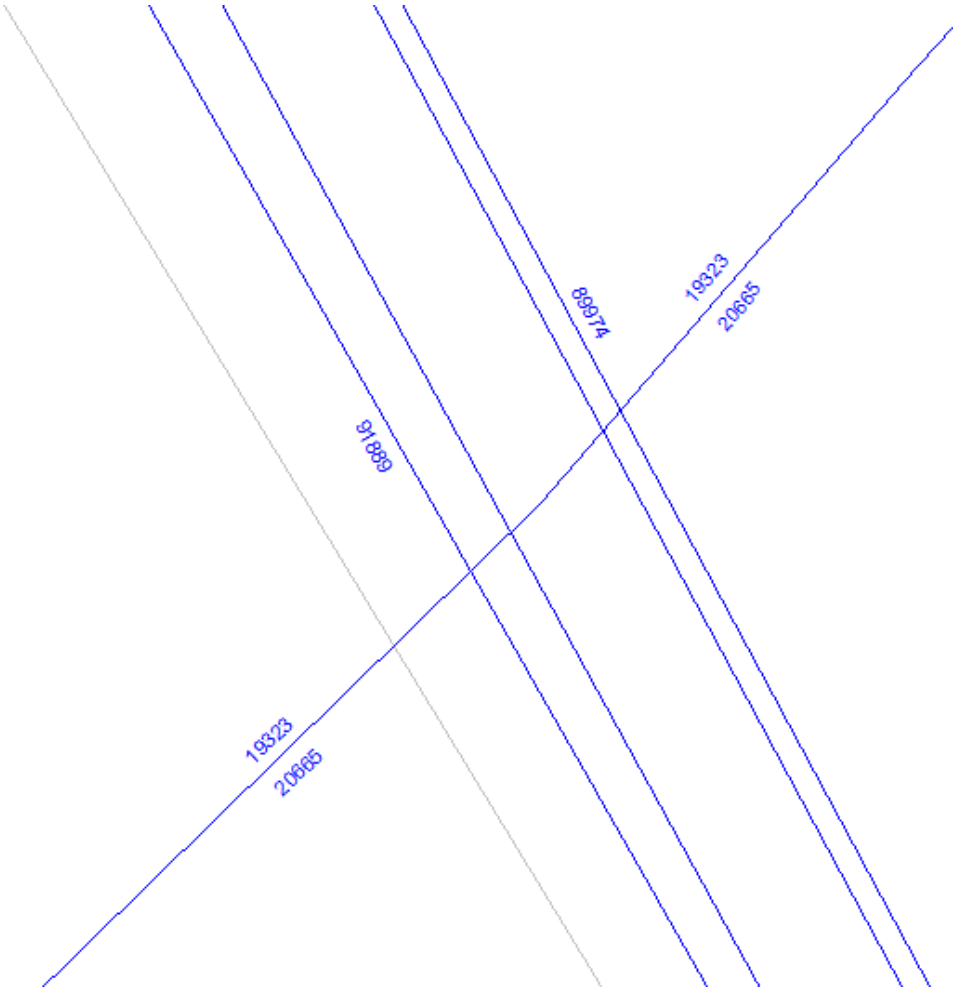
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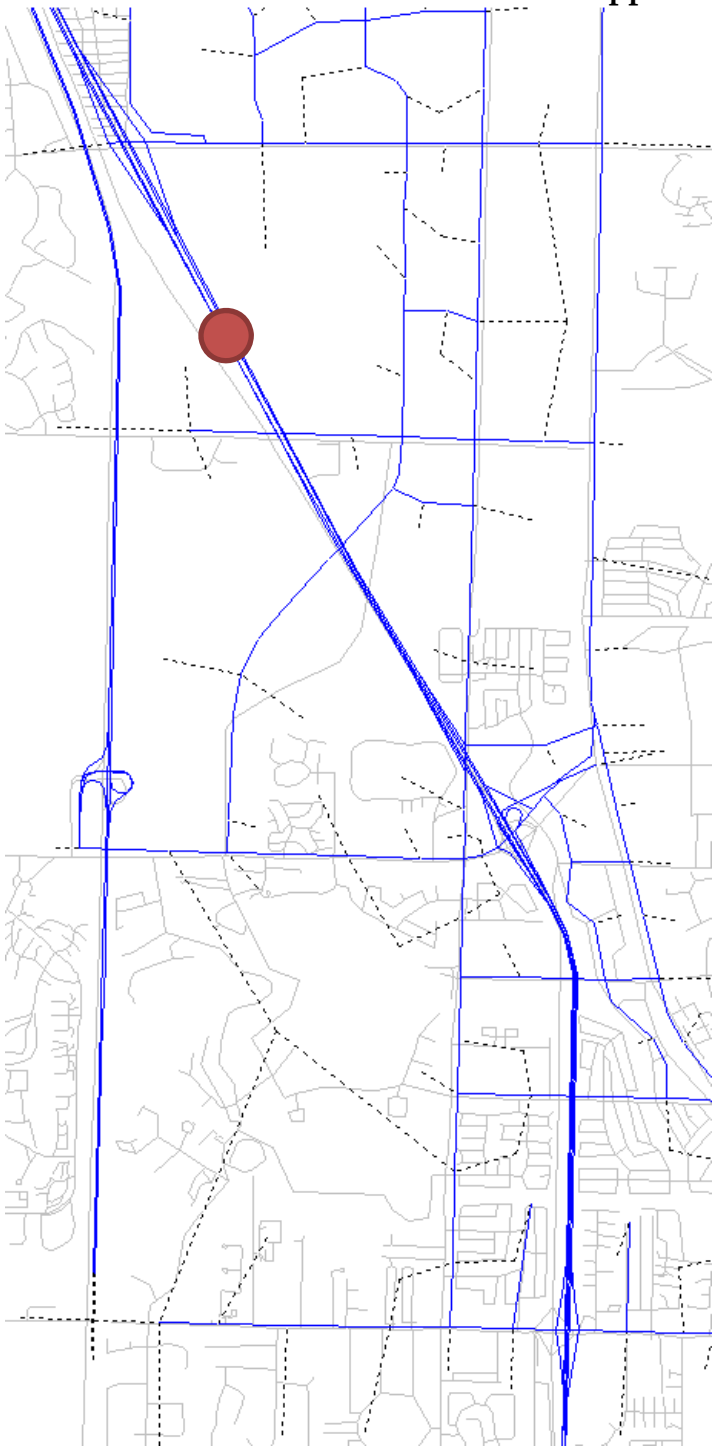

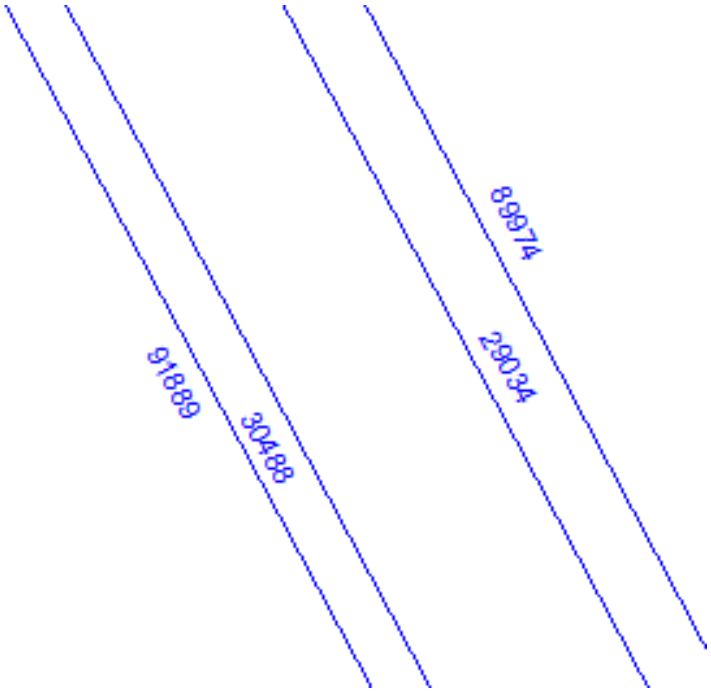
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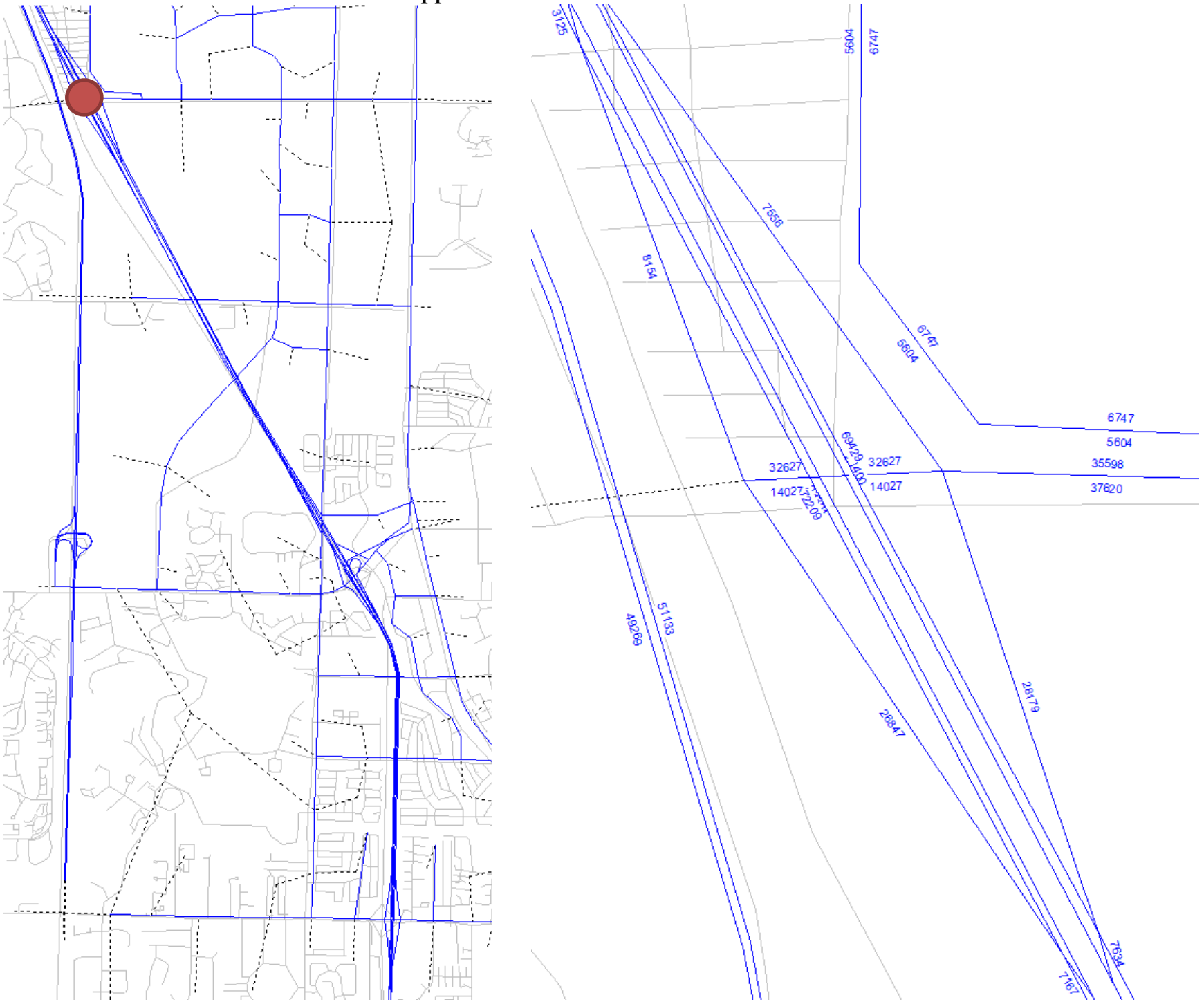
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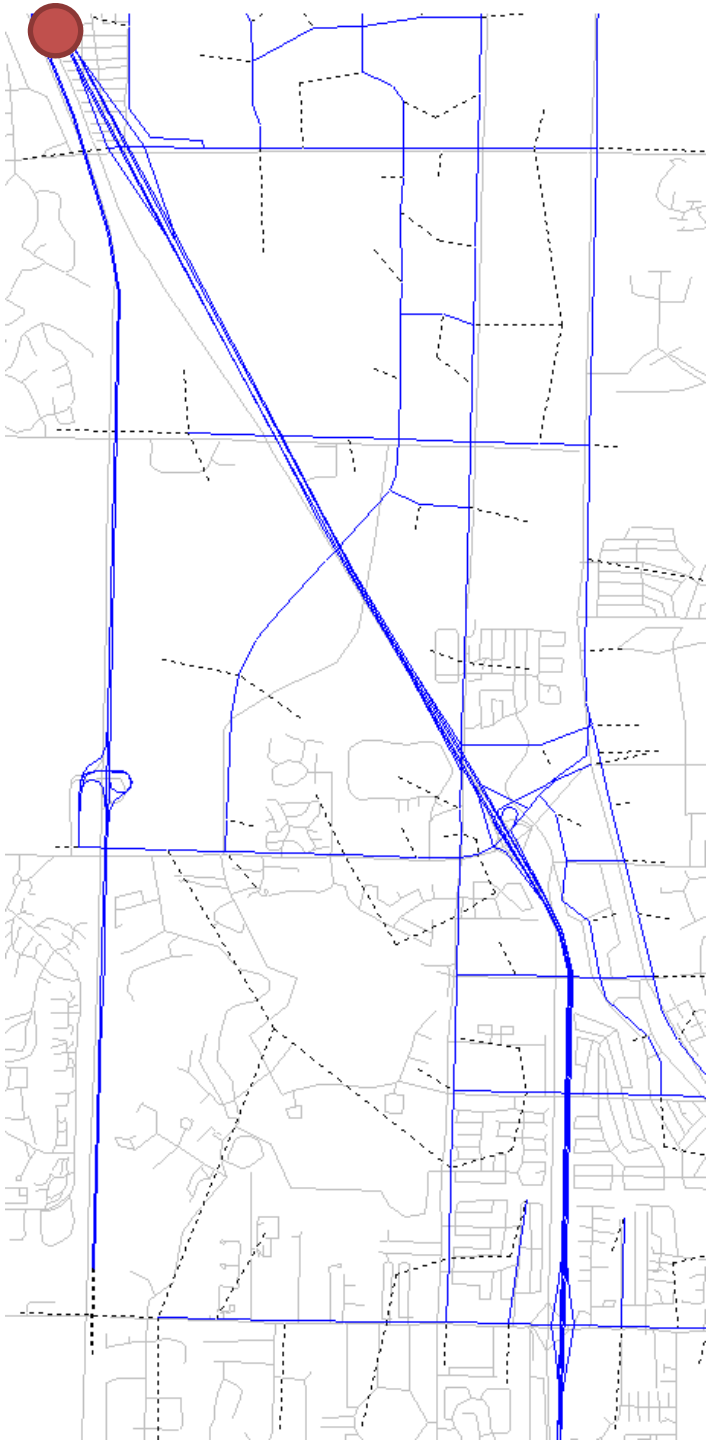

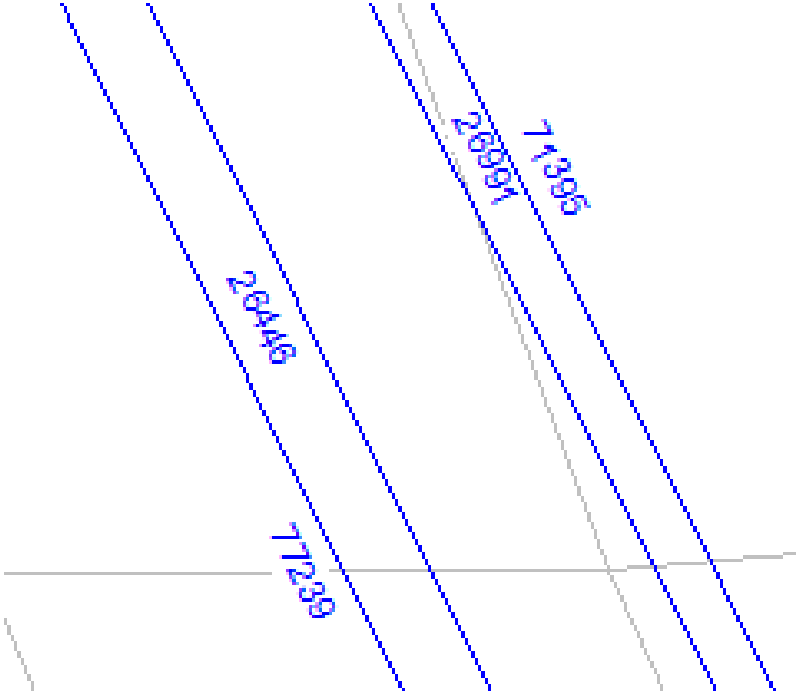
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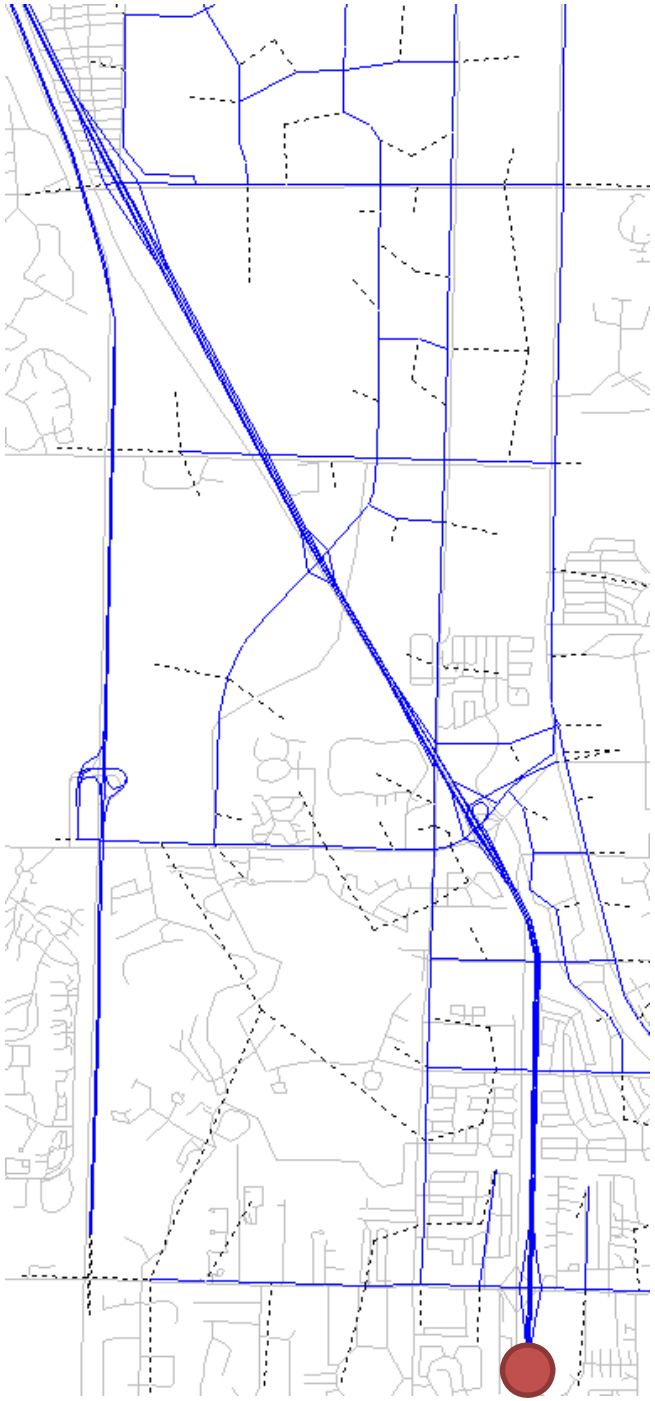
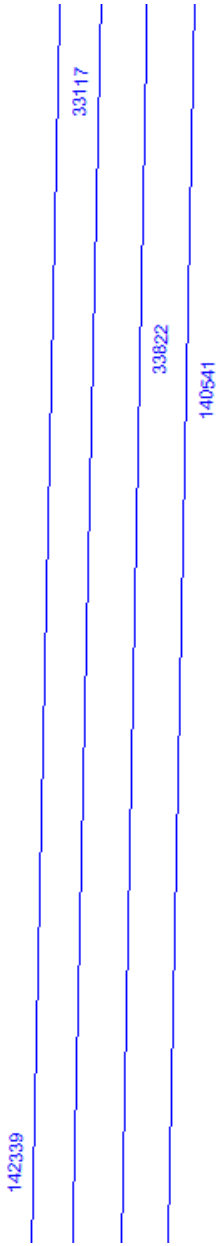
Build Alternative 1 – 2040 AADT

Mainline and Ramps

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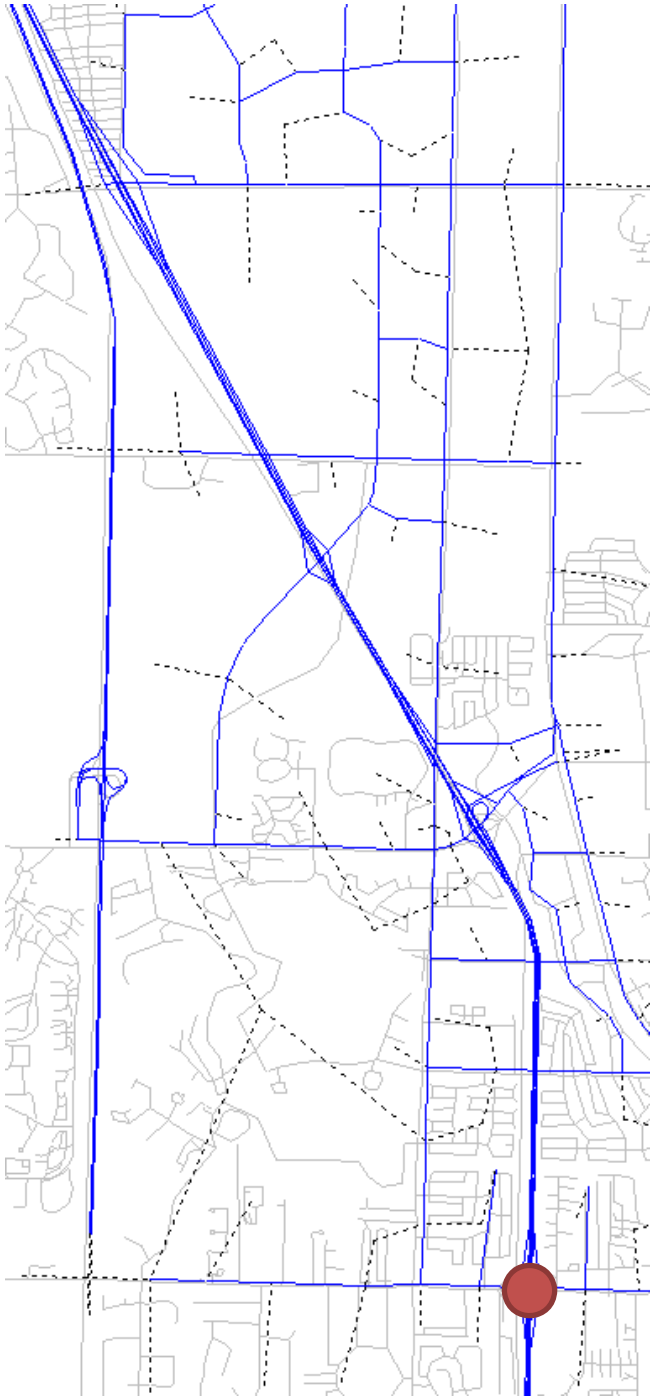

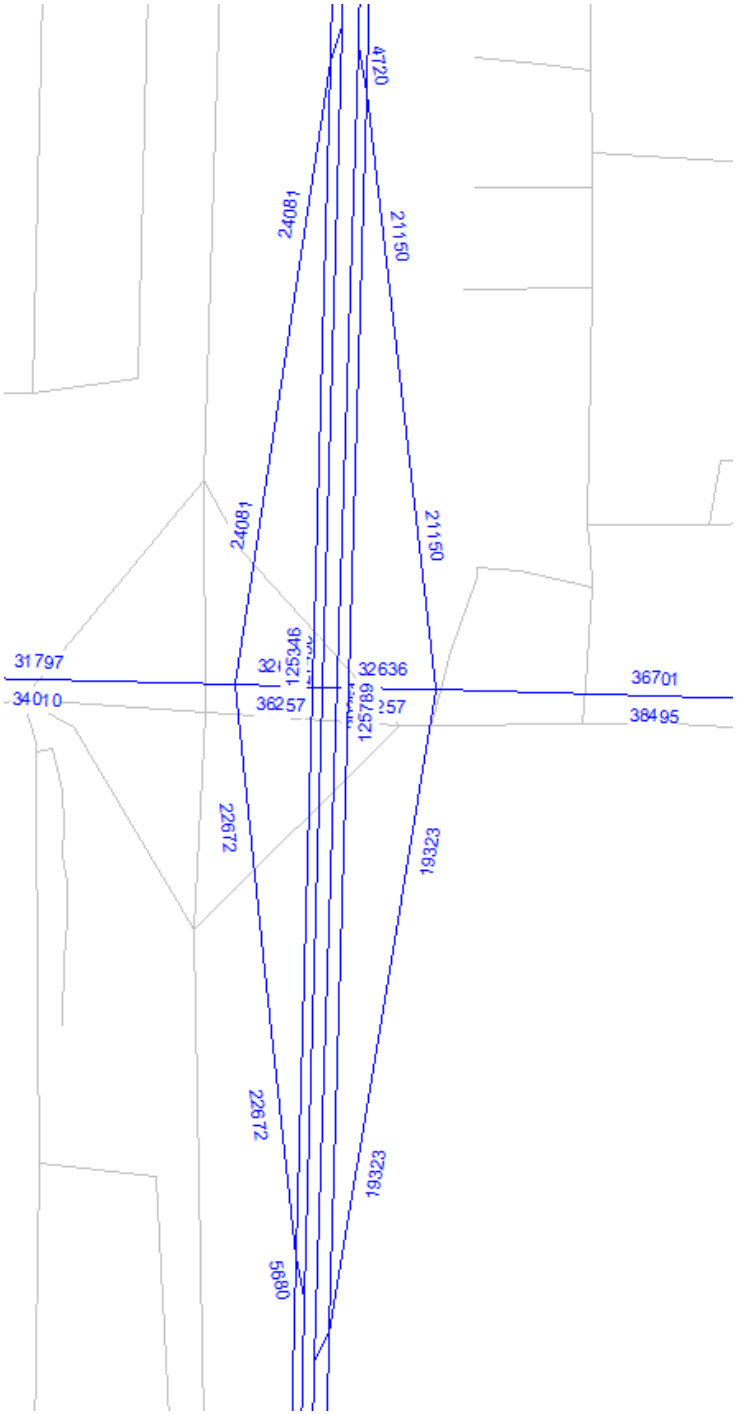
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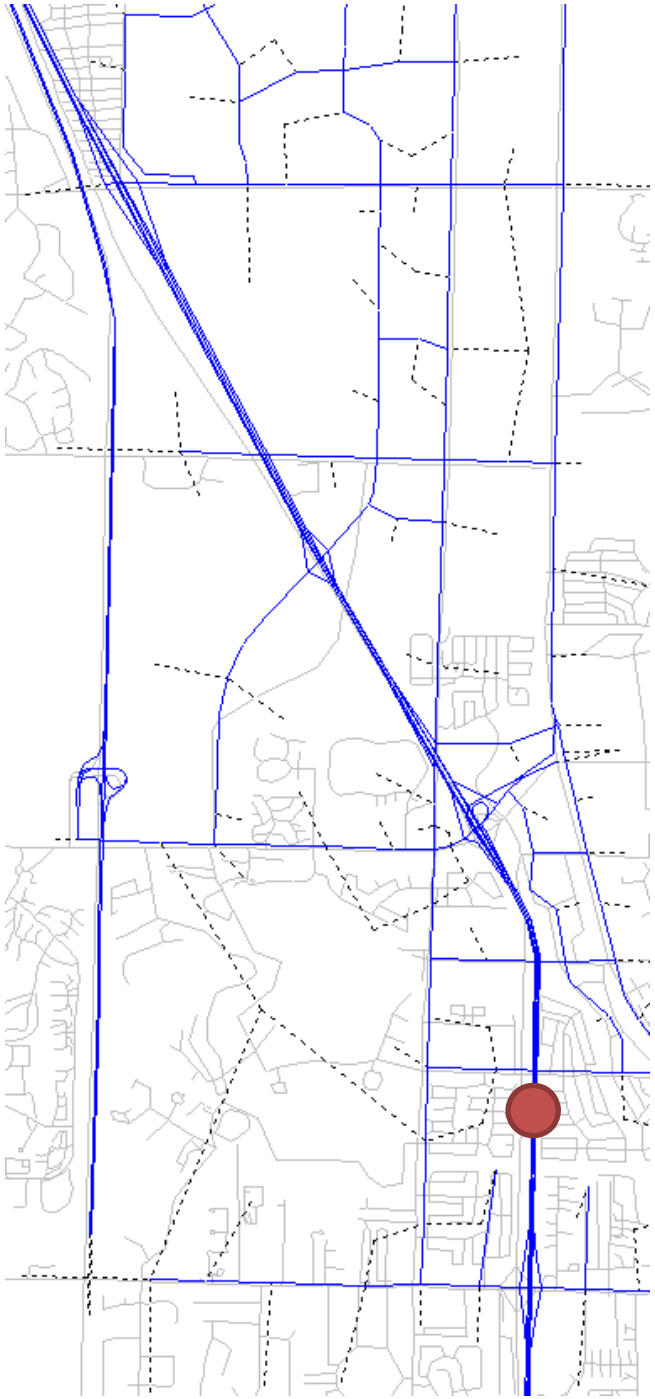

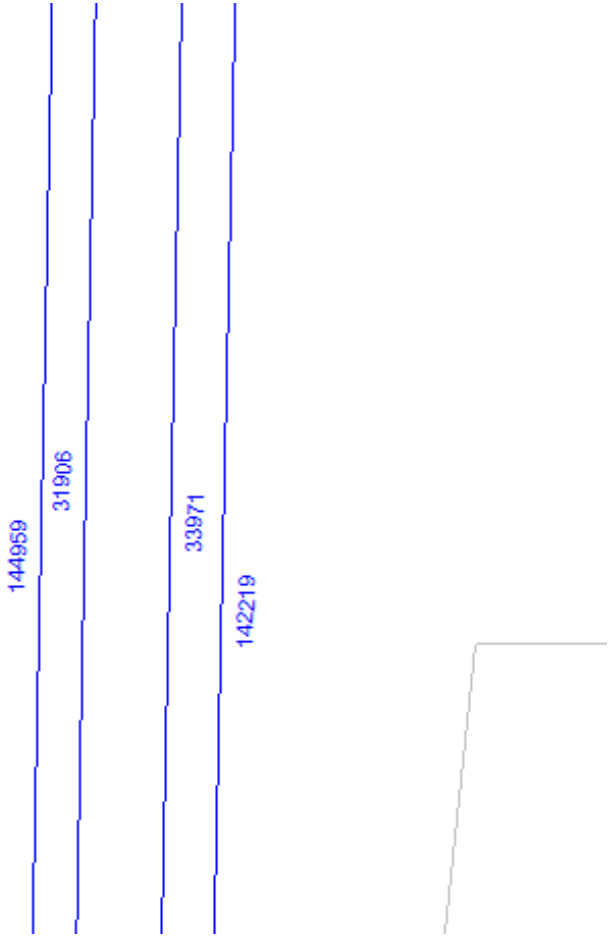
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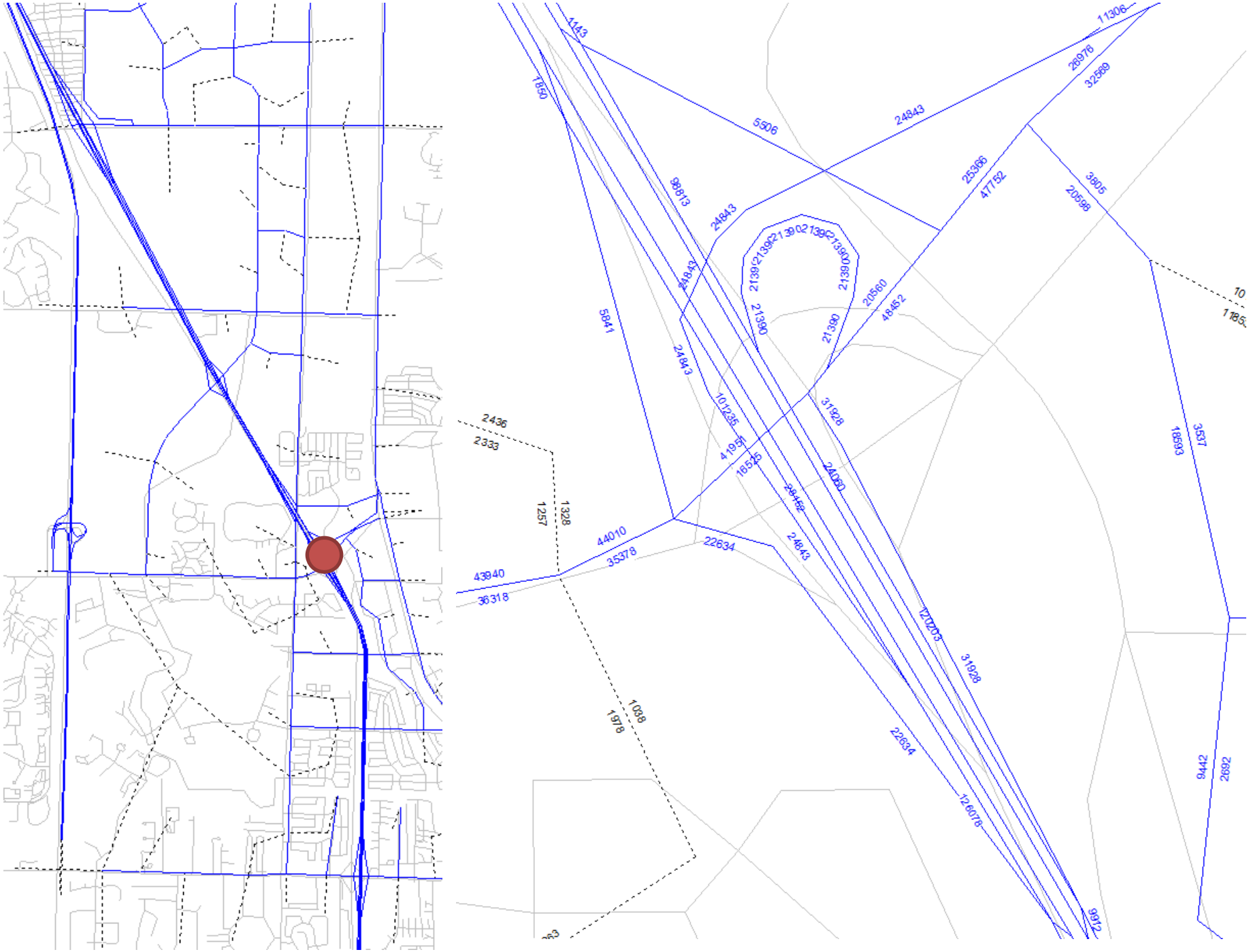
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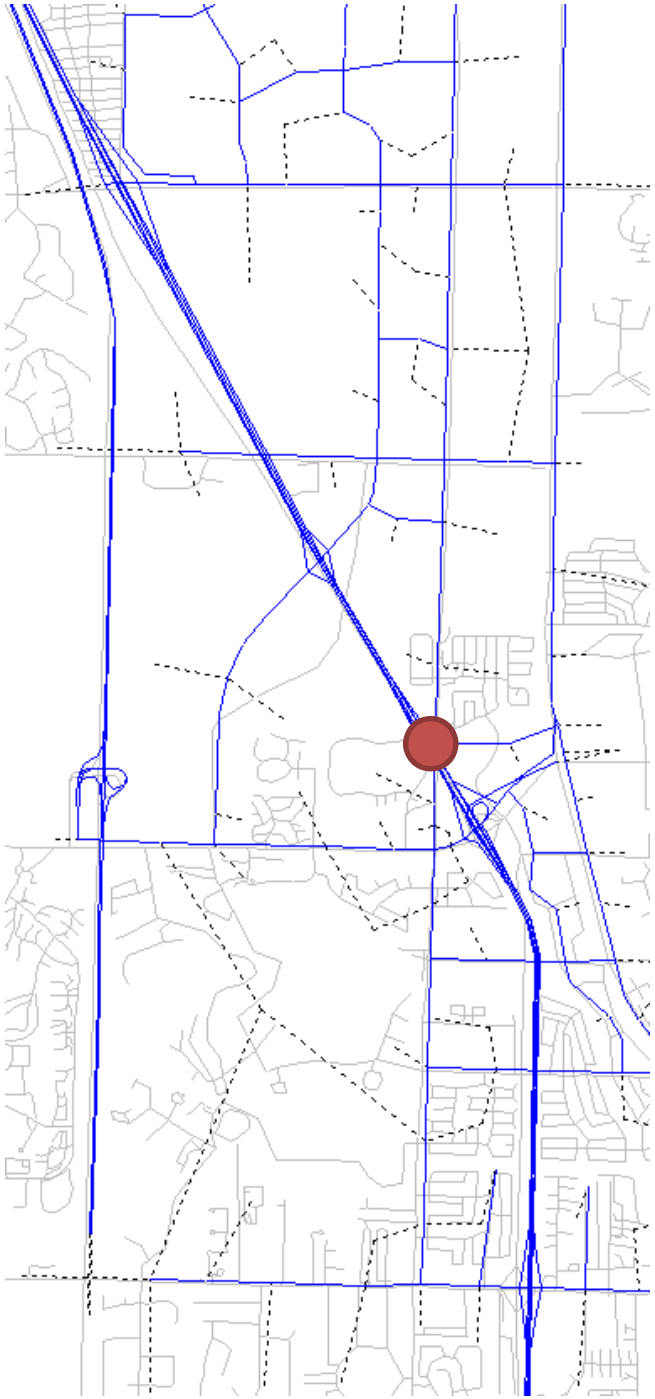

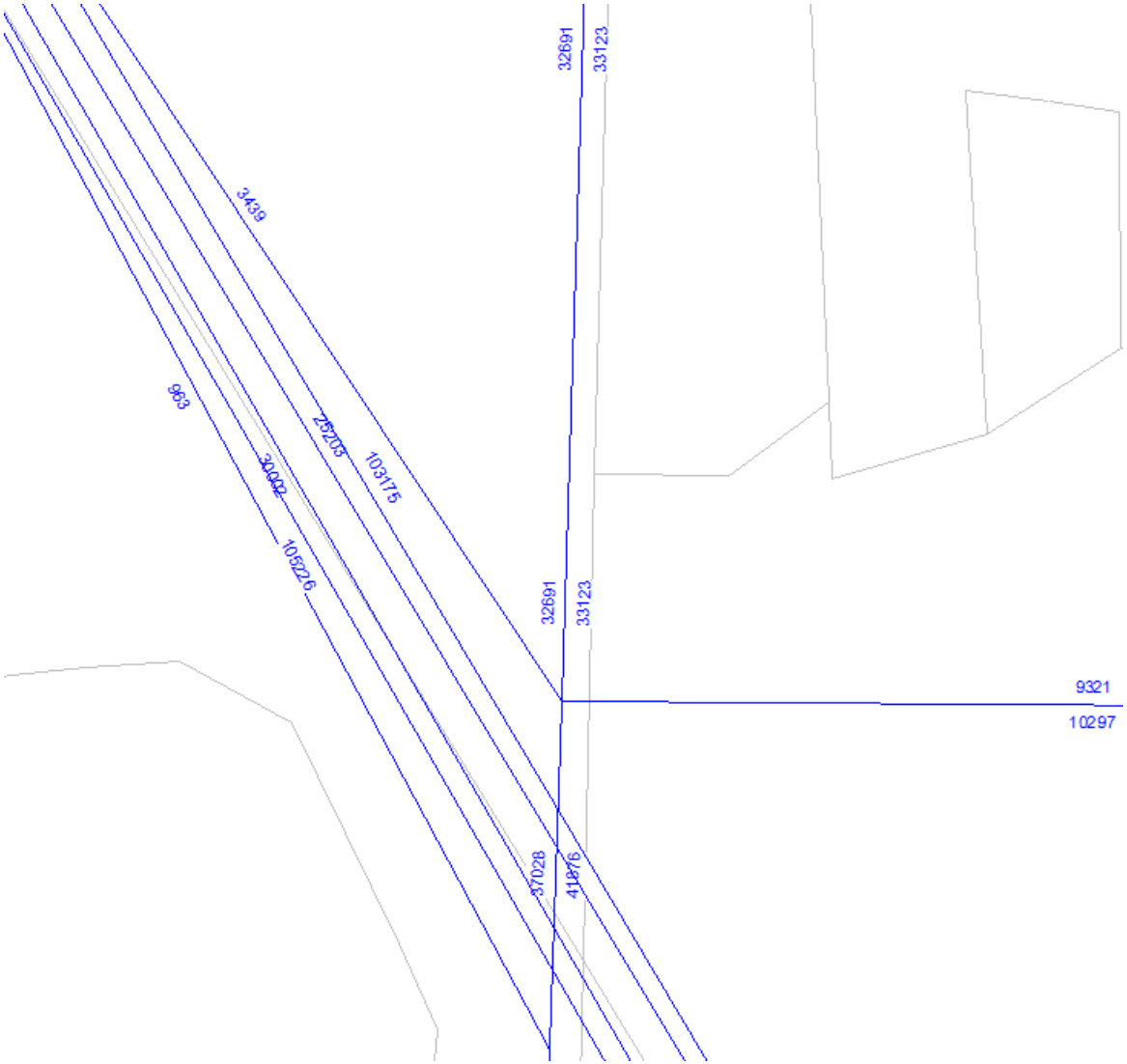
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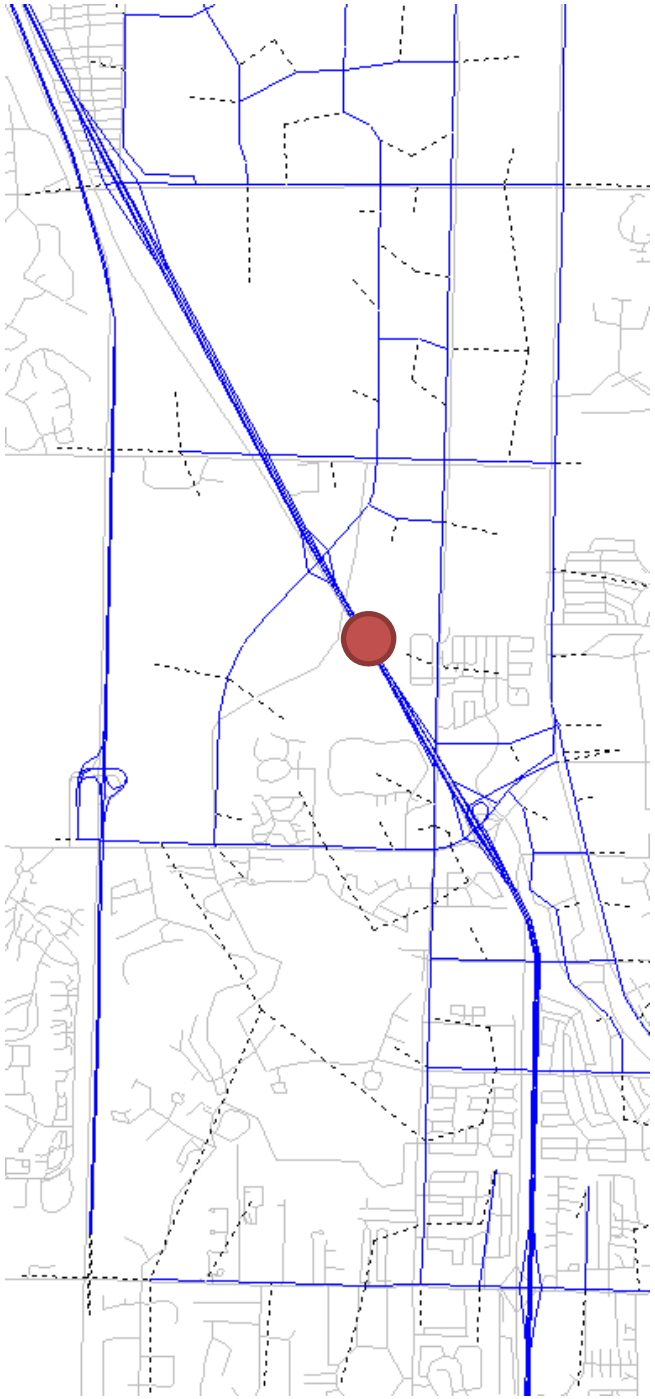

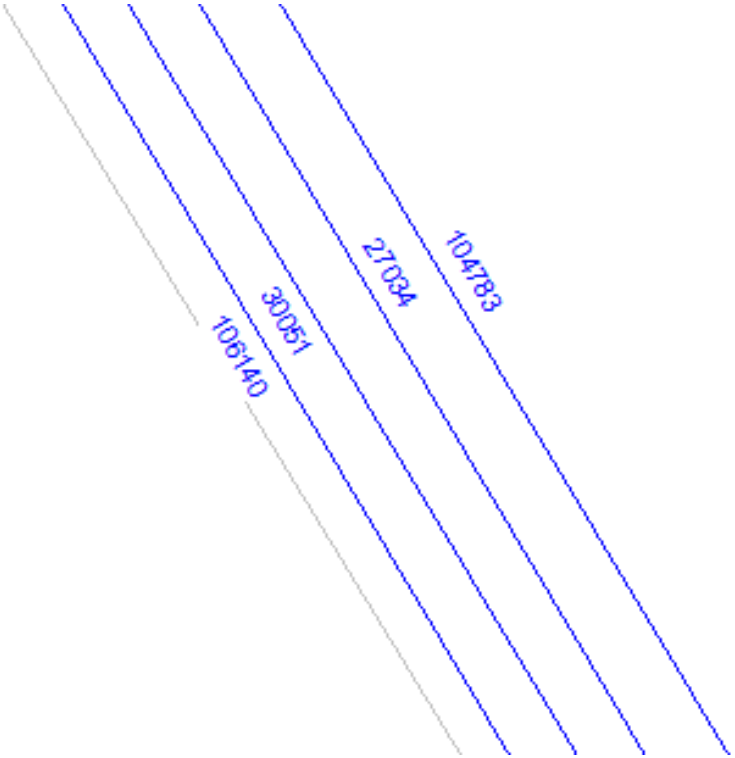
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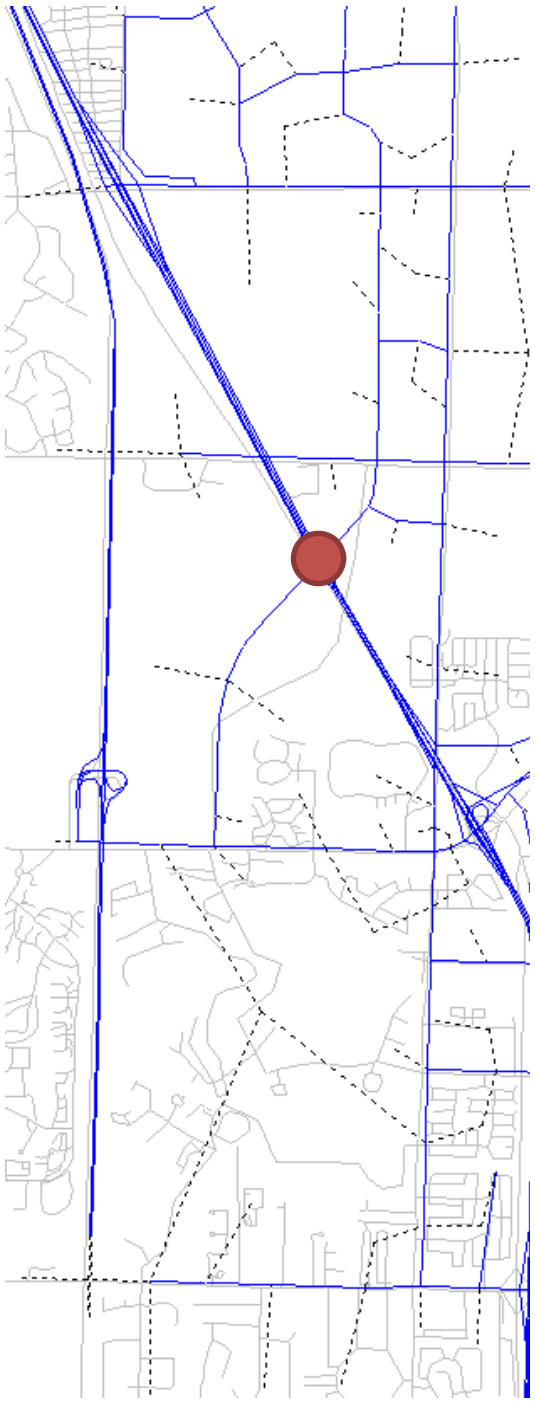

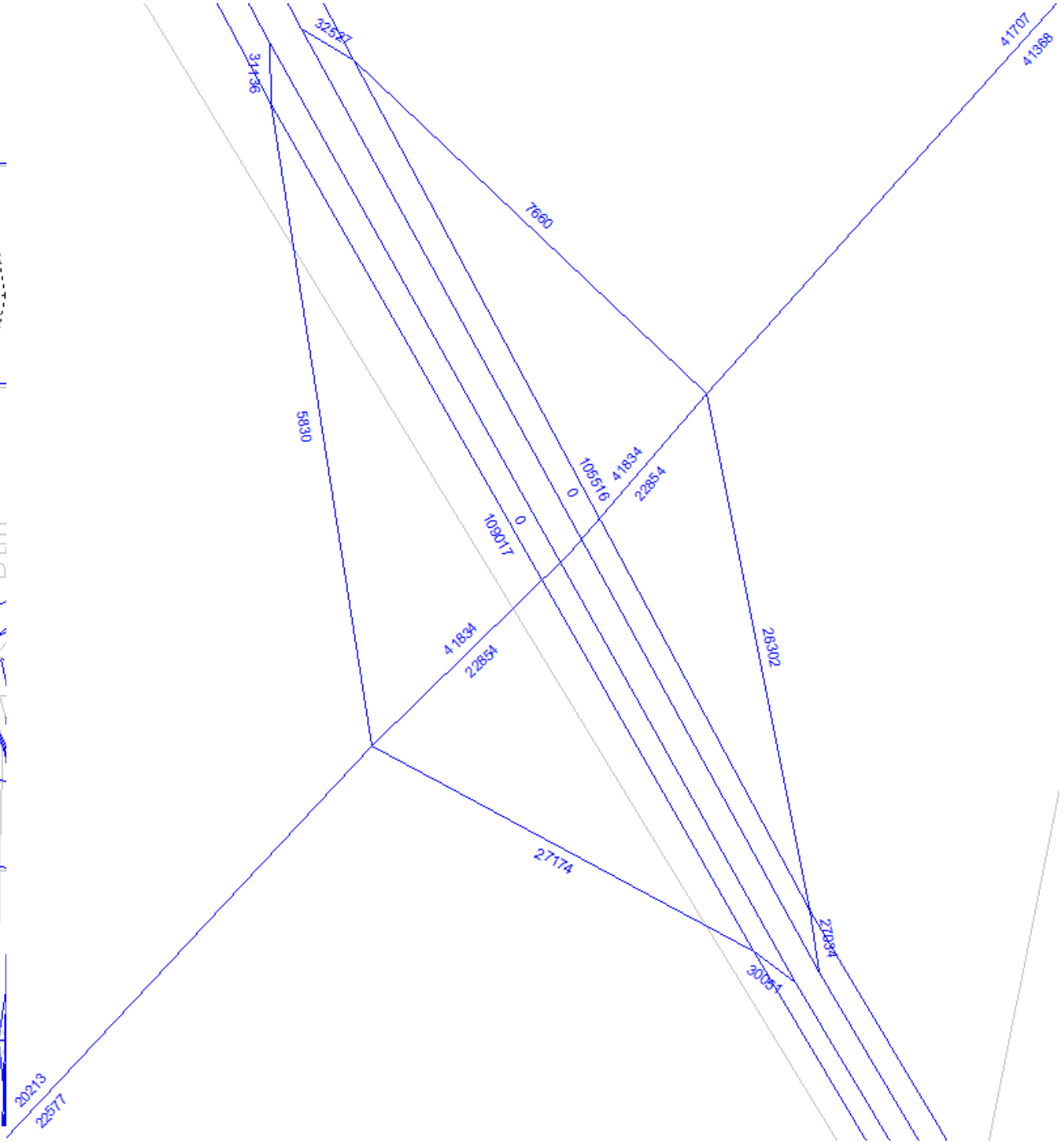
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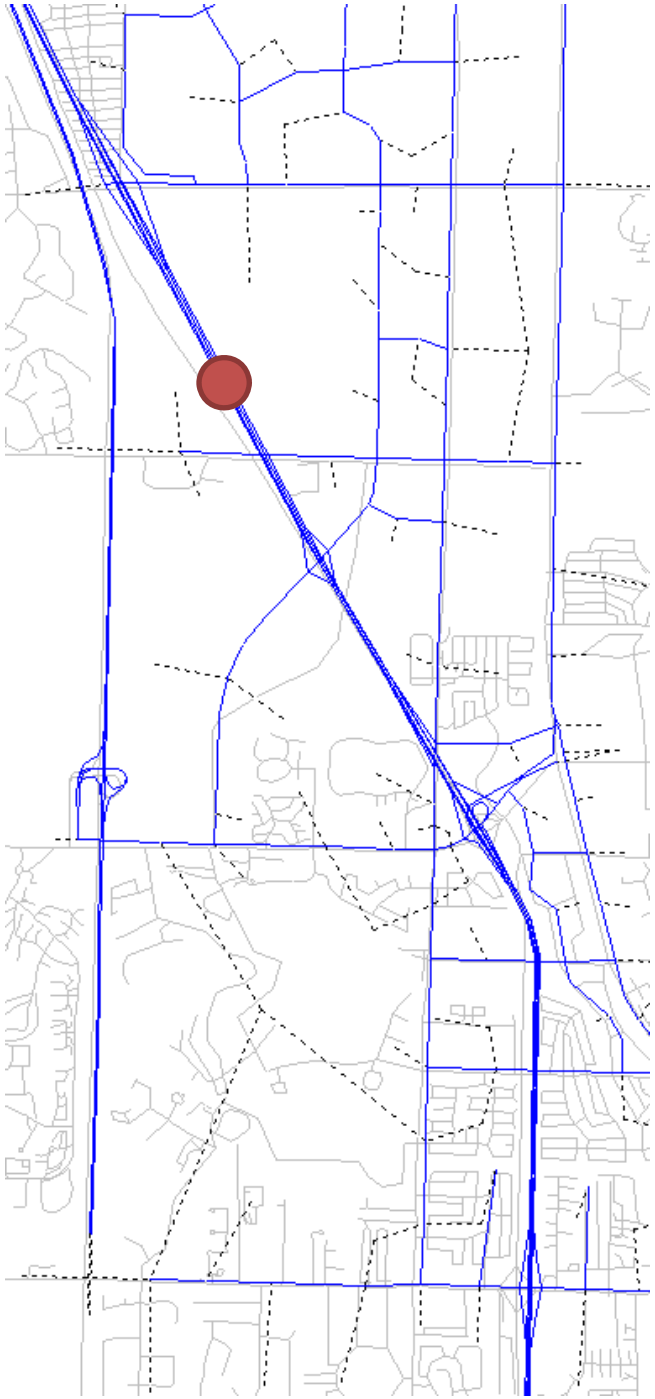

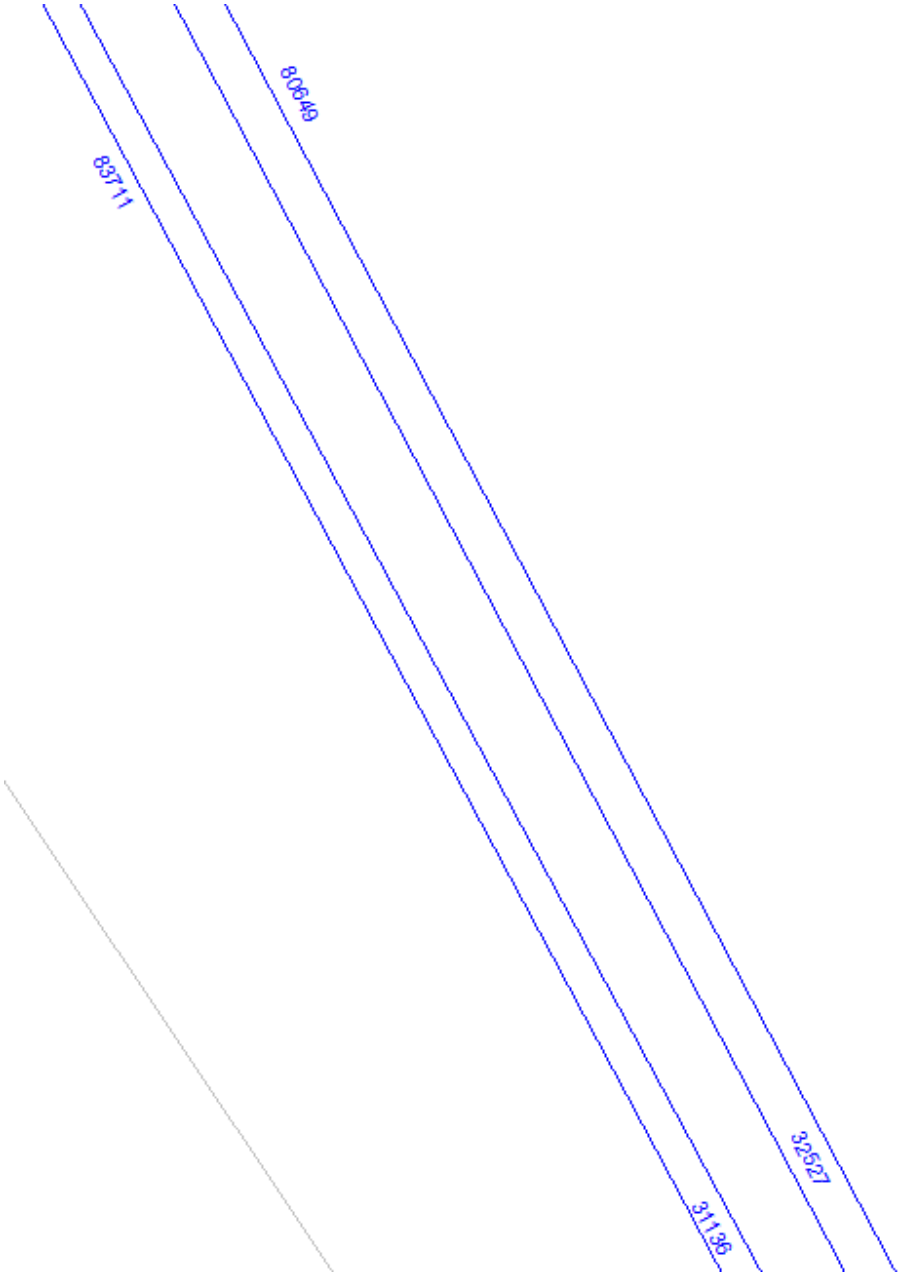
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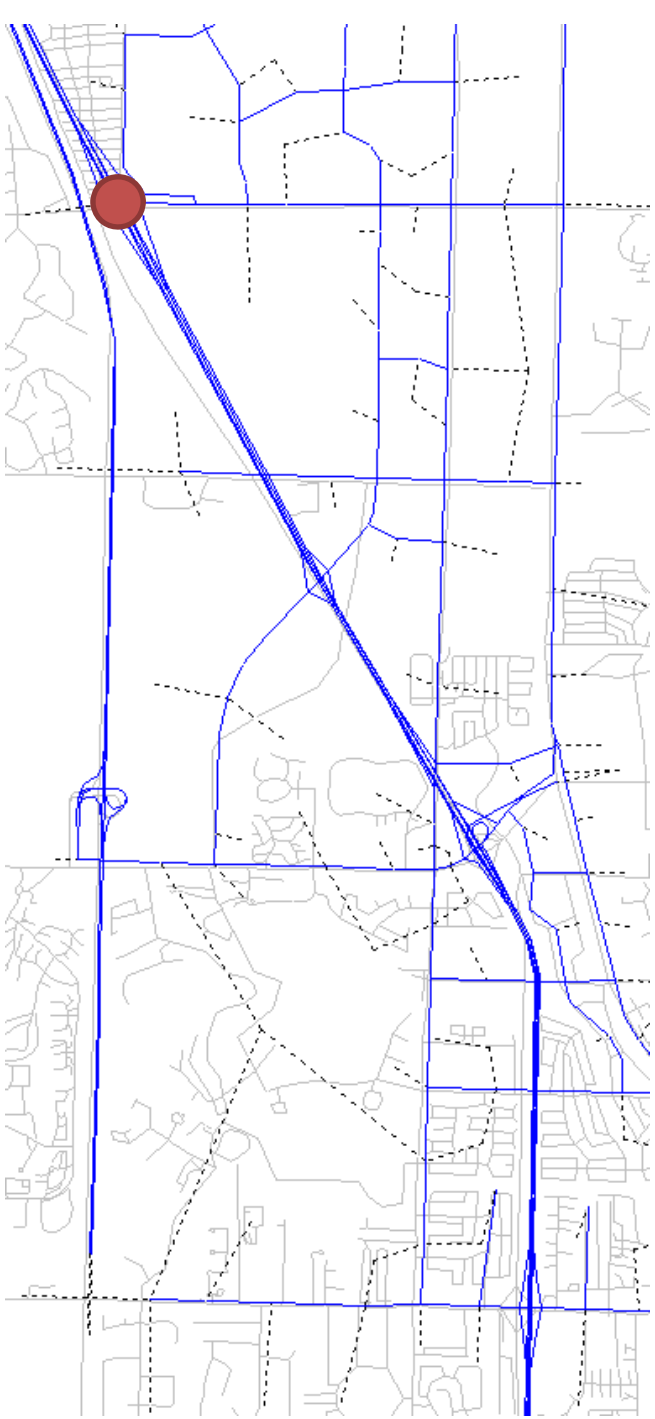

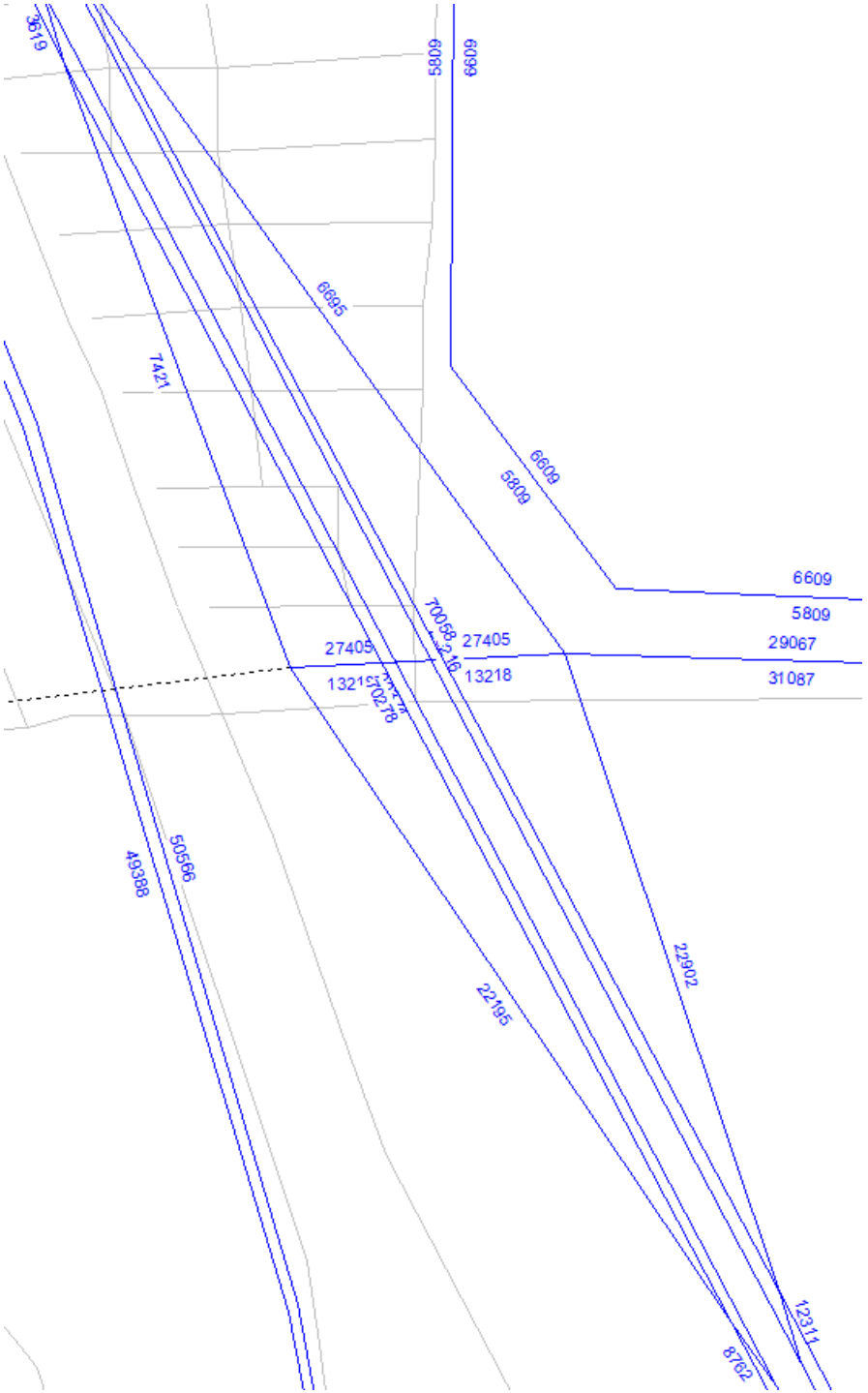
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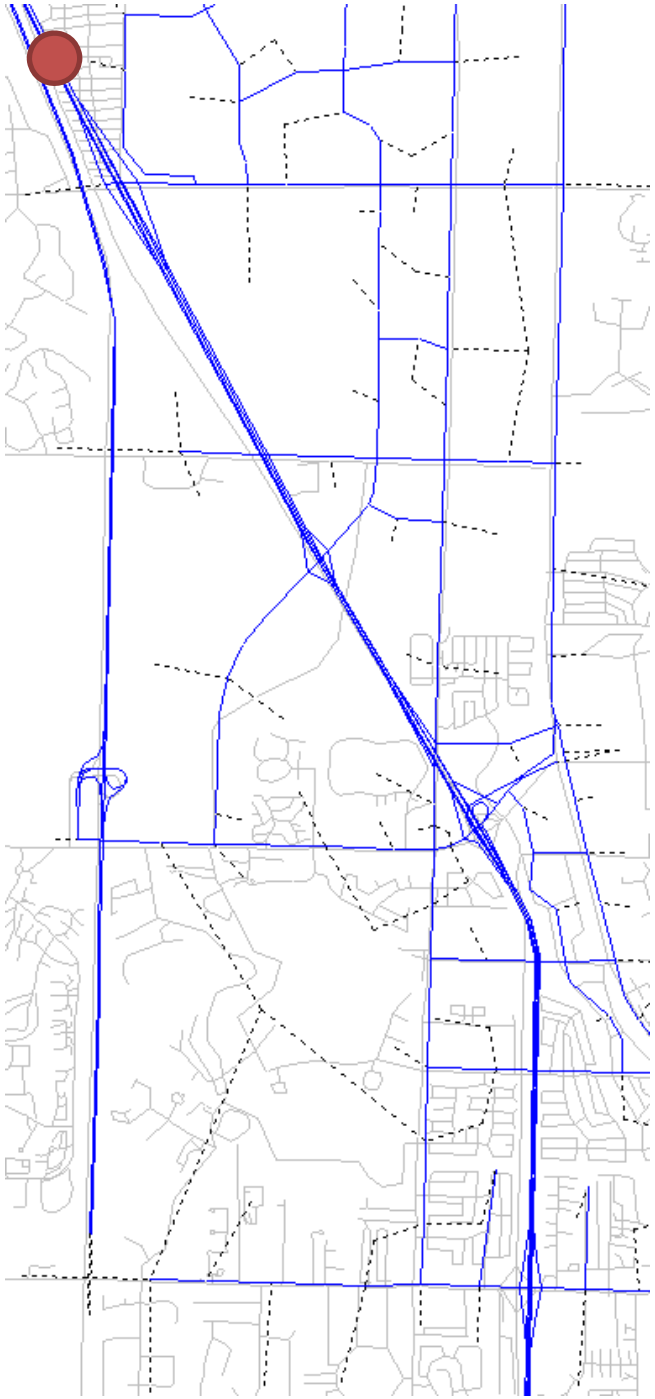

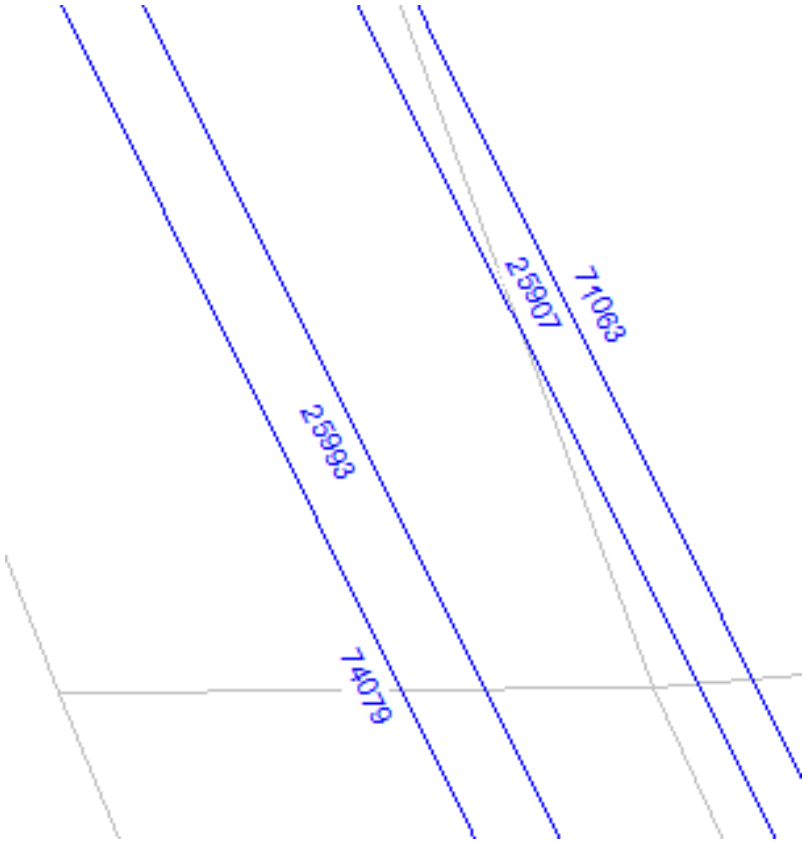
71063
25907
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74079

APPENDIX D

2013 TMTOOLS & EXISTING

CONDITIONS SYNCHRO REPORTS

EXISTING CONDITIONS

TMTOOLS WORKSHEETS

DONALD ROSS ROAD

CORRIDOR

FROM: 64th Dr/ E Pointe Ct

TO: N. Military Trail

DONALD ROSS ROAD

CORRIDOR

Intersection: 64th Dr N-E Pointe Ct

TMTOOL INPUT SHEET

Project Description:

SECTION NO:		PREPARED BY:	
FM NO.:		FILE:	
PROJECT LIMITS:		DATE:	
DESIGN YEAR:			
INTERSECTION:	Donald Ross Rd.& 64th Dr N / E Pointe Ct		

NOTES:

Machine 1064 (W of 64th Dr. N), was also labeled as 4601.
Machine 1036 (D.Ross Rd. W/o SB I-95) was also labeled as 6301.
Only machine 1064 has AADT for the 3 daysW (4/23, 4/24, 4/25). Data was averaged.
TMC data corresponds to (4/25/2013)

Historical AADTs:

	YEAR / STATION	NORTH LEG AADT 1073	EAST LEG AADT 6301	SOUTH LEG AADT 1072	WEST LEG AADT 4601	
Actual AADT:	2004					
Actual AADT:	2005					24-HOUR TOTAL
Actual AADT:	2006					
Actual AADT:	2013	979	14,782	849	12,365	
TCRPM Volume:	2013	0	0	0	0	

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic Trend GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	
Historic + Model Trend GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	
2000 Model to 2030 Model GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	CGR
Recommended Growth Rate:	**0.00%**	**CGR**	**0.00%**	**CGR**	**0.00%**	**CGR**	**0.00%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

			NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
			1		1		1		1	
		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
		2013		979		14,782		849		12,365
NO. YEARS	0	2013	1.000	1,000	1.000	14,800	1.000	800	1.000	12,400
NO. YEARS	10	2023	1.000	1,000	1.000	14,800	1.000	800	1.000	12,400
NO. YEARS	20	2033	1.000	1,000	1.000	14,800	1.000	800	1.000	12,400

Percent Turns Calculated From Base Year AADTs:

JKTURNS		FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT		979			14,782			849			12,365		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	12,365	849	14,782	979	12,365	849	14,782	979	12,365	849	14,782	979
	44%	3%	53%	7%	87%	6%	53%	3%	44%	5%	89%	6%
2013 2-WAY ADT		1,000			14,800			800			12,400		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	12,400	800	14,800	1,000	12,400	800	14,800	1,000	12,400	800	14,800	1,000
	44%	3%	53%	7%	87%	6%	52%	4%	44%	5%	89%	6%
2023 2-WAY ADT		1,000			14,800			800			12,400		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	12,400	800	14,800	1,000	12,400	800	14,800	1,000	12,400	800	14,800	1,000
	44%	3%	53%	7%	87%	6%	52%	4%	44%	5%	89%	6%
2033 2-WAY ADT		1,000			14,800			800			12,400		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	12,400	800	14,800	1,000	12,400	800	14,800	1,000	12,400	800	14,800	1,000
	44%	3%	53%	7%	87%	6%	52%	4%	44%	5%	89%	6%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	98			1,136			38			1,164			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:15 - 8:00	74	0	5	16	334	15	18	0	1	4	748	3	1,218
% TURNS:	94%	0%	6%	4%	92%	4%	95%	0%	5%	1%	99%	0%	
P.M.	2-Way Pk Hr Vol:	86			1,254			80			1,106			
5:00 - 5:45	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL	
	0	0	34	49	677	43	31	0	6	0	420	3	1,263	
% TURNS:	0%	0%	100%	6%	88%	6%	84%	0%	16%	0%	99%	1%		

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		SB			WB			NB			EB		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	
A.M.													
2013	94%	0%	6%	4%	92%	4%	95%	0%	5%	1%	99%	0%	
2013	89%	0%	11%	5%	91%	4%	91%	0%	9%	1%	98%	1%	
2023	87%	0%	12%	5%	91%	4%	89%	0%	10%	1%	98%	1%	
2033	85%	0%	14%	5%	91%	4%	88%	1%	12%	1%	97%	1%	
P.M.													
2013	0%	0%	100%	6%	88%	6%	84%	0%	16%	0%	99%	1%	
2013	4%	0%	95%	6%	88%	6%	81%	0%	19%	0%	98%	1%	
2023	6%	0%	94%	6%	88%	6%	80%	0%	20%	1%	98%	1%	
2033	7%	0%	92%	6%	88%	6%	79%	1%	21%	1%	98%	2%	

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: 0
FM NO.: 0
PROJECT LIMITS: 0
DESIGN YEAR: 0
INTERSECTION: Donald Ross Rd.& 64th Dr N / E Pointe Ct
PREPARED BY: 0
FILE: 0

DATE: 1/0/1900
NOTES: Machine 1064 (W of 64th Dr. N), was also labeled as 4601.
Machine 1036 (D.Ross Rd. W/o SB I-95) was also labeled as 6301.
Only machine 1064 has AADT for the 3 daysW (4/23, 4/24, 4/25). Data was averaged.
TMC data corresponds to (4/25/2013)

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	979	14,782	849	12,365
24 HR EST. AADT	2013	1,000	14,800	800	12,400
24 HR EST. AADT	2023	1,000	14,800	800	12,400
24 HR EST. AADT	2033	1,000	14,800	800	12,400

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	10.0%	8.8%	7.7%	8.5%	4.5%	9.4%	9.4%	8.9%
2013	Approach K30 factor	10.0%	8.8%	7.7%	8.5%	4.5%	9.4%	9.4%	8.9%
2023	Approach K30 factor	10.0%	8.8%	7.7%	8.5%	4.5%	9.4%	9.4%	8.9%
2033	Approach K30 factor	10.0%	8.8%	7.7%	8.5%	4.5%	9.4%	9.4%	8.9%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	80.6%	39.5%	32.1%	61.3%	50.0%	46.3%	64.9%	38.2%
2013	Approach D30 Factor	80.6%	39.5%	32.1%	61.3%	50.0%	46.3%	64.9%	38.2%
2023	Approach D30 Factor	80.6%	39.5%	32.1%	61.3%	50.0%	46.3%	64.9%	38.2%
2033	Approach D30 Factor	80.6%	39.5%	32.1%	61.3%	50.0%	46.3%	64.9%	38.2%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS	74	0	5	18	330	17	18	0	1	4	752	3
2013	EST. TURNS	72	0	9	13	339	15	16	0	2	7	750	6
2023	EST. TURNS	71	0	10	13	340	14	16	0	2	7	749	6
2033	EST. TURNS	70	0	11	12	341	14	16	0	2	8	748	7
P.M. DESIGN HR. TURNS													
2013	EST. TURNS	0	0	34	53	681	43	31	0	6	0	417	3
2013	EST. TURNS	2	0	34	50	678	43	29	0	6	2	427	5
2023	EST. TURNS	2	0	34	50	678	43	29	0	6	2	427	5
2033	EST. TURNS	2	0	33	49	677	42	29	0	7	3	428	6

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		79	21	100	365	775	1140	19	21	40	755	405	1160
2013	TURN SUMMARY	79	21	100	365	775	1140	19	21	40	759	405	1164
CONTROL LINK VOLUMES		81	19	100	365	775	1140	18	22	40	757	413	1170
2013	TURN SUMMARY	81	19	100	367	775	1142	18	22	40	762	413	1175
CONTROL LINK VOLUMES		81	19	100	365	775	1140	18	22	40	757	413	1170
2023	TURN SUMMARY	81	19	100	367	775	1142	18	22	40	763	413	1176
CONTROL LINK VOLUMES		81	19	100	365	775	1140	18	22	40	757	413	1170
2033	TURN SUMMARY	81	19	100	367	775	1142	18	22	40	763	413	1176
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		34	56	90	769	481	1250	37	43	80	423	687	1110
2013	TURN SUMMARY	34	56	90	776	481	1257	37	43	80	420	687	1107
CONTROL LINK VOLUMES		35	55	90	770	490	1260	35	45	80	424	686	1110
2013	TURN SUMMARY	36	55	91	771	490	1261	36	45	81	433	686	1119
CONTROL LINK VOLUMES		35	55	90	770	490	1260	35	45	80	424	686	1110
2023	TURN SUMMARY	36	55	91	770	490	1260	36	45	81	435	686	1121
CONTROL LINK VOLUMES		35	55	90	770	490	1260	35	45	80	424	686	1110
2033	TURN SUMMARY	36	55	91	768	490	1258	36	45	81	437	686	1123

Note: Boxed number indicates manual adjustment.

DONALD ROSS ROAD

CORRIDOR

Intersection: West Ramp

TMTOOL INPUT SHEET

Project Description:

SECTION NO:		PREPARED BY:	
FM NO.:		FILE:	
PROJECT LIMITS:		DATE:	
DESIGN YEAR:			
INTERSECTION:	Donald Ross Rd. & I-95 West Ramp		

NOTES:

AADT data collected on dates (4/23, 4/24, 4/25) correspond to machines 1035, 1039 & 1036. Data was averaged.
AADT data collected on dates (4/30, 5/01, 5/02) corresponds to machine 1153. data was averaged.
TMC data coresponds to dates (4/23, 4/24, 4/25).

Historical AADTs:

	YEAR STATION	NORTH LEG AADT 1034	EAST LEG AADT 1153	SOUTH LEG AADT 1040	WEST LEG AADT 1036	
Actual AADT:	2004					
Actual AADT:	2005					
Actual AADT:	2006					
Actual AADT:	2013	5,583	21,821	11,608	14,935	24-HOUR TOTAL
TCRPM Volume:	2013	0	0	0	0	

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic Trend GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	
Historic + Model Trend GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	
2000 Model to 2030 Model GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	CGR
Recommended Growth Rate:	**0.00%**	**CGR**	**0.00%**	**CGR**	**0.00%**	**CGR**	**0.00%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

			NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
			1		1		1		1	
		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
		2013		21,000		21,000		21,000		21,000
NO. YEARS	0	2013	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000
NO. YEARS	10	2023	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000
NO. YEARS	20	2033	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000

Percent Turns Calculated From Base Year AADTs:

JKTURNS		FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	21,000			21,000			21,000			21,000			
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT		
21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000		
33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%		
2013 2-WAY ADT	21,000			21,000			21,000			21,000			
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT		
21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000		
33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%		
2023 2-WAY ADT	21,000			21,000			21,000			21,000			
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT		
21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000		
33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%		
2033 2-WAY ADT	21,000			21,000			21,000			21,000			
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT		
21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000		
33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%		

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	865			2,497			1,410			1,138			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:45 - 8:30	120	1	744	0	247	1,072	0	0	0	337	434	0	2,955
% TURNS:	14%	0%	86%	0%	19%	81%	0%	0%	0%	44%	56%	0%	
P.M.	2-Way Pk Hr Vol:	418			2,124			1,062			1,256			
5:00 - 5:45	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL	
	148	1	269	0	623	904	0	0	0	157	328	0	2,430	
% TURNS:	35%	0%	64%	0%	41%	59%	0%	0%	0%	32%	68%	0%		

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		SB			WB			NB			EB		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	
A.M.													
2013	14%	0%	86%	0%	19%	81%	0%	0%	0%	44%	56%	0%	
2013	16%	3%	81%	3%	20%	76%	3%	3%	3%	43%	54%	3%	
2023	16%	4%	79%	4%	21%	75%	4%	4%	4%	42%	53%	4%	
2033	17%	6%	77%	6%	21%	73%	6%	6%	6%	42%	52%	6%	
P.M.													
2013	35%	0%	64%	0%	41%	59%	0%	0%	0%	32%	68%	0%	
2013	35%	4%	61%	3%	40%	57%	3%	3%	3%	32%	64%	3%	
2023	35%	4%	60%	4%	40%	56%	4%	4%	4%	32%	63%	4%	
2033	35%	6%	59%	6%	40%	55%	6%	6%	6%	33%	62%	6%	

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: 0
FM NO.: 0
PROJECT LIMITS: 0
DESIGN YEAR: 0
INTERSECTION: Donald Ross Rd. & I-95 West Ramp
PREPARED BY: 0
FILE: 0

DATE: 1/0/1900
NOTES: AADT data collected on dates (4/23, 4/24, 4/25) correspond to machines 1035, 1039 & 1036. Data was ave
AADT data collected on dates (4/30, 5/01, 5/02) corresponds to machine 1153. data was averaged.
TMC data coresponds to dates (4/23, 4/24, 4/25).
0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	21,000	21,000	21,000	21,000
24 HR EST. AADT	2013	21,000	21,000	21,000	21,000
24 HR EST. AADT	2023	21,000	21,000	21,000	21,000
24 HR EST. AADT	2033	21,000	21,000	21,000	21,000

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	4.1%	2.0%	11.9%	10.1%	6.7%	5.1%	5.4%	6.0%
2013	Approach K30 factor	4.1%	2.0%	11.9%	10.1%	6.7%	5.1%	5.4%	6.0%
2023	Approach K30 factor	4.1%	2.0%	11.9%	10.1%	6.7%	5.1%	5.4%	6.0%
2033	Approach K30 factor	4.1%	2.0%	11.9%	10.1%	6.7%	5.1%	5.4%	6.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	100.0%	100.0%	52.8%	71.8%	0.0%	0.0%	67.8%	38.6%
2013	Approach D30 Factor	100.0%	100.0%	52.8%	71.8%	0.0%	0.0%	67.8%	38.6%
2023	Approach D30 Factor	100.0%	100.0%	52.8%	71.8%	0.0%	0.0%	67.8%	38.6%
2033	Approach D30 Factor	100.0%	100.0%	52.8%	71.8%	0.0%	0.0%	67.8%	38.6%

A.M. DESIGN HR. TURNS		NORTH LEG RIGHT	NORTH LEG THRU	NORTH LEG LEFT	EAST LEG RIGHT	EAST LEG THRU	EAST LEG LEFT	SOUTH LEG RIGHT	SOUTH LEG THRU	SOUTH LEG LEFT	WEST LEG RIGHT	WEST LEG THRU	WEST LEG LEFT
2013	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2013	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2023	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2033	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
P.M. DESIGN HR. TURNS													
2013	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2013	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2023	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2033	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

LINK VOLUME CHECK

DESIGN HOUR A.M.:		NORTH LEG FROM	NORTH LEG TO	NORTH LEG LINK	EAST LEG FROM	EAST LEG TO	EAST LEG LINK	SOUTH LEG FROM	SOUTH LEG TO	SOUTH LEG LINK	WEST LEG FROM	WEST LEG TO	WEST LEG LINK
CONTROL LINK VOLUMES		865	5	870	1319	1181	2500	0	1410	1410	771	369	1140
2013	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		865	5	870	1319	1181	2500	0	1410	1410	771	369	1140
2013	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		865	5	870	1319	1181	2500	0	1410	1410	771	369	1140
2023	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		865	5	870	1319	1181	2500	0	1410	1410	771	369	1140
2033	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		420	0	420	1527	603	2130	0	1060	1060	485	775	1260
2013	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		420	0	420	1527	603	2130	0	1060	1060	485	775	1260
2013	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		420	0	420	1527	603	2130	0	1060	1060	485	775	1260
2023	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		420	0	420	1527	603	2130	0	1060	1060	485	775	1260
2033	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Note: Boxed number indicates manual adjustment.

DONALD ROSS ROAD

CORRIDOR

Intersection: East Ramp

TMTOOL INPUT SHEET

Project Description:

SECTION NO:		PREPARED BY:	
FM NO.:		FILE:	
PROJECT LIMITS:		DATE:	
DESIGN YEAR:			
INTERSECTION:	Northlake Blvd. & I-95 East Ramp		

NOTES:

AADT data collected on dates (4/23, 4/24, 4/25) correspond to machines 1032, 1038 &1031; data was averaged.
AADT data collected on dates (4/30, 5/01, 5/02) corresponds to machine 1153; data was averaged.
Machine 1147 was also labeled as 4117.

Historical AADTs:

	YEAR / STATION	NORTH LEG AADT 1033	EAST LEG AADT 1038	SOUTH LEG AADT 1030	WEST LEG AADT 1153	
Actual AADT:	2004					24-HOUR TOTAL
Actual AADT:	2005					
Actual AADT:	2006					
Actual AADT:	2013	5,389	34,560	13,826	21,821	
TCRPM Volume:	2013	0	0	0	0	

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic Trend GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	
Historic + Model Trend GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	
2000 Model to 2030 Model GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	CGR
Recommended Growth Rate:	**0.00%**	**CGR**	**0.00%**	**CGR**	**0.00%**	**CGR**	**0.00%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

			NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
			1		1		1		1	
		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
		2013		21,000		21,000		21,000		21,000
NO. YEARS	0	2013	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000
NO. YEARS	10	2023	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000
NO. YEARS	20	2033	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000

Percent Turns Calculated From Base Year AADTs:

JKTURNS		FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	21,000			21,000			21,000			21,000			
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT		
21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000		
33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%		
2013 2-WAY ADT	21,000			21,000			21,000			21,000			
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT		
21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000		
33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%		
2023 2-WAY ADT	21,000			21,000			21,000			21,000			
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT		
21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000		
33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%		
2033 2-WAY ADT	21,000			21,000			21,000			21,000			
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT		
21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000		
33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%		

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	431			4,064			1,354			2,831			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:15 - 8:00	0	0	0	257	1,218	0	1,251	1	102	0	1,338	173	4,340
% TURNS:	0%	0%	0%	17%	%	0%	92%	0%	8%	0%	89%	11%	
P.M.	2-Way Pk Hr Vol:	900			3,404			1,205			2,125			
5:00 - 5:45	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL	
	0	0	0	752	1,263	0	940	0	265	0	449	148	3,817	
% TURNS:	0%	0%	0%	37%	63%	0%	78%	0%	22%	0%	75%	25%		

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		SB			WB			NB			EB		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	
A.M.													
2013	0%	0%	0%	17%	%	0%	92%	0%	8%	0%	89%	11%	
2013	3%	3%	3%	19%	#VALUE!	3%	86%	3%	10%	3%	83%	14%	
2023	4%	4%	4%	19%	#VALUE!	4%	85%	4%	11%	4%	82%	14%	
2033	6%	6%	6%	20%	#VALUE!	6%	83%	6%	12%	6%	79%	15%	
P.M.													
2013	0%	0%	0%	37%	63%	0%	78%	0%	22%	0%	75%	25%	
2013	3%	3%	3%	37%	60%	3%	74%	3%	23%	3%	71%	26%	
2023	4%	4%	4%	37%	59%	4%	72%	4%	23%	4%	70%	26%	
2033	6%	6%	6%	37%	58%	6%	71%	6%	24%	6%	68%	26%	

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: 0
FM NO.: 0
PROJECT LIMITS: 0
DESIGN YEAR: 0
INTERSECTION: Northlake Blvd. & I-95 East Ramp
PREPARED BY: 0
FILE: 0

DATE: 1/0/1900
NOTES: AADT data collected on dates (4/23, 4/24, 4/25) correspond to machines 1032, 1038 &1031; data was ave
AADT data collected on dates (4/30, 5/01, 5/02) corresponds to machine 1153; data was averaged.
Machine 1147 was also labeled as 4117.
0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	21,000	21,000	21,000	21,000
24 HR EST. AADT	2013	21,000	21,000	21,000	21,000
24 HR EST. AADT	2023	21,000	21,000	21,000	21,000
24 HR EST. AADT	2033	21,000	21,000	21,000	21,000

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	2.1%	3.9%	19.4%	17.2%	6.4%	7.0%	13.5%	10.1%
2013	Approach K30 factor	2.1%	3.9%	19.4%	17.2%	6.4%	7.0%	13.5%	10.1%
2023	Approach K30 factor	2.1%	3.9%	19.4%	17.2%	6.4%	7.0%	13.5%	10.1%
2033	Approach K30 factor	2.1%	3.9%	19.4%	17.2%	6.4%	7.0%	13.5%	10.1%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	0.0%	0.0%	36.3%	53.9%	100.0%	100.0%	53.4%	28.2%
2013	Approach D30 Factor	0.0%	0.0%	36.3%	53.9%	100.0%	100.0%	53.4%	28.2%
2023	Approach D30 Factor	0.0%	0.0%	36.3%	53.9%	100.0%	100.0%	53.4%	28.2%
2033	Approach D30 Factor	0.0%	0.0%	36.3%	53.9%	100.0%	100.0%	53.4%	28.2%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS	#VALUE!	#DIV/0!	#VALUE!	#VALUE!	#VALUE!	#DIV/0!	#VALUE!	#VALUE!	#VALUE!	#DIV/0!	#DIV/0!	#DIV/0!
2013	EST. TURNS	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
2023	EST. TURNS	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
2033	EST. TURNS	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
P.M. DESIGN HR. TURNS													
2013	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2013	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2023	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2033	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		0	430	430	1475	2585	4060	1354	-4	1350	1511	1319	2830
2013	TURN SUMMARY	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#DIV/0!	#VALUE!	#DIV/0!	#VALUE!	#DIV/0!
CONTROL LINK VOLUMES		0	430	430	1475	2585	4060	1354	-4	1350	1511	1319	2830
2013	TURN SUMMARY	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
CONTROL LINK VOLUMES		0	430	430	1475	2585	4060	1354	-4	1350	1511	1319	2830
2023	TURN SUMMARY	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
CONTROL LINK VOLUMES		0	430	430	1475	2585	4060	1354	-4	1350	1511	1319	2830
2033	TURN SUMMARY	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		0	820	820	1945	1665	3610	1471	-1	1470	599	1531	2130
2013	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		0	820	820	1945	1665	3610	1471	-1	1470	599	1531	2130
2013	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		0	820	820	1945	1665	3610	1471	-1	1470	599	1531	2130
2023	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		0	820	820	1945	1665	3610	1471	-1	1470	599	1531	2130
2033	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Note: Boxed number indicates manual adjustment.

DONALD ROSS ROAD

CORRIDOR

Intersection: Parkside Drive

TMTOOL INPUT SHEET

Project Description:

SECTION NO:		PREPARED BY:	
FM NO.:		FILE:	
PROJECT LIMITS:		DATE:	
DESIGN YEAR:			
INTERSECTION:	Donald Ross Rd. & Parkside Dr.		

NOTES:

AADT data collected for dates (5/01, 5/02, 5/03) correspond to machine 1152; data was averaged.
AADT data collected for machines 1151 & 0115 correspond to dates (5/01).
TMC datas collected only for date (5/01/2013). Machine 1152 was also labeled as 2511.
3 leg intersection.

Historical AADTs:

	YEAR / STATION	NORTH LEG AADT 1151	EAST LEG AADT 115	SOUTH LEG AADT 0	WEST LEG AADT 1152	
Actual AADT:	2004					
Actual AADT:	2005					24-HOUR TOTAL
Actual AADT:	2006					
Actual AADT:	2013	6,695	31,813	0	33,715	
TCRPM Volume:	2013	0	0	0	0	

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic Trend GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	
Historic + Model Trend GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	
2000 Model to 2030 Model GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	CGR
Recommended Growth Rate:	**0.00%**	**CGR**	**0.00%**	**CGR**	**0.00%**	**CGR**	**0.00%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

			NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
			1		1		1		1	
		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
		2013		21,000		21,000		21,000		21,000
NO. YEARS	0	2013	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000
NO. YEARS	10	2023	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000
NO. YEARS	20	2033	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000

Percent Turns Calculated From Base Year AADTs:

JKTURNS		FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT		21,000			21,000			21,000			21,000		
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT		
21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000		
33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%		
2013 2-WAY ADT		21,000			21,000			21,000			21,000		
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT		
21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000		
33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%		
2023 2-WAY ADT		21,000			21,000			21,000			21,000		
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT		
21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000		
33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%		
2033 2-WAY ADT		21,000			21,000			21,000			21,000		
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT		
21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000		
33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%		

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	823			3,266			0			3,765			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:15 - 8:00	391	0	77	85	1,081	0	0	0	0	0	2,023	270	3,927
% TURNS:	84%	0%	16%	7%	93%	0%	0%	0%	0%	0%	88%	12%	
P.M.	2-Way Pk Hr Vol:	686			3,080			7			3,405			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:00 - 5:45	261	0	70	107	1,756	7	0	0	0	0	1,140	248	3,589
% TURNS:	79%	0%	21%	6%	94%	0%	0%	0%	0%	0%	82%	18%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		SB			WB			NB			EB		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	
A.M.													
2013	84%	0%	16%	7%	93%	0%	0%	0%	0%	0%	88%	12%	
2013	79%	3%	18%	10%	87%	3%	3%	3%	3%	3%	83%	14%	
2023	77%	4%	19%	11%	85%	4%	4%	4%	4%	4%	81%	14%	
2033	75%	6%	19%	12%	83%	6%	6%	6%	6%	6%	79%	15%	
P.M.													
2013	79%	0%	21%	6%	94%	0%	0%	0%	0%	0%	82%	18%	
2013	74%	3%	22%	8%	88%	4%	3%	3%	3%	3%	77%	19%	
2023	73%	4%	23%	9%	86%	4%	4%	4%	4%	4%	76%	20%	
2033	71%	6%	23%	10%	84%	6%	6%	6%	6%	6%	74%	20%	

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: 0
FM NO.: 0
PROJECT LIMITS: 0
DESIGN YEAR: 0
INTERSECTION: Donald Ross Rd. & Parkside Dr.
PREPARED BY: 0
FILE: 0

DATE: 1/0/1900
NOTES: AADT data collected for dates (5/01, 5/02, 5/03) correspond to machine 1152; data was averaged.
AADT data collected for machines 1151 & 0115 correspond to dates (5/01).
TMC datas collected only for date (5/01/2013). Machine 1152 was also labeled as 2511.
3 leg intersection.

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	21,000	21,000	21,000	21,000
24 HR EST. AADT	2013	21,000	21,000	21,000	21,000
24 HR EST. AADT	2023	21,000	21,000	21,000	21,000
24 HR EST. AADT	2033	21,000	21,000	21,000	21,000

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	3.9%	3.6%	15.6%	13.2%	0.0%	0.0%	17.9%	15.2%
2013	Approach K30 factor	3.9%	3.6%	15.6%	13.2%	0.0%	0.0%	17.9%	15.2%
2023	Approach K30 factor	3.9%	3.6%	15.6%	13.2%	0.0%	0.0%	17.9%	15.2%
2033	Approach K30 factor	3.9%	3.6%	15.6%	13.2%	0.0%	0.0%	17.9%	15.2%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	56.9%	46.0%	35.7%	48.9%	#DIV/0!	0.0%	60.9%	52.0%
2013	Approach D30 Factor	56.9%	46.0%	35.7%	48.9%	#DIV/0!	0.0%	60.9%	52.0%
2023	Approach D30 Factor	56.9%	46.0%	35.7%	48.9%	#DIV/0!	0.0%	60.9%	52.0%
2033	Approach D30 Factor	56.9%	46.0%	35.7%	48.9%	#DIV/0!	0.0%	60.9%	52.0%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2013	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2023	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2033	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
P.M. DESIGN HR. TURNS													
2013	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2013	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2023	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2033	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		468	352	820	1166	2104	3270	#DIV/0!	#DIV/0!	#DIV/0!	2293	1477	3770
2013	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		468	352	820	1166	2104	3270	#DIV/0!	#DIV/0!	#DIV/0!	2293	1477	3770
2013	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		468	352	820	1166	2104	3270	#DIV/0!	#DIV/0!	#DIV/0!	2293	1477	3770
2023	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		468	352	820	1166	2104	3270	#DIV/0!	#DIV/0!	#DIV/0!	2293	1477	3770
2033	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		352	418	770	1355	1415	2770	0	10	10	1663	1537	3200
2013	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		352	418	770	1355	1415	2770	0	10	10	1663	1537	3200
2013	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		352	418	770	1355	1415	2770	0	10	10	1663	1537	3200
2023	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		352	418	770	1355	1415	2770	0	10	10	1663	1537	3200
2033	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Note: Boxed number indicates manual adjustment.

DONALD ROSS ROAD

CORRIDOR

Intersection: Central Boulevard

TMTOOL INPUT SHEET

Project Description:

SECTION NO:		PREPARED BY:	
FM NO.:		FILE:	
PROJECT LIMITS:		DATE:	
DESIGN YEAR:			
INTERSECTION:	Donald Ross Rd. & Central Blvd		

NOTES:

AADT data collected on dates (4/30, 5/01, 5/02) corresponds to machine 1150; Data was averaged.
AADT data collected on (5/02) corresponds to machines (1148, 7411, 1149); data was averaged.
Machine **1150** was also labeled as 0511. Machine **1147** was also labeled as 7411.

Historical AADTs:

	YEAR STATION	NORTH LEG AADT 1148	EAST LEG AADT 1147	SOUTH LEG AADT 1149	WEST LEG AADT 1150	
Actual AADT:	2004					
Actual AADT:	2005					24-HOUR TOTAL
Actual AADT:	2006					
Actual AADT:	2013	12,484	28,402	13,856	30,789	
TCRPM Volume:	2013	0	0	0	0	

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic Trend GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	
Historic + Model Trend GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	
2000 Model to 2030 Model GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	CGR
Recommended Growth Rate:	**0.00%**	**CGR**	**0.00%**	**CGR**	**0.00%**	**CGR**	**0.00%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

			NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
			1		1		1		1	
		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
		2013		21,000		21,000		21,000		21,000
NO. YEARS	0	2013	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000
NO. YEARS	10	2023	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000
NO. YEARS	20	2033	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000

Percent Turns Calculated From Base Year AADTs:

JKTURNS		FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	21,000			21,000			21,000			21,000			
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	
21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	
33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	
2013 2-WAY ADT	21,000			21,000			21,000			21,000			
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	
21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	
33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	
2023 2-WAY ADT	21,000			21,000			21,000			21,000			
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	
21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	
33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	
2033 2-WAY ADT	21,000			21,000			21,000			21,000			
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	
21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	
33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	1,242			2,883			1,523			3,270			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:15 - 8:00	263	221	118	67	710	299	215	269	197	322	1,474	304	4,459
% TURNS:	44%	37%	20%	6%	66%	28%	32%	40%	29%	15%	70%	14%	
P.M.	2-Way Pk Hr Vol:	1,504			3,372			1,459			3,085			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:00 - 5:45	174	282	225	184	1,558	378	207	349	143	100	820	290	4,710
% TURNS:	26%	41%	33%	9%	73%	18%	30%	50%	20%	8%	68%	24%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		SB			WB			NB			EB		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	
A.M.													
2013	44%	37%	20%	6%	66%	28%	32%	40%	29%	15%	70%	14%	
2013	43%	36%	21%	9%	63%	28%	32%	39%	29%	17%	67%	16%	
2023	42%	36%	21%	10%	62%	28%	32%	39%	29%	18%	66%	17%	
2033	42%	36%	22%	11%	61%	29%	32%	38%	30%	18%	64%	18%	
P.M.													
2013	26%	41%	33%	9%	73%	18%	30%	50%	20%	8%	68%	24%	
2013	26%	41%	33%	11%	69%	19%	30%	48%	22%	11%	64%	25%	
2023	27%	40%	33%	12%	68%	20%	30%	48%	22%	11%	63%	25%	
2033	27%	40%	33%	13%	67%	20%	30%	47%	23%	12%	62%	26%	

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: 0
FM NO.: 0
PROJECT LIMITS: 0
DESIGN YEAR: 0
INTERSECTION: Donald Ross Rd. & Central Blvd
PREPARED BY: 0
FILE: 0

DATE: 1/0/1900
NOTES: AADT data collected on dates (4/30, 5/01, 5/02) corresponds to machine 1150; Data was averaged.
AADT data collected on (5/02) corresponds to machines (1148, 7411, 1149); data was averaged.
Machine 1150 was also labeled as 0511. Machine 1147 was also labeled as 7411.
0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	21,000	21,000	21,000	21,000
24 HR EST. AADT	2013	21,000	21,000	21,000	21,000
24 HR EST. AADT	2023	21,000	21,000	21,000	21,000
24 HR EST. AADT	2033	21,000	21,000	21,000	21,000

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	5.9%	7.3%	13.7%	13.9%	7.3%	6.7%	15.6%	15.0%
2013	Approach K30 factor	5.9%	7.3%	13.7%	13.9%	7.3%	6.7%	15.6%	15.0%
2023	Approach K30 factor	5.9%	7.3%	13.7%	13.9%	7.3%	6.7%	15.6%	15.0%
2033	Approach K30 factor	5.9%	7.3%	13.7%	13.9%	7.3%	6.7%	15.6%	15.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	48.5%	36.8%	37.3%	62.1%	44.7%	50.8%	64.2%	44.8%
2013	Approach D30 Factor	48.5%	36.8%	37.3%	62.1%	44.7%	50.8%	64.2%	44.8%
2023	Approach D30 Factor	48.5%	36.8%	37.3%	62.1%	44.7%	50.8%	64.2%	44.8%
2033	Approach D30 Factor	48.5%	36.8%	37.3%	62.1%	44.7%	50.8%	64.2%	44.8%

A.M. DESIGN HR. TURNS		NORTH LEG RIGHT	NORTH LEG THRU	NORTH LEG LEFT	EAST LEG RIGHT	EAST LEG THRU	EAST LEG LEFT	SOUTH LEG RIGHT	SOUTH LEG THRU	SOUTH LEG LEFT	WEST LEG RIGHT	WEST LEG THRU	WEST LEG LEFT
2013	EST. TURNS	262	221	118	67	710	297	214	268	197	321	1,472	303
2013	EST. TURNS	260	221	120	87	701	285	229	242	209	333	1,455	309
2023	EST. TURNS	259	221	121	92	699	282	232	236	212	336	1,451	310
2033	EST. TURNS	258	221	121	99	696	278	238	226	216	340	1,445	313
P.M. DESIGN HR. TURNS													
2013	EST. TURNS	159	243	161	154	1327	336	120	337	260	116	826	476
2013	EST. TURNS	166	240	157	190	1309	319	133	313	270	136	817	465
2023	EST. TURNS	168	240	155	199	1,304	315	137	307	272	141	815	462
2033	EST. TURNS	171	238	153	212	1297	309	142	298	277	148	811	458

LINK VOLUME CHECK

DESIGN HOUR A.M.:		NORTH LEG FROM	NORTH LEG TO	NORTH LEG LINK	EAST LEG FROM	EAST LEG TO	EAST LEG LINK	SOUTH LEG FROM	SOUTH LEG TO	SOUTH LEG LINK	WEST LEG FROM	WEST LEG TO	WEST LEG LINK
CONTROL LINK VOLUMES		602	638	1240	1076	1804	2880	681	839	1520	2100	1170	3270
2013	TURN SUMMARY	601	638	1239	1074	1804	2878	680	839	1519	2096	1170	3266
CONTROL LINK VOLUMES		602	638	1240	1076	1804	2880	681	839	1520	2100	1170	3270
2013	TURN SUMMARY	601	638	1239	1073	1804	2877	680	839	1519	2097	1170	3267
CONTROL LINK VOLUMES		602	638	1240	1076	1804	2880	681	839	1520	2100	1170	3270
2023	TURN SUMMARY	601	638	1239	1073	1804	2877	680	839	1519	2098	1170	3268
CONTROL LINK VOLUMES		602	638	1240	1076	1804	2880	681	839	1520	2100	1170	3270
2033	TURN SUMMARY	600	638	1238	1073	1804	2877	680	839	1519	2098	1170	3268

DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		562	968	1530	1813	1107	2920	715	695	1410	1415	1745	3160
2013	TURN SUMMARY	563	968	1531	1817	1107	2924	717	695	1412	1418	1745	3163
CONTROL LINK VOLUMES		562	968	1530	1813	1107	2920	715	695	1410	1415	1745	3160
2013	TURN SUMMARY	563	968	1531	1818	1107	2925	717	695	1412	1418	1745	3163
CONTROL LINK VOLUMES		562	968	1530	1813	1107	2920	715	695	1410	1415	1745	3160
2023	TURN SUMMARY	563	968	1531	1818	1107	2925	717	695	1412	1417	1745	3162
CONTROL LINK VOLUMES		562	968	1530	1813	1107	2920	715	695	1410	1415	1745	3160
2033	TURN SUMMARY	563	968	1531	1818	1107	2925	717	695	1412	1417	1745	3162

Note: Boxed number indicates manual adjustment.

DONALD ROSS ROAD

CORRIOR

Intersection: North Military Trail

TMTOOL INPUT SHEET

Project Description:

SECTION NO:		PREPARED BY:	
FM NO.:		FILE:	
PROJECT LIMITS:		DATE:	
DESIGN YEAR:			
INTERSECTION:	Donald Ross Rd. & N Military Trail		

NOTES: AADT data collected on machine 1147 corresponds to dates (4/30, 5/01, 5/02) as well as TMC; data was averaged.

Historical AADTs:

	YEAR STATION	NORTH LEG AADT 1146	EAST LEG AADT 4411	SOUTH LEG AADT 1145	WEST LEG AADT 1147	
Actual AADT:	2004					24-HOUR TOTAL
Actual AADT:	2005					
Actual AADT:	2006					
Actual AADT:	2013	34924	27111	22742	29663	
TCRPM Volume:	2013	0	0	0	0	

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic Trend GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	
Historic + Model Trend GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	
2000 Model to 2030 Model GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	CGR
Recommended Growth Rate:	**0.00%**	**CGR**	**0.00%**	**CGR**	**0.00%**	**CGR**	**0.00%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

			NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
			1		1		1		1	
		2013		21,000		21,000		21,000		21,000
NO. YEARS	0	2013	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000
NO. YEARS	10	2023	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000
NO. YEARS	20	2033	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000

Percent Turns Calculated From Base Year AADTs:

JKTURNS		FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	21,000			21,000			21,000			21,000			
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	
21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	
33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	
2013 2-WAY ADT	21,000			21,000			21,000			21,000			
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	
21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	
33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	
2023 2-WAY ADT	21,000			21,000			21,000			21,000			
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	
21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	
33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	
2033 2-WAY ADT	21,000			21,000			21,000			21,000			
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	
21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	
33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	3,428			2,545			2,455			2,876			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:15 - 8:00	412	828	477	314	482	142	163	852	183	287	967	545	5,652
% TURNS:	24%	48%	28%	33%	51%	15%	14%	71%	15%	16%	54%	30%	
P.M.	2-Way Pk Hr Vol:	3,374			3,111			2,061			3,372			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
4:30 - 5:15	571	875	457	414	1,361	164	86	591	188	157	629	466	5,959
% TURNS:	30%	46%	24%	21%	70%	8%	10%	68%	22%	13%	50%	37%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		SB			WB			NB			EB		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	
A.M.													
2013	24%	48%	28%	33%	51%	15%	14%	71%	15%	16%	54%	30%	
2013	25%	47%	28%	33%	50%	17%	16%	67%	17%	18%	52%	31%	
2023	25%	46%	28%	33%	49%	17%	16%	66%	18%	18%	51%	31%	
2033	26%	46%	29%	33%	48%	18%	17%	65%	18%	19%	50%	31%	
P.M.													
2013	30%	46%	24%	21%	70%	8%	10%	68%	22%	13%	50%	37%	
2013	30%	45%	25%	23%	67%	11%	12%	65%	23%	15%	49%	37%	
2023	30%	44%	25%	23%	66%	12%	13%	64%	23%	15%	48%	37%	
2033	31%	44%	26%	23%	64%	13%	14%	62%	24%	16%	47%	37%	

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: 0
FM NO.: 0
PROJECT LIMITS: 0
DESIGN YEAR: 0
INTERSECTION: Donald Ross Rd. & N Military Trail
PREPARED BY: 0
FILE: 0

DATE: 1/0/1900
NOTES: AADT data collected on machine 1147 corresponds to dates (4/30, 5/01, 5/02) as well as TMC; data was a
0
0
0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	21,000	21,000	21,000	21,000
24 HR EST. AADT	2013	21,000	21,000	21,000	21,000
24 HR EST. AADT	2023	21,000	21,000	21,000	21,000
24 HR EST. AADT	2033	21,000	21,000	21,000	21,000

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	16.3%	15.4%	12.1%	13.5%	11.7%	9.6%	13.7%	13.9%
2013	Approach K30 factor	16.3%	15.4%	12.1%	13.5%	11.7%	9.6%	13.7%	13.9%
2023	Approach K30 factor	16.3%	15.4%	12.1%	13.5%	11.7%	9.6%	13.7%	13.9%
2033	Approach K30 factor	16.3%	15.4%	12.1%	13.5%	11.7%	9.6%	13.7%	13.9%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	50.1%	56.3%	36.9%	61.3%	48.8%	41.6%	62.6%	37.9%
2013	Approach D30 Factor	50.1%	56.3%	36.9%	61.3%	48.8%	41.6%	62.6%	37.9%
2023	Approach D30 Factor	50.1%	56.3%	36.9%	61.3%	48.8%	41.6%	62.6%	37.9%
2033	Approach D30 Factor	50.1%	56.3%	36.9%	61.3%	48.8%	41.6%	62.6%	37.9%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS	414	830	478	314	483	143	164	854	184	289	970	545
2013	EST. TURNS	425	804	492	327	459	154	185	820	197	304	934	566
2023	EST. TURNS	427	797	496	330	453	157	191	811	200	308	925	571
2033	EST. TURNS	431	787	502	336	444	161	200	797	206	314	910	580
P.M. DESIGN HR. TURNS													
2013	EST. TURNS	489	876	457	415	1164	165	86	592	161	140	554	412
2013	EST. TURNS	515	838	468	432	1123	190	100	563	176	155	528	423
2023	EST. TURNS	521	828	471	437	1,113	195	104	556	180	158	522	425
2033	EST. TURNS	531	814	475	445	1097	204	109	544	186	164	512	430

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		1717	1713	3430	938	1612	2550	1198	1262	2460	1799	1081	2880
2013	TURN SUMMARY	1722	1713	3435	941	1612	2553	1201	1262	2463	1804	1081	2885
CONTROL LINK VOLUMES		1717	1713	3430	938	1612	2550	1198	1262	2460	1799	1081	2880
2013	TURN SUMMARY	1721	1713	3434	941	1612	2553	1202	1262	2464	1804	1081	2885
CONTROL LINK VOLUMES		1717	1713	3430	938	1612	2550	1198	1262	2460	1799	1081	2880
2023	TURN SUMMARY	1720	1713	3433	941	1612	2553	1202	1262	2464	1804	1081	2885
CONTROL LINK VOLUMES		1717	1713	3430	938	1612	2550	1198	1262	2460	1799	1081	2880
2033	TURN SUMMARY	1720	1713	3433	941	1612	2553	1203	1262	2465	1805	1081	2886
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		1822	1418	3240	1743	1097	2840	838	1182	2020	1106	1814	2920
2013	TURN SUMMARY	1823	1418	3241	1744	1097	2841	838	1182	2020	1106	1814	2920
CONTROL LINK VOLUMES		1822	1418	3240	1743	1097	2840	838	1182	2020	1106	1814	2920
2013	TURN SUMMARY	1821	1418	3239	1745	1097	2842	839	1182	2021	1106	1814	2920
CONTROL LINK VOLUMES		1822	1418	3240	1743	1097	2840	838	1182	2020	1106	1814	2920
2023	TURN SUMMARY	1821	1418	3239	1745	1097	2842	839	1182	2021	1106	1814	2920
CONTROL LINK VOLUMES		1822	1418	3240	1743	1097	2840	838	1182	2020	1106	1814	2920
2033	TURN SUMMARY	1820	1418	3238	1746	1097	2843	839	1182	2021	1106	1814	2920

Note: Boxed number indicates manual adjustment.

HOOD ROAD

CORRIDOR

FROM: Eastpointe Boulevard

TO: North Military Trail

HOOD ROAD

CORRIDOR

Intersection: Eastpointe Boulevard

TMTOOL INPUT SHEET

Project Description:

SECTION NO:		PREPARED BY:	
FM NO.:		FILE:	
PROJECT LIMITS:		DATE:	
DESIGN YEAR:			
INTERSECTION:	Hood Rd. & Eastpointe Blvd.		

NOTES: 3 leg intersection

Historical AADTs:

	YEAR STATION	NORTH LEG AADT 1017	EAST LEG AADT 1018	SOUTH LEG AADT 0	WEST LEG AADT 1016	
Actual AADT:	2004					24-HOUR TOTAL
Actual AADT:	2005					
Actual AADT:	2006					
Actual AADT:	2013	1,725	4,729	0	3,615	
TCRPM Volume:	2013	0	0	0	0	

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic Trend GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	
Historic + Model Trend GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	
2000 Model to 2030 Model GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	CGR
Recommended Growth Rate:	**0.00%**	**CGR**	**0.00%**	**CGR**	**0.00%**	**CGR**	**0.00%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

			NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
			1		1		1		1	
		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
		2013		21,000		21,000		21,000		21,000
NO. YEARS	0	2013	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000
NO. YEARS	10	2023	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000
NO. YEARS	20	2033	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000

Percent Turns Calculated From Base Year AADTs:

JKTURNS		FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT		21,000			21,000			21,000			21,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000
	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%
2013 2-WAY ADT		21,000			21,000			21,000			21,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000
	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%
2023 2-WAY ADT		21,000			21,000			21,000			21,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000
	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%
2033 2-WAY ADT		21,000			21,000			21,000			21,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000
	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	135			1,134			0			1,051			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:30 - 8:15	13	0	84	25	211	0	0	0	0	0	814	13	1,160
% TURNS:	13%	0%	87%	11%	89%	0%	0%	0%	0%	0%	98%	2%	
P.M.	2-Way Pk Hr Vol:	167			870			0			719			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:00 - 5:45	5	0	42	117	362	0	0	0	0	0	349	3	878
% TURNS:	11%	0%	89%	24%	76%	0%	0%	0%	0%	0%	99%	1%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		SB			WB			NB			EB		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
A.M.												
2013	13%	0%	87%	11%	89%	0%	0%	0%	0%	0%	98%	2%
2013	15%	3%	81%	13%	84%	3%	3%	3%	3%	3%	92%	5%
2023	16%	4%	80%	13%	82%	4%	4%	4%	4%	4%	90%	6%
2033	17%	6%	78%	14%	80%	6%	6%	6%	6%	6%	88%	7%
P.M.												
2013	11%	0%	89%	24%	76%	0%	0%	0%	0%	0%	99%	1%
2013	13%	3%	84%	25%	71%	3%	3%	3%	3%	3%	93%	4%
2023	13%	4%	82%	26%	70%	4%	4%	4%	4%	4%	91%	5%
2033	14%	6%	80%	26%	69%	6%	6%	6%	6%	6%	88%	6%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: 0
FM NO.: 0
PROJECT LIMITS: 0
DESIGN YEAR: 0
INTERSECTION: Hood Rd. & Eastpointe Blvd.
PREPARED BY: 0
FILE: 0

DATE: 1/0/1900
NOTES: 3 leg intersection
0
0
0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	21,000	21,000	21,000	21,000
24 HR EST. AADT	2013	21,000	21,000	21,000	21,000
24 HR EST. AADT	2023	21,000	21,000	21,000	21,000
24 HR EST. AADT	2033	21,000	21,000	21,000	21,000

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	0.6%	0.8%	4.8%	4.1%	0.0%	0.0%	4.5%	3.4%
2013	Approach K30 factor	0.6%	0.8%	4.8%	4.1%	0.0%	0.0%	4.5%	3.4%
2023	Approach K30 factor	0.6%	0.8%	4.8%	4.1%	0.0%	0.0%	4.5%	3.4%
2033	Approach K30 factor	0.6%	0.8%	4.8%	4.1%	0.0%	0.0%	4.5%	3.4%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	54.6%	28.1%	38.7%	55.1%	#DIV/0!	#DIV/0!	61.6%	49.0%
2013	Approach D30 Factor	54.6%	28.1%	38.7%	55.1%	#DIV/0!	#DIV/0!	61.6%	49.0%
2023	Approach D30 Factor	54.6%	28.1%	38.7%	55.1%	#DIV/0!	#DIV/0!	61.6%	49.0%
2033	Approach D30 Factor	54.6%	28.1%	38.7%	55.1%	#DIV/0!	#DIV/0!	61.6%	49.0%

A.M. DESIGN HR. TURNS		NORTH LEG RIGHT	NORTH LEG THRU	NORTH LEG LEFT	EAST LEG RIGHT	EAST LEG THRU	EAST LEG LEFT	SOUTH LEG RIGHT	SOUTH LEG THRU	SOUTH LEG LEFT	WEST LEG RIGHT	WEST LEG THRU	WEST LEG LEFT
2013	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2013	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2023	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2033	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
P.M. DESIGN HR. TURNS													
2013	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2013	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2023	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2033	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

LINK VOLUME CHECK

DESIGN HOUR A.M.:		NORTH LEG FROM	NORTH LEG TO	NORTH LEG LINK	EAST LEG FROM	EAST LEG TO	EAST LEG LINK	SOUTH LEG FROM	SOUTH LEG TO	SOUTH LEG LINK	WEST LEG FROM	WEST LEG TO	WEST LEG LINK
CONTROL LINK VOLUMES		71	59	130	393	627	1020	#DIV/0!	#DIV/0!	#DIV/0!	577	363	940
2013	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		71	59	130	393	627	1020	#DIV/0!	#DIV/0!	#DIV/0!	577	363	940
2013	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		71	59	130	393	627	1020	#DIV/0!	#DIV/0!	#DIV/0!	577	363	940
2023	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		71	59	130	393	627	1020	#DIV/0!	#DIV/0!	#DIV/0!	577	363	940
2033	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		47	123	170	479	391	870	#DIV/0!	#DIV/0!	#DIV/0!	352	368	720
2013	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		47	123	170	479	391	870	#DIV/0!	#DIV/0!	#DIV/0!	352	368	720
2013	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		47	123	170	479	391	870	#DIV/0!	#DIV/0!	#DIV/0!	352	368	720
2023	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		47	123	170	479	391	870	#DIV/0!	#DIV/0!	#DIV/0!	352	368	720
2033	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Note: Boxed number indicates manual adjustment

HOOD ROAD

CORRIDOR

Intersection: Central Boulevard

TMTOOL INPUT SHEET

Project Description:

SECTION NO:		PREPARED BY:	
FM NO.:		FILE:	
PROJECT LIMITS:		DATE:	
DESIGN YEAR:			
INTERSECTION:	Hood Rd. & Central Blvd.		

NOTES:

Historical AADTs:

	YEAR STATION	NORTH LEG AADT 1010	EAST LEG AADT 1011	SOUTH LEG AADT 1012	WEST LEG AADT 1013	
Actual AADT:	2004					
Actual AADT:	2005					24-HOUR TOTAL
Actual AADT:	2006					
Actual AADT:	2013	12,345	10,678	11,803	9,720	
TCRPM Volume:	2013	0	0	0	0	

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic Trend GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	
Historic + Model Trend GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	
2000 Model to 2030 Model GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	CGR
Recommended Growth Rate:	**0.00%**	**CGR**	**0.00%**	**CGR**	**0.00%**	**CGR**	**0.00%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

			NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
			1		1		1		1	
		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
		2013		21,000		21,000		21,000		21,000
NO. YEARS	0	2013	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000
NO. YEARS	10	2023	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000
NO. YEARS	20	2033	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000

Percent Turns Calculated From Base Year AADTs:

JKTURNS		FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	21,000			21,000			21,000			21,000			
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT		
21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000		
33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%		
2013 2-WAY ADT	21,000			21,000			21,000			21,000			
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT		
21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000		
33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%		
2023 2-WAY ADT	21,000			21,000			21,000			21,000			
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT		
21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000		
33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%		
2033 2-WAY ADT	21,000			21,000			21,000			21,000			
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT		
21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000		
33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%		

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	1,735			1,578			1,305			1,136			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:30 - 8:15	77	508	305	291	84	59	143	435	77	83	696	119	2,877
% TURNS:	9%	57%	34%	67%	19%	14%	22%	66%	12%	9%	78%	13%	
P.M.	2-Way Pk Hr Vol:	1,296			1,039			1,147			872			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:00 - 5:45	104	453	153	113	319	116	81	389	58	50	257	84	2,177
% TURNS:	15%	64%	22%	21%	58%	21%	15%	74%	11%	13%	66%	21%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		SB			WB			NB			EB		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	
A.M.													
2013	9%	57%	34%	67%	19%	14%	22%	66%	12%	9%	78%	13%	
2013	11%	55%	34%	64%	21%	16%	23%	63%	14%	12%	73%	15%	
2023	12%	54%	34%	63%	21%	16%	23%	62%	14%	12%	72%	16%	
2033	13%	53%	34%	61%	22%	17%	24%	61%	15%	13%	70%	17%	
P.M.													
2013	15%	64%	22%	21%	58%	21%	15%	74%	11%	13%	66%	21%	
2013	17%	61%	23%	22%	56%	22%	17%	70%	13%	15%	62%	23%	
2023	17%	60%	23%	22%	55%	23%	18%	69%	14%	15%	62%	23%	
2033	18%	59%	24%	23%	54%	23%	18%	67%	15%	16%	60%	23%	

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: 0
FM NO.: 0
PROJECT LIMITS: 0
DESIGN YEAR: 0
INTERSECTION: Hood Rd. & Central Blvd.
PREPARED BY: 0
FILE: 0

DATE: 1/0/1900
NOTES: 0
0
0
0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	21,000	21,000	21,000	21,000
24 HR EST. AADT	2013	21,000	21,000	21,000	21,000
24 HR EST. AADT	2023	21,000	21,000	21,000	21,000
24 HR EST. AADT	2033	21,000	21,000	21,000	21,000

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	6.7%	6.2%	5.7%	4.9%	6.5%	5.5%	4.8%	4.2%
2013	Approach K30 factor	6.7%	6.2%	5.7%	4.9%	6.5%	5.5%	4.8%	4.2%
2023	Approach K30 factor	6.7%	6.2%	5.7%	4.9%	6.5%	5.5%	4.8%	4.2%
2033	Approach K30 factor	6.7%	6.2%	5.7%	4.9%	6.5%	5.5%	4.8%	4.2%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	54.5%	54.8%	42.0%	52.7%	44.0%	46.0%	61.2%	44.8%
2013	Approach D30 Factor	54.5%	54.8%	42.0%	52.7%	44.0%	46.0%	61.2%	44.8%
2023	Approach D30 Factor	54.5%	54.8%	42.0%	52.7%	44.0%	46.0%	61.2%	44.8%
2033	Approach D30 Factor	54.5%	54.8%	42.0%	52.7%	44.0%	46.0%	61.2%	44.8%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS	78	508	183	87	243	170	87	436	78	83	421	119
2013	EST. TURNS	90	486	193	98	224	178	99	416	84	97	399	128
2023	EST. TURNS	93	481	196	100	219	180	103	412	85	100	393	130
2033	EST. TURNS	98	471	200	105	212	183	108	404	88	106	383	133
P.M. DESIGN HR. TURNS													
2013	EST. TURNS	104	454	154	114	318	117	81	391	57	50	257	85
2013	EST. TURNS	114	435	163	124	298	127	88	374	67	60	241	91
2023	EST. TURNS	117	430	165	127	293	130	90	370	69	62	237	93
2033	EST. TURNS	122	421	169	131	284	134	93	363	73	66	230	96

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		768	642	1410	499	691	1190	599	761	1360	622	398	1020
2013	TURN SUMMARY	769	642	1411	500	691	1191	600	761	1361	623	398	1021
CONTROL LINK VOLUMES		768	642	1410	499	691	1190	599	761	1360	622	398	1020
2013	TURN SUMMARY	769	642	1411	500	691	1191	600	761	1361	623	398	1021
CONTROL LINK VOLUMES		768	642	1410	499	691	1190	599	761	1360	622	398	1020
2023	TURN SUMMARY	770	642	1412	500	691	1191	600	761	1361	623	398	1021
CONTROL LINK VOLUMES		768	642	1410	499	691	1190	599	761	1360	622	398	1020
2033	TURN SUMMARY	770	642	1412	500	691	1191	600	761	1361	623	398	1021
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		710	590	1300	548	492	1040	528	622	1150	391	479	870
2013	TURN SUMMARY	712	590	1302	549	492	1041	529	622	1151	392	479	871
CONTROL LINK VOLUMES		710	590	1300	548	492	1040	528	622	1150	391	479	870
2013	TURN SUMMARY	712	590	1302	550	492	1042	529	622	1151	392	479	871
CONTROL LINK VOLUMES		710	590	1300	548	492	1040	528	622	1150	391	479	870
2023	TURN SUMMARY	712	590	1302	550	492	1042	529	622	1151	392	479	871
CONTROL LINK VOLUMES		710	590	1300	548	492	1040	528	622	1150	391	479	870
2033	TURN SUMMARY	712	590	1302	550	492	1042	529	622	1151	392	479	871

Note: Boxed number indicates manual adjustment.

HOOD ROAD

CORRIDOR

Intersection: North Military Trail

TMTOOL INPUT SHEET

Project Description:

SECTION NO:		PREPARED BY:	
FM NO.:		FILE:	
PROJECT LIMITS:		DATE:	
DESIGN YEAR:			
INTERSECTION:	Hood Rd. & N Military Trail		

NOTES:

Historical AADTs:

	YEAR STATION	NORTH LEG AADT 1021	EAST LEG AADT 1020	SOUTH LEG AADT 1019	WEST LEG AADT 1101	
Actual AADT:	2004					
Actual AADT:	2005					24-HOUR TOTAL
Actual AADT:	2006					
Actual AADT:	2013	24,774	13,479	24,873	10,678	
TCRPM Volume:	2013	0	0	0	0	

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic Trend GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	
Historic + Model Trend GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	
2000 Model to 2030 Model GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	CGR
Recommended Growth Rate:	**0.00%**	**CGR**	**0.00%**	**CGR**	**0.00%**	**CGR**	**0.00%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		NORTH LEG: 1		EAST LEG: 1		SOUTH LEG: 1		WEST LEG: 1	
	YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
	2013		21,000		21,000		21,000		21,000
NO. YEARS 0	2013	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000
NO. YEARS 10	2023	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000
NO. YEARS 20	2033	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000

Percent Turns Calculated From Base Year AADTs:

JKTURNS		FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	21,000			21,000			21,000			21,000			
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT		
21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000		
33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%		
2013 2-WAY ADT	21,000			21,000			21,000			21,000			
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT		
21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000		
33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%		
2023 2-WAY ADT	21,000			21,000			21,000			21,000			
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT		
21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000		
33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%		
2033 2-WAY ADT	21,000			21,000			21,000			21,000			
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT		
21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000		
33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%		

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	2,817			1,592			2,762			1,491			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:15 - 8:00	98	1,262	125	497	295	141	105	710	41	503	429	125	4,331
% TURNS:	7%	85%	8%	53%	32%	15%	12%	83%	5%	48%	41%	12%	
P.M.	2-Way Pk Hr Vol:	2,327			1,365			2,307			1,039			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:00 - 5:45	98	912	165	265	333	148	177	813	117	140	277	74	3,519
% TURNS:	8%	78%	14%	36%	45%	20%	16%	73%	11%	29%	56%	15%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		SB			WB			NB			EB		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	
A.M.													
2013	7%	85%	8%	53%	32%	15%	12%	83%	5%	48%	41%	12%	
2013	9%	80%	11%	51%	32%	17%	14%	78%	8%	46%	40%	14%	
2023	10%	79%	12%	51%	32%	17%	15%	77%	8%	46%	40%	15%	
2033	11%	76%	13%	50%	32%	18%	16%	75%	10%	45%	39%	15%	
P.M.													
2013	8%	78%	14%	36%	45%	20%	16%	73%	11%	29%	56%	15%	
2013	11%	73%	16%	35%	44%	21%	18%	69%	13%	29%	54%	17%	
2023	11%	72%	16%	35%	43%	22%	18%	68%	13%	29%	54%	17%	
2033	13%	70%	17%	35%	43%	22%	19%	67%	14%	29%	53%	18%	

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: 0
FM NO.: 0
PROJECT LIMITS: 0
DESIGN YEAR: 0
INTERSECTION: Hood Rd. & N Military Trail
PREPARED BY: 0
FILE: 0

DATE: 1/0/1900
NOTES: 0
0
0
0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	21,000	21,000	21,000	21,000
24 HR EST. AADT	2013	21,000	21,000	21,000	21,000
24 HR EST. AADT	2023	21,000	21,000	21,000	21,000
24 HR EST. AADT	2033	21,000	21,000	21,000	21,000

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	12.3%	11.1%	6.5%	6.5%	10.7%	11.0%	5.7%	4.9%
2013	Approach K30 factor	12.3%	11.1%	6.5%	6.5%	10.7%	11.0%	5.7%	4.9%
2023	Approach K30 factor	12.3%	11.1%	6.5%	6.5%	10.7%	11.0%	5.7%	4.9%
2033	Approach K30 factor	12.3%	11.1%	6.5%	6.5%	10.7%	11.0%	5.7%	4.9%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	52.0%	50.5%	41.3%	54.7%	48.7%	48.0%	58.0%	47.3%
2013	Approach D30 Factor	52.0%	50.5%	41.3%	54.7%	48.7%	48.0%	58.0%	47.3%
2023	Approach D30 Factor	52.0%	50.5%	41.3%	54.7%	48.7%	48.0%	58.0%	47.3%
2033	Approach D30 Factor	52.0%	50.5%	41.3%	54.7%	48.7%	48.0%	58.0%	47.3%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS	182	925	231	276	242	45	184	838	76	181	381	127
2013	EST. TURNS	190	891	258	283	216	64	190	814	93	197	349	144
2023	EST. TURNS	192	883	265	284	210	69	191	809	97	201	341	148
2033	EST. TURNS	196	868	277	285	201	77	193	800	103	207	327	155
P.M. DESIGN HR. TURNS													
2013	EST. TURNS	99	915	166	266	334	149	179	815	117	140	279	74
2013	EST. TURNS	118	874	191	274	301	173	183	794	131	156	250	87
2023	EST. TURNS	122	863	197	276	293	179	184	789	134	160	243	90
2033	EST. TURNS	129	846	208	278	280	190	185	782	139	167	231	95

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		1339	1241	2580	563	797	1360	1098	1152	2250	690	500	1190
2013	TURN SUMMARY	1338	1241	2579	563	797	1360	1099	1152	2251	690	500	1190
CONTROL LINK VOLUMES		1339	1241	2580	563	797	1360	1098	1152	2250	690	500	1190
2013	TURN SUMMARY	1340	1241	2581	563	797	1360	1097	1152	2249	690	500	1190
CONTROL LINK VOLUMES		1339	1241	2580	563	797	1360	1098	1152	2250	690	500	1190
2023	TURN SUMMARY	1340	1241	2581	563	797	1360	1097	1152	2249	690	500	1190
CONTROL LINK VOLUMES		1339	1241	2580	563	797	1360	1098	1152	2250	690	500	1190
2033	TURN SUMMARY	1341	1241	2582	563	797	1360	1097	1152	2249	690	500	1190
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		1175	1155	2330	746	624	1370	1107	1203	2310	491	549	1040
2013	TURN SUMMARY	1179	1155	2334	748	624	1372	1111	1203	2314	493	549	1042
CONTROL LINK VOLUMES		1175	1155	2330	746	624	1370	1107	1203	2310	491	549	1040
2013	TURN SUMMARY	1182	1155	2337	748	624	1372	1108	1203	2311	493	549	1042
CONTROL LINK VOLUMES		1175	1155	2330	746	624	1370	1107	1203	2310	491	549	1040
2023	TURN SUMMARY	1183	1155	2338	748	624	1372	1107	1203	2310	493	549	1042
CONTROL LINK VOLUMES		1175	1155	2330	746	624	1370	1107	1203	2310	491	549	1040
2033	TURN SUMMARY	1183	1155	2338	748	624	1372	1106	1203	2309	493	549	1042

Note: Boxed number indicates manual adjustment.

LAKE VICTORIA GARDENS

CORRIDOR

from: PGA Passage

To: PGA Boulevard

LAKE VICTORIA GARDENS

CORRIDOR

Intersection: PGA Passage

TMTOOL INPUT SHEET

Project Description:

SECTION NO:		PREPARED BY:	
FM NO.:		FILE:	
PROJECT LIMITS:		DATE:	
DESIGN YEAR:			
INTERSECTION:	PGA Blvd. & PGA Passage		

NOTES:

TMC & AADT data collected on (4/24/2013) only
Machine 6501 was labeled as 1056

Historical AADTs:

	YEAR / STATION	NORTH LEG AADT 1070	EAST LEG AADT 1069	SOUTH LEG AADT 1068	WEST LEG AADT 1071	
Actual AADT:	2004					24-HOUR TOTAL
Actual AADT:	2005					
Actual AADT:	2006					
Actual AADT:	2013	8,291	0	0	0	
TCRPM Volume:	2013	0	0	0	0	

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic Trend GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	
Historic + Model Trend GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	
2000 Model to 2030 Model GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	CGR
Recommended Growth Rate:	**0.00%**	**CGR**	**0.00%**	**CGR**	**0.00%**	**CGR**	**0.00%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
		1		1		1		1	
	YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
	2013		21,000		21,000		21,000		21,000
NO. YEARS	0 2013	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000
NO. YEARS	10 2023	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000
NO. YEARS	20 2033	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	21,000			21,000			21,000			21,000		
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	
21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	
33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	
2013 2-WAY ADT	21,000			21,000			21,000			21,000		
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	
21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	
33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	
2023 2-WAY ADT	21,000			21,000			21,000			21,000		
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	
21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	
33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	
2033 2-WAY ADT	21,000			21,000			21,000			21,000		
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	
21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	
33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	513			153			477			145			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
8:00 - 8:45	14	64	0	22	131	0	0	413	0	0	0	0	644
% TURNS:	18%	82%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
P.M.	2-Way Pk Hr Vol:	875			123			782			158			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
4:45 - 5:30	64	242	0	29	94	0	0	540	0	0	0	0	969
% TURNS:	21%	79%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		SB			WB			NB			EB	
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
A.M.												
2013	18%	82%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
2013	19%	77%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
2023	20%	76%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
2033	21%	74%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
P.M.												
2013	21%	79%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
2013	22%	75%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
2023	22%	73%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
2033	23%	71%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: 0
FM NO.: 0
PROJECT LIMITS: 0
DESIGN YEAR: 0
INTERSECTION: PGA Blvd. & PGA Passage
PREPARED BY: 0
FILE: 0

DATE: 1/0/1900
NOTES: TMC & AADT data collected on (4/24/2013) only
Machine 6501 was labeled as 1056
0
0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	21,000	21,000	21,000	21,000
24 HR EST. AADT	2013	21,000	21,000	21,000	21,000
24 HR EST. AADT	2023	21,000	21,000	21,000	21,000
24 HR EST. AADT	2033	21,000	21,000	21,000	21,000

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	2.4%	4.2%	0.7%	0.6%	2.3%	3.7%	0.7%	0.8%
2013	Approach K30 factor	2.4%	4.2%	0.7%	0.6%	2.3%	3.7%	0.7%	0.8%
2023	Approach K30 factor	2.4%	4.2%	0.7%	0.6%	2.3%	3.7%	0.7%	0.8%
2033	Approach K30 factor	2.4%	4.2%	0.7%	0.6%	2.3%	3.7%	0.7%	0.8%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	15.2%	35.0%	100.0%	100.0%	86.6%	69.1%	0.0%	0.0%
2013	Approach D30 Factor	15.2%	35.0%	100.0%	100.0%	86.6%	69.1%	0.0%	0.0%
2023	Approach D30 Factor	15.2%	35.0%	100.0%	100.0%	86.6%	69.1%	0.0%	0.0%
2033	Approach D30 Factor	15.2%	35.0%	100.0%	100.0%	86.6%	69.1%	0.0%	0.0%

A.M. DESIGN HR. TURNS		NORTH LEG RIGHT	NORTH LEG THRU	NORTH LEG LEFT	EAST LEG RIGHT	EAST LEG THRU	EAST LEG LEFT	SOUTH LEG RIGHT	SOUTH LEG THRU	SOUTH LEG LEFT	WEST LEG RIGHT	WEST LEG THRU	WEST LEG LEFT
2013	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2013	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2023	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2033	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
P.M. DESIGN HR. TURNS													
2013	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2013	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2023	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2033	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

LINK VOLUME CHECK

DESIGN HOUR A.M.:		NORTH LEG FROM	NORTH LEG TO	NORTH LEG LINK	EAST LEG FROM	EAST LEG TO	EAST LEG LINK	SOUTH LEG FROM	SOUTH LEG TO	SOUTH LEG LINK	WEST LEG FROM	WEST LEG TO	WEST LEG LINK
CONTROL LINK VOLUMES		78	432	510	153	-3	150	413	67	480	0	150	150
2013	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		78	432	510	153	-3	150	413	67	480	0	150	150
2013	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		78	432	510	153	-3	150	413	67	480	0	150	150
2023	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		78	432	510	153	-3	150	413	67	480	0	150	150
2033	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		306	574	880	123	-3	120	540	240	780	0	160	160
2013	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		306	574	880	123	-3	120	540	240	780	0	160	160
2013	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		306	574	880	123	-3	120	540	240	780	0	160	160
2023	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		306	574	880	123	-3	120	540	240	780	0	160	160
2033	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Note: Boxed number i 64

LAKE VICTORIA GARDENS

CORRIDOR

Intersections: PGA Boulevard

TMTOOL INPUT SHEET

Project Description:

SECTION NO:		PREPARED BY:	
FM NO.:		FILE:	
PROJECT LIMITS:		DATE:	
DESIGN YEAR:			
INTERSECTION:	PGA Blvd. & Lake Victoria Gardens		

NOTES:

AADT data collected on machine 1057 (4/23, 4/24, 4/25) was averaged.
Machine **1057** was also labeled as 7501. Has no TMC

Historical AADTs:

	YEAR / STATION	NORTH LEG AADT 0	EAST LEG AADT 1057	SOUTH LEG AADT 1068	WEST LEG AADT 1056
Actual AADT:	2004				
Actual AADT:	2005				
Actual AADT:	2006				
Actual AADT:	2013	0	57,768	9,305	69,391
TCRPM Volume:	2013	0	0	0	0

24-HOUR TOTAL

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic Trend GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	
Historic + Model Trend GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	
2000 Model to 2030 Model GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	CGR
Recommended Growth Rate:	**0.00%**	**CGR**	**0.00%**	**CGR**	**0.00%**	**CGR**	**0.00%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	NORTH LEG FACTOR	NORTH LEG AADT	EAST LEG FACTOR	EAST LEG AADT	SOUTH LEG FACTOR	SOUTH LEG AADT	WEST LEG FACTOR	WEST LEG AADT
			1		**1**		**1**		**1**	
		2013		21,000		21,000		21,000		21,000
NO. YEARS	0	2013	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000
NO. YEARS	10	2023	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000
NO. YEARS	20	2033	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000

Percent Turns Calculated From Base Year AADTs:

JKTURNS		FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	21,000			21,000			21,000			21,000			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000
	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%
2013 2-WAY ADT	21,000			21,000			21,000			21,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000
	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%
2023 2-WAY ADT	21,000			21,000			21,000			21,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000
	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%
2033 2-WAY ADT	21,000			21,000			21,000			21,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000
	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	389			4,315			760			5,264			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
8:00 - 8:45	0	0	0	0	1,028	0	100	0	250	410	3,187	389	5,364
% TURNS:	0%	0%	0%	0%	100%	0%	29%	0%	71%	10%	80%	10%	
P.M.	2-Way Pk Hr Vol:	539			5,084			856			6,203			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
4:45 - 5:30	0	0	0	0	2,552	0	138	0	321	397	2,394	539	6,341
% TURNS:	0%	0%	0%	0%	100%	0%	30%	0%	70%	12%	72%	16%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		SB			WB			NB			EB		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
A.M.												
2013	0%	0%	0%	0%	100%	0%	29%	0%	71%	10%	80%	10%
2013	3%	3%	3%	3%	93%	3%	29%	3%	68%	13%	75%	12%
2023	4%	4%	4%	4%	92%	4%	29%	4%	67%	13%	74%	13%
2033	6%	6%	6%	6%	89%	6%	29%	6%	65%	14%	72%	14%
P.M.												
2013	0%	0%	0%	0%	100%	0%	30%	0%	70%	12%	72%	16%
2013	3%	3%	3%	3%	93%	3%	30%	3%	66%	14%	68%	18%
2023	4%	4%	4%	4%	92%	4%	30%	4%	65%	15%	67%	18%
2033	6%	6%	6%	6%	89%	6%	31%	6%	64%	15%	65%	19%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: 0
FM NO.: 0
PROJECT LIMITS: 0
DESIGN YEAR: 0
INTERSECTION: PGA Blvd. & Lake Victoria Gardens
PREPARED BY: 0
FILE: 0

DATE: 1/0/1900
NOTES: AADT data collected on machine 1057 (4/23, 4/24, 4/25) was averaged.
Machine 1057 was also labeled as 7501. Has no TMC
0
0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	21,000	21,000	21,000	21,000
24 HR EST. AADT	2013	21,000	21,000	21,000	21,000
24 HR EST. AADT	2023	21,000	21,000	21,000	21,000
24 HR EST. AADT	2033	21,000	21,000	21,000	21,000

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	1.9%	2.6%	20.5%	24.2%	3.6%	4.1%	25.1%	29.5%
2013	Approach K30 factor	1.9%	2.6%	20.5%	24.2%	3.6%	4.1%	25.1%	29.5%
2023	Approach K30 factor	1.9%	2.6%	20.5%	24.2%	3.6%	4.1%	25.1%	29.5%
2033	Approach K30 factor	1.9%	2.6%	20.5%	24.2%	3.6%	4.1%	25.1%	29.5%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	0.0%	0.0%	23.8%	50.2%	46.1%	53.6%	75.7%	53.7%
2013	Approach D30 Factor	0.0%	0.0%	23.8%	50.2%	46.1%	53.6%	75.7%	53.7%
2023	Approach D30 Factor	0.0%	0.0%	23.8%	50.2%	46.1%	53.6%	75.7%	53.7%
2033	Approach D30 Factor	0.0%	0.0%	23.8%	50.2%	46.1%	53.6%	75.7%	53.7%

A.M. DESIGN HR. TURNS		NORTH LEG RIGHT	NORTH LEG THRU	NORTH LEG LEFT	EAST LEG RIGHT	EAST LEG THRU	EAST LEG LEFT	SOUTH LEG RIGHT	SOUTH LEG THRU	SOUTH LEG LEFT	WEST LEG RIGHT	WEST LEG THRU	WEST LEG LEFT
2013	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2013	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2023	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2033	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
P.M. DESIGN HR. TURNS													
2013	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2013	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2023	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2033	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

LINK VOLUME CHECK

DESIGN HOUR A.M.:		NORTH LEG FROM	NORTH LEG TO	NORTH LEG LINK	EAST LEG FROM	EAST LEG TO	EAST LEG LINK	SOUTH LEG FROM	SOUTH LEG TO	SOUTH LEG LINK	WEST LEG FROM	WEST LEG TO	WEST LEG LINK
CONTROL LINK VOLUMES		0	390	390	1028	3292	4320	350	410	760	3986	1274	5260
2013	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		0	390	390	1028	3292	4320	350	410	760	3986	1274	5260
2013	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		0	390	390	1028	3292	4320	350	410	760	3986	1274	5260
2023	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		0	390	390	1028	3292	4320	350	410	760	3986	1274	5260
2033	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		0	540	540	2552	2528	5080	459	401	860	3330	2870	6200
2013	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		0	540	540	2552	2528	5080	459	401	860	3330	2870	6200
2013	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		0	540	540	2552	2528	5080	459	401	860	3330	2870	6200
2023	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		0	540	540	2552	2528	5080	459	401	860	3330	2870	6200
2033	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Note: Boxed number i 0 0

0% 0% 0%

0

PGA BOULEVARD(FL. TURNPIKE TO CENTRAL BOULEVARD)

CORRIDOR

From: FL. Turnpike

To: Central Boulevard

PGA BOULEVARD(FL. TURNPIKE TO CENTRAL BOULEVARD)

CORRIDOR

Intersection: FL. Turnpike

TMTOOL INPUT SHEET

Project Description:

SECTION NO:		PREPARED BY:	
FM NO.:		FILE:	
PROJECT LIMITS:		DATE:	
DESIGN YEAR:			
INTERSECTION:	PGA Blvd. & FL. Turnpike		

NOTES: Machine 1111 (South Leg) has no AADT data.

Historical AADTs:

	YEAR STATION	NORTH LEG AADT 1112	EAST LEG AADT 1113	SOUTH LEG AADT 0	WEST LEG AADT 1110	
Actual AADT:	2004					24-HOUR TOTAL
Actual AADT:	2005					
Actual AADT:	2006					
Actual AADT:	2013	19,547	39,746	0	24,066	
TCRPM Volume:	2013	0	0	0	0	

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic Trend GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	
Historic + Model Trend GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	
2000 Model to 2030 Model GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	CGR
Recommended Growth Rate:	**0.00%**	**CGR**	**0.00%**	**CGR**	**0.00%**	**CGR**	**0.00%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	NORTH LEG FACTOR	NORTH LEG AADT	EAST LEG FACTOR	EAST LEG AADT	SOUTH LEG FACTOR	SOUTH LEG AADT	WEST LEG FACTOR	WEST LEG AADT
			1		1		1		1	
		2013		21,000		21,000		21,000		21,000
NO. YEARS	0	2013	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000
NO. YEARS	10	2023	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000
NO. YEARS	20	2033	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000

Percent Turns Calculated From Base Year AADTs:

JKTURNS		FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	21,000				21,000			21,000			21,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000
	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%
2013 2-WAY ADT	21,000				21,000			21,000			21,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000
	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%
2023 2-WAY ADT	21,000				21,000			21,000			21,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000
	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%
2033 2-WAY ADT	21,000				21,000			21,000			21,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000
	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	2,116			4,204			1,245			2,015			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:30 - 8:15	100	159	983	645	902	410	501	77	45	53	763	152	4,790
% TURNS:	8%	13%	79%	33%	46%	21%	80%	12%	7%	5%	79%	16%	
P.M.	2-Way Pk Hr Vol:	2,079			4,362			1,611			2,114			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:00 - 5:45	156	55	539	951	982	389	805	230	65	67	696	148	5,083
% TURNS:	21%	7%	72%	41%	42%	17%	73%	21%	6%	7%	76%	16%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		SB RIGHT	SB THRU	SB LEFT	WB RIGHT	WB THRU	WB LEFT	NB RIGHT	NB THRU	NB LEFT	EB RIGHT	EB THRU	EB LEFT
A.M.													
	2013	8%	13%	79%	33%	46%	21%	80%	12%	7%	5%	79%	16%
	2013	11%	15%	75%	33%	45%	22%	76%	14%	10%	8%	74%	17%
	2023	11%	15%	73%	33%	44%	22%	75%	15%	10%	9%	73%	18%
	2033	12%	16%	72%	33%	44%	23%	73%	16%	12%	10%	71%	19%
P.M.													
	2013	21%	7%	72%	41%	42%	17%	73%	21%	6%	7%	76%	16%
	2013	22%	10%	68%	40%	41%	18%	69%	22%	9%	10%	72%	18%
	2023	22%	11%	67%	40%	41%	19%	68%	22%	9%	11%	71%	18%
	2033	23%	12%	65%	40%	41%	20%	67%	23%	10%	12%	69%	19%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: 0
FM NO.: 0
PROJECT LIMITS: 0
DESIGN YEAR: 0
INTERSECTION: PGA Blvd. & FL. Turnpike
PREPARED BY: 0
FILE: 0

DATE: 1/0/1900
NOTES: Machine 1111 (South Leg) has no AADT data.
0
0
0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	21,000	21,000	21,000	21,000
24 HR EST. AADT	2013	21,000	21,000	21,000	21,000
24 HR EST. AADT	2023	21,000	21,000	21,000	21,000
24 HR EST. AADT	2033	21,000	21,000	21,000	21,000

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	10.1%	9.9%	20.0%	20.8%	5.9%	7.7%	9.6%	10.1%
2013	Approach K30 factor	10.1%	9.9%	20.0%	20.8%	5.9%	7.7%	9.6%	10.1%
2023	Approach K30 factor	10.1%	9.9%	20.0%	20.8%	5.9%	7.7%	9.6%	10.1%
2033	Approach K30 factor	10.1%	9.9%	20.0%	20.8%	5.9%	7.7%	9.6%	10.1%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	58.7%	36.1%	46.6%	53.2%	50.0%	68.3%	48.0%	43.1%
2013	Approach D30 Factor	58.7%	36.1%	46.6%	53.2%	50.0%	68.3%	48.0%	43.1%
2023	Approach D30 Factor	58.7%	36.1%	46.6%	53.2%	50.0%	68.3%	48.0%	43.1%
2033	Approach D30 Factor	58.7%	36.1%	46.6%	53.2%	50.0%	68.3%	48.0%	43.1%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS	102	160	982	646	905	413	500	78	46	54	761	154
2013	EST. TURNS	117	181	959	660	884	387	505	75	50	59	779	143
2023	EST. TURNS	121	186	952	663	880	381	507	74	51	59	784	140
2033	EST. TURNS	127	196	941	669	873	372	509	73	52	59	792	136
P.M. DESIGN HR. TURNS													
2013	EST. TURNS	155	55	539	952	979	388	804	230	65	67	695	148
2013	EST. TURNS	152	79	523	968	965	365	810	216	81	67	705	146
2023	EST. TURNS	152	85	518	972	962	359	812	212	85	66	708	146
2033	EST. TURNS	151	95	510	978	958	351	815	207	90	65	713	145

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		1242	878	2120	1957	2243	4200	623	627	1250	968	1052	2020
2013	TURN SUMMARY	1244	878	2122	1963	2243	4206	624	627	1251	969	1052	2021
CONTROL LINK VOLUMES		1242	878	2120	1957	2243	4200	623	627	1250	968	1052	2020
2013	TURN SUMMARY	1257	878	2135	1931	2243	4174	631	627	1258	981	1052	2033
CONTROL LINK VOLUMES		1242	878	2120	1957	2243	4200	623	627	1250	968	1052	2020
2023	TURN SUMMARY	1260	878	2138	1925	2243	4168	632	627	1259	983	1052	2035
CONTROL LINK VOLUMES		1242	878	2120	1957	2243	4200	623	627	1250	968	1052	2020
2033	TURN SUMMARY	1264	878	2142	1914	2243	4157	635	627	1262	987	1052	2039
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		750	1330	2080	2322	2038	4360	1100	510	1610	911	1199	2110
2013	TURN SUMMARY	749	1330	2079	2319	2038	4357	1099	510	1609	910	1199	2109
CONTROL LINK VOLUMES		750	1330	2080	2322	2038	4360	1100	510	1610	911	1199	2110
2013	TURN SUMMARY	754	1330	2084	2298	2038	4336	1107	510	1617	918	1199	2117
CONTROL LINK VOLUMES		750	1330	2080	2322	2038	4360	1100	510	1610	911	1199	2110
2023	TURN SUMMARY	755	1330	2085	2294	2038	4332	1109	510	1619	920	1199	2119
CONTROL LINK VOLUMES		750	1330	2080	2322	2038	4360	1100	510	1610	911	1199	2110
2033	TURN SUMMARY	756	1330	2086	2287	2038	4325	1112	510	1622	922	1199	2121

Note: Boxed number indicates manual adjustment.

PGA BOULEVARD(FL. TURNPIKE TO CENTRAL BOULEVARD)

CORRIDOR

Intersection: Central Boulevard

TMTOOL INPUT SHEET

Project Description:

SECTION NO:		PREPARED BY:	
FM NO.:		FILE:	
PROJECT LIMITS:		DATE:	
DESIGN YEAR:			
INTERSECTION:	PGA Blvd. & Central Blvd.		

NOTES:

Historical AADTs:

	YEAR / STATION	NORTH LEG AADT 1115	EAST LEG AADT 1117	SOUTH LEG AADT 1116	WEST LEG AADT 4111
Actual AADT:	2004				
Actual AADT:	2005				
Actual AADT:	2006				
Actual AADT:	2013	15,078	40,198	3,053	43,236
TCRPM Volume:	2013	0	0	0	0

24-HOUR TOTAL

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic Trend GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	
Historic + Model Trend GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	
2000 Model to 2030 Model GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	CGR
Recommended Growth Rate:	**0.00%**	**CGR**	**0.00%**	**CGR**	**0.00%**	**CGR**	**0.00%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
		1		1		1		1	
	YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
	2013		21,000		21,000		21,000		21,000
NO. YEARS	0 2013	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000
NO. YEARS	10 2023	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000
NO. YEARS	20 2033	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000

Percent Turns Calculated From Base Year AADTs:

JKTURNS		FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	21,000				21,000			21,000			21,000		
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT		
21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000		
33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%		
2013 2-WAY ADT	21,000				21,000			21,000			21,000		
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT		
21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000		
33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%		
2023 2-WAY ADT	21,000				21,000			21,000			21,000		
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT		
21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000		
33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%		
2033 2-WAY ADT	21,000				21,000			21,000			21,000		
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT		
21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000		
33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%		

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	2,266			3,950			104			4,204			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:30 - 8:15	769	4	531	446	1,177	17	36	24	11	12	1,743	492	5,262
% TURNS:	59%	0%	41%	27%	72%	1%	51%	34%	15%	1%	78%	22%	
P.M.	2-Way Pk Hr Vol:	1,375			4,097			166			4,362			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:00 - 5:45	469	6	259	271	1,821	52	37	13	32	26	1,657	357	5,000
% TURNS:	64%	1%	35%	13%	85%	2%	45%	16%	39%	1%	81%	18%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		SB			WB			NB			EB		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	
A.M.													
2013	59%	0%	41%	27%	72%	1%	51%	34%	15%	1%	78%	22%	
2013	56%	4%	40%	28%	68%	4%	49%	34%	17%	4%	73%	23%	
2023	56%	4%	40%	28%	67%	5%	49%	34%	18%	5%	72%	23%	
2033	55%	6%	39%	28%	65%	6%	48%	34%	18%	6%	70%	24%	
P.M.													
2013	64%	1%	35%	13%	85%	2%	45%	16%	39%	1%	81%	18%	
2013	61%	4%	35%	15%	80%	6%	44%	18%	38%	4%	76%	19%	
2023	60%	5%	35%	15%	78%	6%	44%	18%	38%	5%	75%	19%	
2033	59%	6%	35%	16%	76%	8%	43%	19%	38%	7%	73%	20%	

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: 0
FM NO.: 0
PROJECT LIMITS: 0
DESIGN YEAR: 0
INTERSECTION: PGA Blvd. & Central Blvd.
PREPARED BY: 0
FILE: 0

DATE: 1/0/1900
NOTES: 0
0
0
0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	21,000	21,000	21,000	21,000
24 HR EST. AADT	2013	21,000	21,000	21,000	21,000
24 HR EST. AADT	2023	21,000	21,000	21,000	21,000
24 HR EST. AADT	2033	21,000	21,000	21,000	21,000

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	10.8%	6.5%	18.8%	19.5%	0.5%	0.8%	20.0%	20.8%
2013	Approach K30 factor	10.8%	6.5%	18.8%	19.5%	0.5%	0.8%	20.0%	20.8%
2023	Approach K30 factor	10.8%	6.5%	18.8%	19.5%	0.5%	0.8%	20.0%	20.8%
2033	Approach K30 factor	10.8%	6.5%	18.8%	19.5%	0.5%	0.8%	20.0%	20.8%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	57.5%	53.4%	41.5%	52.3%	68.3%	49.4%	53.4%	46.8%
2013	Approach D30 Factor	57.5%	53.4%	41.5%	52.3%	68.3%	49.4%	53.4%	46.8%
2023	Approach D30 Factor	57.5%	53.4%	41.5%	52.3%	68.3%	49.4%	53.4%	46.8%
2033	Approach D30 Factor	57.5%	53.4%	41.5%	52.3%	68.3%	49.4%	53.4%	46.8%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS	767	4	532	449	1175	14	36	24	11	10	1,742	493
2013	EST. TURNS	761	27	510	449	1179	1	36	22	12	1	1,763	495
2023	EST. TURNS	763	28	506	448	1,177	1	37	22	13	1	1,768	496
2033	EST. TURNS	767	28	498	446	1173	0	37	21	13	0	1,775	499
P.M. DESIGN HR. TURNS													
2013	EST. TURNS	469	6	260	274	1819	55	37	13	32	27	1,659	359
2013	EST. TURNS	453	44	238	285	1834	25	37	12	32	19	1,681	349
2023	EST. TURNS	451	51	232	287	1,836	21	37	12	32	16	1,686	347
2033	EST. TURNS	450	60	225	289	1838	15	37	12	33	13	1,694	345

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		1304	966	2270	1640	2310	3950	71	29	100	2247	1953	4200
2013	TURN SUMMARY	1303	966	2269	1638	2310	3948	71	29	100	2246	1953	4199
CONTROL LINK VOLUMES		1304	966	2270	1640	2310	3950	71	29	100	2247	1953	4200
2013	TURN SUMMARY	1299	966	2265	1629	2310	3939	71	29	100	2260	1953	4213
CONTROL LINK VOLUMES		1304	966	2270	1640	2310	3950	71	29	100	2247	1953	4200
2023	TURN SUMMARY	1297	966	2263	1625	2310	3935	71	29	100	2265	1953	4218
CONTROL LINK VOLUMES		1304	966	2270	1640	2310	3950	71	29	100	2247	1953	4200
2033	TURN SUMMARY	1293	966	2259	1619	2310	3929	71	29	100	2275	1953	4228
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		734	646	1380	2144	1956	4100	82	88	170	2040	2320	4360
2013	TURN SUMMARY	735	646	1381	2147	1956	4103	82	88	170	2045	2320	4365
CONTROL LINK VOLUMES		734	646	1380	2144	1956	4100	82	88	170	2040	2320	4360
2013	TURN SUMMARY	735	646	1381	2144	1956	4100	82	88	170	2049	2320	4369
CONTROL LINK VOLUMES		734	646	1380	2144	1956	4100	82	88	170	2040	2320	4360
2023	TURN SUMMARY	735	646	1381	2143	1956	4099	82	88	170	2050	2320	4370
CONTROL LINK VOLUMES		734	646	1380	2144	1956	4100	82	88	170	2040	2320	4360
2033	TURN SUMMARY	734	646	1380	2142	1956	4098	82	88	170	2051	2320	4371

Note: Boxed number indicates manual adjustment.

PGA BOULEVARD (NORTH MILITARY TRAIL TO LAKE VICTORIA)

CORRIDOR

From: North Military Trail

To: Lake Victoria

PGA BOULEVARD (NORTH MILITARY TRAIL TO LAKE VICTORIA)

CORRIDOR

Intersection: North Military Trail

TMTOOL INPUT SHEET

Project Description:

SECTION NO:		PREPARED BY:	
FM NO.:		FILE:	
PROJECT LIMITS:		DATE:	
DESIGN YEAR:			
INTERSECTION:	PGA Blvd. & N Military Trail		

NOTES:

AADT & TMC data was compliled for all machines on (4/23, 4/24, 4/25).

Historical AADTs:

	YEAR / STATION	NORTH LEG AADT 1042	EAST LEG AADT 1050	SOUTH LEG AADT 1053	WEST LEG AADT 1052
Actual AADT:	2004				
Actual AADT:	2005				
Actual AADT:	2006				
Actual AADT:	2013	35,169	47,831	39,699	46,162
TCRPM Volume:	2013	0	0	0	0

24-HOUR TOTAL

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic Trend GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	
Historic + Model Trend GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	
2000 Model to 2030 Model GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	CGR
Recommended Growth Rate:	**0.00%**	**CGR**	**0.00%**	**CGR**	**0.00%**	**CGR**	**0.00%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

			NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
			1		1		1		1	
		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
		2013		21,000		21,000		21,000		21,000
NO. YEARS	0	2013	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000
NO. YEARS	10	2023	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000
NO. YEARS	20	2033	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000

Percent Turns Calculated From Base Year AADTs:

JKTURNS		FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	21,000			21,000			21,000			21,000			
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT		
21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000		
33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%		
2013 2-WAY ADT	21,000			21,000			21,000			21,000			
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT		
21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000		
33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%		
2023 2-WAY ADT	21,000			21,000			21,000			21,000			
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT		
21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000		
33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%		
2033 2-WAY ADT	21,000			21,000			21,000			21,000			
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT		
21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000		
33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%		

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	2,569			3,953			2,938			3,858			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:45 - 8:30	191	848	722	211	880	128	416	476	536	534	1,596	121	6,659
% TURNS:	11%	48%	41%	17%	72%	11%	29%	33%	38%	24%	71%	5%	
P.M.	2-Way Pk Hr Vol:	2,848			4,270			3,632			4,314			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:00 - 5:45	260	940	459	354	1,476	354	462	649	674	553	1,165	186	7,532
% TURNS:	16%	57%	28%	16%	68%	16%	26%	36%	38%	29%	61%	10%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		SB			WB			NB			EB		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	
A.M.													
2013	11%	48%	41%	17%	72%	11%	29%	33%	38%	24%	71%	5%	
2013	13%	47%	40%	19%	68%	13%	30%	33%	37%	25%	67%	8%	
2023	14%	46%	40%	19%	67%	13%	30%	33%	37%	25%	66%	9%	
2033	15%	46%	40%	20%	66%	14%	30%	33%	37%	25%	65%	10%	
P.M.													
2013	16%	57%	28%	16%	68%	16%	26%	36%	38%	29%	61%	10%	
2013	17%	54%	28%	18%	64%	18%	27%	36%	37%	29%	58%	12%	
2023	18%	54%	28%	18%	63%	18%	27%	36%	37%	30%	58%	13%	
2033	19%	53%	29%	19%	62%	19%	27%	36%	37%	30%	57%	14%	

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: 0
FM NO.: 0
PROJECT LIMITS: 0
DESIGN YEAR: 0
INTERSECTION: PGA Blvd. & N Military Trail
PREPARED BY: 0
FILE: 0

DATE: 1/0/1900
NOTES: AADT & TMC data was compliled for all machines on (4/23, 4/24, 4/25).
0
0
0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	21,000	21,000	21,000	21,000
24 HR EST. AADT	2013	21,000	21,000	21,000	21,000
24 HR EST. AADT	2023	21,000	21,000	21,000	21,000
24 HR EST. AADT	2033	21,000	21,000	21,000	21,000

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	12.2%	13.6%	18.8%	20.3%	14.0%	17.3%	18.4%	20.5%
2013	Approach K30 factor	12.2%	13.6%	18.8%	20.3%	14.0%	17.3%	18.4%	20.5%
2023	Approach K30 factor	12.2%	13.6%	18.8%	20.3%	14.0%	17.3%	18.4%	20.5%
2033	Approach K30 factor	12.2%	13.6%	18.8%	20.3%	14.0%	17.3%	18.4%	20.5%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	68.5%	58.3%	30.8%	51.1%	48.6%	49.1%	58.3%	44.1%
2013	Approach D30 Factor	68.5%	58.3%	30.8%	51.1%	48.6%	49.1%	58.3%	44.1%
2023	Approach D30 Factor	68.5%	58.3%	30.8%	51.1%	48.6%	49.1%	58.3%	44.1%
2033	Approach D30 Factor	68.5%	58.3%	30.8%	51.1%	48.6%	49.1%	58.3%	44.1%

A.M. DESIGN HR. TURNS		NORTH LEG RIGHT	NORTH LEG THRU	NORTH LEG LEFT	EAST LEG RIGHT	EAST LEG THRU	EAST LEG LEFT	SOUTH LEG RIGHT	SOUTH LEG THRU	SOUTH LEG LEFT	WEST LEG RIGHT	WEST LEG THRU	WEST LEG LEFT
2013	EST. TURNS	191	848	722	211	880	128	415	477	537	536	1,594	121
2013	EST. TURNS	229	827	707	213	847	157	458	435	534	528	1,566	161
2023	EST. TURNS	238	822	703	214	839	164	468	426	532	527	1,560	169
2033	EST. TURNS	254	813	697	215	825	175	485	411	530	524	1,550	183
P.M. DESIGN HR. TURNS													
2013	EST. TURNS	259	940	459	355	1474	354	462	650	672	552	1,165	186
2013	EST. TURNS	294	901	463	367	1427	389	490	609	685	555	1,132	216
2023	EST. TURNS	303	891	464	369	1,415	397	497	599	688	557	1,125	223
2033	EST. TURNS	318	875	466	374	1396	412	508	583	692	559	1,112	234

LINK VOLUME CHECK

DESIGN HOUR A.M.:		NORTH LEG FROM	NORTH LEG TO	NORTH LEG LINK	EAST LEG FROM	EAST LEG TO	EAST LEG LINK	SOUTH LEG FROM	SOUTH LEG TO	SOUTH LEG LINK	WEST LEG FROM	WEST LEG TO	WEST LEG LINK
CONTROL LINK VOLUMES		1761	809	2570	1219	2731	3950	1428	1512	2940	2251	1609	3860
2013	TURN SUMMARY	1761	809	2570	1220	2731	3951	1429	1512	2941	2252	1609	3861
CONTROL LINK VOLUMES		1761	809	2570	1219	2731	3950	1428	1512	2940	2251	1609	3860
2013	TURN SUMMARY	1763	809	2572	1216	2731	3947	1427	1512	2939	2255	1609	3864
CONTROL LINK VOLUMES		1761	809	2570	1219	2731	3950	1428	1512	2940	2251	1609	3860
2023	TURN SUMMARY	1763	809	2572	1216	2731	3947	1426	1512	2938	2256	1609	3865
CONTROL LINK VOLUMES		1761	809	2570	1219	2731	3950	1428	1512	2940	2251	1609	3860
2033	TURN SUMMARY	1764	809	2573	1215	2731	3946	1426	1512	2938	2256	1609	3865
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		1659	1191	2850	2184	2086	4270	1785	1845	3630	1904	2406	4310
2013	TURN SUMMARY	1658	1191	2849	2183	2086	4269	1784	1845	3629	1903	2406	4309
CONTROL LINK VOLUMES		1659	1191	2850	2184	2086	4270	1785	1845	3630	1904	2406	4310
2013	TURN SUMMARY	1658	1191	2849	2182	2086	4268	1784	1845	3629	1903	2406	4309
CONTROL LINK VOLUMES		1659	1191	2850	2184	2086	4270	1785	1845	3630	1904	2406	4310
2023	TURN SUMMARY	1658	1191	2849	2182	2086	4268	1784	1845	3629	1904	2406	4310
CONTROL LINK VOLUMES		1659	1191	2850	2184	2086	4270	1785	1845	3630	1904	2406	4310
2033	TURN SUMMARY	1658	1191	2849	2182	2086	4268	1784	1845	3629	1904	2406	4310

Note: Boxed number indicates manual adjustment.

PGA BOULEVARD (NORTH MILITARY TRAIL TO LAKE VICTORIA)

CORRIDOR

Intersection: West Ramps

Appendix D - 2013 TMTools & Existing Conditions Analysis Synchro Reports

TMTOOL INPUT SHEET

Project Description:

SECTION NO:		PREPARED BY:	
FM NO.:		FILE:	
PROJECT LIMITS:		DATE:	
DESIGN YEAR:			
INTERSECTION:	PGA Blvd. & West Ramps		

NOTES: AADT & TMC data for (4/23, 4/24, 4/25) for all stations; data was averaged.

Historical AADTs:

	YEAR / STATION	NORTH LEG AADT 1049	EAST LEG AADT 1054	SOUTH LEG AADT 1051	WEST LEG AADT 1050
Actual AADT:	2004				
Actual AADT:	2005				
Actual AADT:	2006				
Actual AADT:	2013	5,947	43,007	10,363	47,830
TCRPM Volume:	2013	0	0	0	0

24-HOUR TOTAL

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic Trend GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	
Historic + Model Trend GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	
2000 Model to 2030 Model GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	CGR
Recommended Growth Rate:	**0.00%**	**CGR**	**0.00%**	**CGR**	**0.00%**	**CGR**	**0.00%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
		1		1		1		1	
	YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
	2013		21,000		21,000		21,000		21,000
NO. YEARS	0 2013	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000
NO. YEARS	10 2023	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000
NO. YEARS	20 2033	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000

Percent Turns Calculated From Base Year AADTs:

JKTURNS		FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	21,000			21,000			21,000			21,000			
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT		
21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000		
33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%		
2013 2-WAY ADT	21,000			21,000			21,000			21,000			
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT		
21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000		
33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%		
2023 2-WAY ADT	21,000			21,000			21,000			21,000			
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT		
21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000		
33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%		
2033 2-WAY ADT	21,000			21,000			21,000			21,000			
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT		
21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000		
33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%		

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	1,018			3,689			1,169			3,952			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:45 - 8:30	56	0	962	0	1,163	0	0	0	0	1,169	1,564	0	4,914
% TURNS:	6%	0%	94%	0%	100%	0%	0%	0%	0%	43%	57%	0%	
P.M.	2-Way Pk Hr Vol:	403			3,639			939			4,269			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:00 - 5:45	47	0	356	0	2,137	0	0	0	0	939	1,146	0	4,625
% TURNS:	12%	0%	88%	0%	100%	0%	0%	0%	0%	45%	55%	0%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		SB			WB			NB			EB		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	
A.M.													
2013	6%	0%	94%	0%	100%	0%	0%	0%	0%	43%	57%	0%	
2013	8%	3%	88%	3%	93%	3%	3%	3%	3%	42%	55%	3%	
2023	9%	4%	87%	4%	92%	4%	4%	4%	4%	42%	54%	4%	
2033	10%	6%	84%	6%	89%	6%	6%	6%	6%	41%	53%	6%	
P.M.													
2013	12%	0%	88%	0%	100%	0%	0%	0%	0%	45%	55%	0%	
2013	14%	3%	83%	3%	93%	3%	3%	3%	3%	44%	53%	3%	
2023	14%	4%	81%	4%	92%	4%	4%	4%	4%	44%	52%	4%	
2033	15%	6%	79%	6%	89%	6%	6%	6%	6%	43%	51%	6%	

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: 0
FM NO.: 0
PROJECT LIMITS: 0
DESIGN YEAR: 0
INTERSECTION: PGA Blvd. & West Ramps
PREPARED BY: 0
FILE: 0

DATE: 1/0/1900
NOTES: AADT & TMC data for (4/23, 4/24, 4/25) for all stations; data was averaged.
0
0
0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	21,000	21,000	21,000	21,000
24 HR EST. AADT	2013	21,000	21,000	21,000	21,000
24 HR EST. AADT	2023	21,000	21,000	21,000	21,000
24 HR EST. AADT	2033	21,000	21,000	21,000	21,000

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	4.8%	1.9%	17.6%	17.3%	5.6%	4.5%	18.8%	20.3%
2013	Approach K30 factor	4.8%	1.9%	17.6%	17.3%	5.6%	4.5%	18.8%	20.3%
2023	Approach K30 factor	4.8%	1.9%	17.6%	17.3%	5.6%	4.5%	18.8%	20.3%
2033	Approach K30 factor	4.8%	1.9%	17.6%	17.3%	5.6%	4.5%	18.8%	20.3%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	100.0%	100.0%	31.5%	58.7%	0.0%	0.0%	69.2%	48.8%
2013	Approach D30 Factor	100.0%	100.0%	31.5%	58.7%	0.0%	0.0%	69.2%	48.8%
2023	Approach D30 Factor	100.0%	100.0%	31.5%	58.7%	0.0%	0.0%	69.2%	48.8%
2033	Approach D30 Factor	100.0%	100.0%	31.5%	58.7%	0.0%	0.0%	69.2%	48.8%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2013	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2023	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2033	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
P.M. DESIGN HR. TURNS													
2013	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2013	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2023	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2033	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		1018	2	1020	1163	2527	3690	0	1170	1170	2733	1217	3950
2013	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		1018	2	1020	1163	2527	3690	0	1170	1170	2733	1217	3950
2013	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		1018	2	1020	1163	2527	3690	0	1170	1170	2733	1217	3950
2023	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		1018	2	1020	1163	2527	3690	0	1170	1170	2733	1217	3950
2033	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		403	-3	400	2137	1503	3640	0	940	940	2085	2185	4270
2013	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		403	-3	400	2137	1503	3640	0	940	940	2085	2185	4270
2013	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		403	-3	400	2137	1503	3640	0	940	940	2085	2185	4270
2023	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		403	-3	400	2137	1503	3640	0	940	940	2085	2185	4270
2033	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Note: Boxed number indicates manual adjustment.

PGA BOULEVARD (NORTH MILITARY TRAIL TO LAKE VICTORIA)

CORRIDOR

Intersection: NB OFF Ramp

TMTOOL INPUT SHEET

Project Description:

SECTION NO:		PREPARED BY:	
FM NO.:		FILE:	
PROJECT LIMITS:		DATE:	
DESIGN YEAR:			
INTERSECTION:	PGA Blvd. & NB Off Ramps		

NOTES:

Historical AADTs:

	YEAR / STATION	NORTH LEG AADT 0	EAST LEG AADT 1054	SOUTH LEG AADT 1062	WEST LEG AADT 1063	
Actual AADT:	2004					24-HOUR TOTAL
Actual AADT:	2005					
Actual AADT:	2006					
Actual AADT:	2013	0	58,994	22,152	43,007	
TCRPM Volume:	2013	0	0	0	0	

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic Trend GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	
Historic + Model Trend GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	
2000 Model to 2030 Model GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	CGR
Recommended Growth Rate:	**0.00%**	**CGR**	**0.00%**	**CGR**	**0.00%**	**CGR**	**0.00%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

			NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
			1		1		1		1	
		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
		2013		21,000		21,000		21,000		21,000
NO. YEARS	0	2013	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000
NO. YEARS	10	2023	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000
NO. YEARS	20	2033	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000

Percent Turns Calculated From Base Year AADTs:

JKTURNS		FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	21,000			21,000			21,000			21,000			
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT		
21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000		
33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%		
2013 2-WAY ADT	21,000			21,000			21,000			21,000			
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT		
21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000		
33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%		
2023 2-WAY ADT	21,000			21,000			21,000			21,000			
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT		
21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000		
33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%		
2033 2-WAY ADT	21,000			21,000			21,000			21,000			
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT		
21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000		
33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%		

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	0			6,086			2,396			3,690			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:45 - 8:30	0	0	0	0	1,164	0	2,396	0	0	0	2,526	0	6,086
% TURNS:	0%	0%	0%	0%	100%	0%	100%	0%	0%	0%	100%	0%	
P.M.	2-Way Pk Hr Vol:	0			5,601			1,961			3,640			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:00 - 5:45	0	0	0	0	2,138	0	1,961	0	0	0	1,502	0	5,601
% TURNS:	0%	0%	0%	0%	100%	0%	100%	0%	0%	0%	100%	0%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		SB			WB			NB			EB		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	
A.M.													
2013	0%	0%	0%	0%	100%	0%	100%	0%	0%	0%	100%	0%	
2013	3%	3%	3%	3%	93%	3%	93%	3%	3%	3%	93%	3%	
2023	4%	4%	4%	4%	92%	4%	92%	4%	4%	4%	92%	4%	
2033	6%	6%	6%	6%	89%	6%	89%	6%	6%	6%	89%	6%	
P.M.													
2013	0%	0%	0%	0%	100%	0%	100%	0%	0%	0%	100%	0%	
2013	3%	3%	3%	3%	93%	3%	93%	3%	3%	3%	93%	3%	
2023	4%	4%	4%	4%	92%	4%	92%	4%	4%	4%	92%	4%	
2033	6%	6%	6%	6%	89%	6%	89%	6%	6%	6%	89%	6%	

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: 0
FM NO.: 0
PROJECT LIMITS: 0
DESIGN YEAR: 0
INTERSECTION: PGA Blvd. & NB Off Ramps
PREPARED BY: 0
FILE: 0

DATE: 1/0/1900
NOTES: 0
0
0
0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	21,000	21,000	21,000	21,000
24 HR EST. AADT	2013	21,000	21,000	21,000	21,000
24 HR EST. AADT	2023	21,000	21,000	21,000	21,000
24 HR EST. AADT	2033	21,000	21,000	21,000	21,000

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	0.0%	0.0%	29.0%	26.7%	11.4%	9.3%	17.6%	17.3%
2013	Approach K30 factor	0.0%	0.0%	29.0%	26.7%	11.4%	9.3%	17.6%	17.3%
2023	Approach K30 factor	0.0%	0.0%	29.0%	26.7%	11.4%	9.3%	17.6%	17.3%
2033	Approach K30 factor	0.0%	0.0%	29.0%	26.7%	11.4%	9.3%	17.6%	17.3%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	#DIV/0!	#DIV/0!	19.1%	38.2%	100.0%	100.0%	68.5%	41.3%
2013	Approach D30 Factor	#DIV/0!	#DIV/0!	19.1%	38.2%	100.0%	100.0%	68.5%	41.3%
2023	Approach D30 Factor	#DIV/0!	#DIV/0!	19.1%	38.2%	100.0%	100.0%	68.5%	41.3%
2033	Approach D30 Factor	#DIV/0!	#DIV/0!	19.1%	38.2%	100.0%	100.0%	68.5%	41.3%

A.M. DESIGN HR. TURNS		NORTH LEG RIGHT	NORTH LEG THRU	NORTH LEG LEFT	EAST LEG RIGHT	EAST LEG THRU	EAST LEG LEFT	SOUTH LEG RIGHT	SOUTH LEG THRU	SOUTH LEG LEFT	WEST LEG RIGHT	WEST LEG THRU	WEST LEG LEFT
2013	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2013	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2023	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2033	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
P.M. DESIGN HR. TURNS													
2013	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2013	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2023	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2033	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

LINK VOLUME CHECK

DESIGN HOUR A.M.:		NORTH LEG FROM	NORTH LEG TO	NORTH LEG LINK	EAST LEG FROM	EAST LEG TO	EAST LEG LINK	SOUTH LEG FROM	SOUTH LEG TO	SOUTH LEG LINK	WEST LEG FROM	WEST LEG TO	WEST LEG LINK
CONTROL LINK VOLUMES		#DIV/0!	#DIV/0!	#DIV/0!	1164	4926	6090	2396	4	2400	2526	1164	3690
2013	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		#DIV/0!	#DIV/0!	#DIV/0!	1164	4926	6090	2396	4	2400	2526	1164	3690
2013	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		#DIV/0!	#DIV/0!	#DIV/0!	1164	4926	6090	2396	4	2400	2526	1164	3690
2023	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		#DIV/0!	#DIV/0!	#DIV/0!	1164	4926	6090	2396	4	2400	2526	1164	3690
2033	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		#DIV/0!	#DIV/0!	#DIV/0!	2138	3462	5600	1961	-1	1960	1502	2138	3640
2013	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		#DIV/0!	#DIV/0!	#DIV/0!	2138	3462	5600	1961	-1	1960	1502	2138	3640
2013	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		#DIV/0!	#DIV/0!	#DIV/0!	2138	3462	5600	1961	-1	1960	1502	2138	3640
2023	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		#DIV/0!	#DIV/0!	#DIV/0!	2138	3462	5600	1961	-1	1960	1502	2138	3640
2033	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Note: Boxed number indicates manual adjustment.

PGA BOULEVARD (NORTH MILITARY TRAIL TO LAKE VICTORIA)

CORRIDOR

Intersection: NB ON Ramp

TMTOOL INPUT SHEET

Project Description:

SECTION NO:		PREPARED BY:	
FM NO.:		FILE:	
PROJECT LIMITS:		DATE:	
DESIGN YEAR:			
INTERSECTION:	PGA Blvd. & NB ON Ramp		

NOTES: No station data found for station 1055

Historical AADTs:

	YEAR / STATION	NORTH LEG AADT 1075	EAST LEG AADT 1055	SOUTH LEG AADT 0	WEST LEG AADT 1063	
Actual AADT:	2004					
Actual AADT:	2005					24-HOUR TOTAL
Actual AADT:	2006					
Actual AADT:	2013	9,043	0	0	58,997	
TCRPM Volume:	2013	0	0	0	0	

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic Trend GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	
Historic + Model Trend GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	
2000 Model to 2030 Model GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	CGR
Recommended Growth Rate:	**0.00%**	**CGR**	**0.00%**	**CGR**	**0.00%**	**CGR**	**0.00%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

			NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
			1		1		1		1	
		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
		2013		21,000		21,000		21,000		21,000
NO. YEARS	0	2013	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000
NO. YEARS	10	2023	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000
NO. YEARS	20	2033	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000

Percent Turns Calculated From Base Year AADTs:

JKTURNS		FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	21,000			21,000			21,000			21,000			
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT		
21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000		
33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%		
2013 2-WAY ADT	21,000			21,000			21,000			21,000			
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT		
21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000		
33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%		
2023 2-WAY ADT	21,000			21,000			21,000			21,000			
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT		
21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000		
33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%		
2033 2-WAY ADT	21,000			21,000			21,000			21,000			
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT		
21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000		
33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%		

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	995			5,463			0			6,084			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:45 - 8:30	714	0	0	187	450	0	0	0	0	0	4,826	94	6,271
% TURNS:	100%	0%	0%	29%	71%	0%	0%	0%	0%	0%	98%	2%	
P.M.	2-Way Pk Hr Vol:	1,628			5,175			0			5,599			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:00 - 5:45	905	0	0	602	1,233	0	0	0	0	0	3,340	121	6,201
% TURNS:	100%	0%	0%	33%	67%	0%	0%	0%	0%	0%	97%	3%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		SB			WB			NB			EB		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	
A.M.													
2013	100%	0%	0%	29%	71%	0%	0%	0%	0%	0%	98%	2%	
2013	93%	3%	3%	30%	67%	3%	3%	3%	3%	3%	92%	5%	
2023	92%	4%	4%	30%	66%	4%	4%	4%	4%	4%	90%	6%	
2033	89%	6%	6%	30%	64%	6%	6%	6%	6%	6%	87%	7%	
P.M.													
2013	100%	0%	0%	33%	67%	0%	0%	0%	0%	0%	97%	3%	
2013	93%	3%	3%	33%	64%	3%	3%	3%	3%	3%	90%	6%	
2023	92%	4%	4%	33%	63%	4%	4%	4%	4%	4%	89%	7%	
2033	89%	6%	6%	33%	62%	6%	6%	6%	6%	6%	86%	8%	

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: 0
FM NO.: 0
PROJECT LIMITS: 0
DESIGN YEAR: 0
INTERSECTION: PGA Blvd. & NB ON Ramp
PREPARED BY: 0
FILE: 0

DATE: 1/0/1900
NOTES: No station data found for station 1055
0
0
0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	21,000	21,000	21,000	21,000
24 HR EST. AADT	2013	21,000	21,000	21,000	21,000
24 HR EST. AADT	2023	21,000	21,000	21,000	21,000
24 HR EST. AADT	2033	21,000	21,000	21,000	21,000

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	4.7%	7.8%	26.0%	24.6%	0.0%	0.0%	29.0%	26.7%
2013	Approach K30 factor	4.7%	7.8%	26.0%	24.6%	0.0%	0.0%	29.0%	26.7%
2023	Approach K30 factor	4.7%	7.8%	26.0%	24.6%	0.0%	0.0%	29.0%	26.7%
2033	Approach K30 factor	4.7%	7.8%	26.0%	24.6%	0.0%	0.0%	29.0%	26.7%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	71.8%	55.6%	11.7%	35.5%	#DIV/0!	#DIV/0!	80.9%	61.8%
2013	Approach D30 Factor	71.8%	55.6%	11.7%	35.5%	#DIV/0!	#DIV/0!	80.9%	61.8%
2023	Approach D30 Factor	71.8%	55.6%	11.7%	35.5%	#DIV/0!	#DIV/0!	80.9%	61.8%
2033	Approach D30 Factor	71.8%	55.6%	11.7%	35.5%	#DIV/0!	#DIV/0!	80.9%	61.8%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2013	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2023	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2033	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
P.M. DESIGN HR. TURNS													
2013	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2013	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2023	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2033	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		714	286	1000	637	4823	5460	#DIV/0!	#DIV/0!	#DIV/0!	4920	1160	6080
2013	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		714	286	1000	637	4823	5460	#DIV/0!	#DIV/0!	#DIV/0!	4920	1160	6080
2013	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		714	286	1000	637	4823	5460	#DIV/0!	#DIV/0!	#DIV/0!	4920	1160	6080
2023	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		714	286	1000	637	4823	5460	#DIV/0!	#DIV/0!	#DIV/0!	4920	1160	6080
2033	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		905	725	1630	1835	3345	5180	#DIV/0!	#DIV/0!	#DIV/0!	3461	2139	5600
2013	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		905	725	1630	1835	3345	5180	#DIV/0!	#DIV/0!	#DIV/0!	3461	2139	5600
2013	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		905	725	1630	1835	3345	5180	#DIV/0!	#DIV/0!	#DIV/0!	3461	2139	5600
2023	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		905	725	1630	1835	3345	5180	#DIV/0!	#DIV/0!	#DIV/0!	3461	2139	5600
2033	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Note: Boxed number indicates manual adjustment.

PGA BOULEVARD (NORTH MILITARY TRAIL TO LAKE VICTORIA)

CORRIDOR

Intersection: RCA Boulevard

TMTOOL INPUT SHEET

Project Description:

SECTION NO:		PREPARED BY:	
FM NO.:		FILE:	
PROJECT LIMITS:		DATE:	
DESIGN YEAR:			
INTERSECTION:	PGA Blvd. & RCA Blvd.		

NOTES:

AADT & TMC data was compiled on (4/25/2013) only.
Machine 1067 was not specified/placed on KMZ file.

Historical AADTs:

	YEAR / STATION	NORTH LEG AADT 0	EAST LEG AADT 5610	SOUTH LEG AADT 7894	WEST LEG AADT 5501
Actual AADT:	2004				
Actual AADT:	2005				
Actual AADT:	2006				
Actual AADT:	2013	0	70,813	7,894	57,750
TCRPM Volume:	2013	0	0	0	0

24-HOUR TOTAL

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic Trend GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	
Historic + Model Trend GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	
2000 Model to 2030 Model GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	CGR
Recommended Growth Rate:	**0.00%**	**CGR**	**0.00%**	**CGR**	**0.00%**	**CGR**	**0.00%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
		1		1		1		1	
	YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
	2013		21,000		21,000		21,000		21,000
NO. YEARS	0 2013	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000
NO. YEARS	10 2023	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000
NO. YEARS	20 2033	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	21,000			21,000			21,000			21,000		
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	
21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	
33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	
2013 2-WAY ADT	21,000			21,000			21,000			21,000		
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	
21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	
33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	
2023 2-WAY ADT	21,000			21,000			21,000			21,000		
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	
21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	
33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	
2033 2-WAY ADT	21,000			21,000			21,000			21,000		
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	
21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	
33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	0			4,631			1,104			5,463			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:45 - 8:30	0	0	0	0	637	24	112	0	0	968	3,858	0	5,599
% TURNS:	0%	0%	0%	0%	96%	4%	100%	0%	0%	20%	80%	0%	
P.M.	2-Way Pk Hr Vol:	0			5,137			639			5,174			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:00 - 5:45	0	0	0	0	1,834	82	219	0	0	338	3,002	0	5,475
% TURNS:	0%	0%	0%	0%	96%	4%	100%	0%	0%	10%	90%	0%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		SB			WB			NB			EB		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	
A.M.													
2013	0%	0%	0%	0%	96%	4%	100%	0%	0%	20%	80%	0%	
2013	3%	3%	3%	3%	90%	7%	93%	3%	3%	21%	75%	3%	
2023	4%	4%	4%	4%	88%	7%	92%	4%	4%	22%	74%	4%	
2033	6%	6%	6%	6%	86%	9%	89%	6%	6%	22%	72%	6%	
P.M.													
2013	0%	0%	0%	0%	96%	4%	100%	0%	0%	10%	90%	0%	
2013	3%	3%	3%	3%	89%	7%	93%	3%	3%	12%	84%	3%	
2023	4%	4%	4%	4%	88%	8%	92%	4%	4%	13%	83%	4%	
2033	6%	6%	6%	6%	85%	9%	89%	6%	6%	14%	80%	6%	

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: 0
FM NO.: 0
PROJECT LIMITS: 0
DESIGN YEAR: 0
INTERSECTION: PGA Blvd. & RCA Blvd.
PREPARED BY: 0
FILE: 0

DATE: 1/0/1900
NOTES: AADT & TMC data was compiled on (4/25/2013) only.
Machine 1067 was not specified/placed on KMZ file.
0
0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	21,000	21,000	21,000	21,000
24 HR EST. AADT	2013	21,000	21,000	21,000	21,000
24 HR EST. AADT	2023	21,000	21,000	21,000	21,000
24 HR EST. AADT	2033	21,000	21,000	21,000	21,000

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	0.0%	0.0%	22.1%	24.5%	5.3%	3.0%	26.0%	24.6%
2013	Approach K30 factor	0.0%	0.0%	22.1%	24.5%	5.3%	3.0%	26.0%	24.6%
2023	Approach K30 factor	0.0%	0.0%	22.1%	24.5%	5.3%	3.0%	26.0%	24.6%
2033	Approach K30 factor	0.0%	0.0%	22.1%	24.5%	5.3%	3.0%	26.0%	24.6%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	#DIV/0!	#DIV/0!	14.3%	37.3%	10.1%	34.3%	88.3%	64.6%
2013	Approach D30 Factor	#DIV/0!	#DIV/0!	14.3%	37.3%	10.1%	34.3%	88.3%	64.6%
2023	Approach D30 Factor	#DIV/0!	#DIV/0!	14.3%	37.3%	10.1%	34.3%	88.3%	64.6%
2033	Approach D30 Factor	#DIV/0!	#DIV/0!	14.3%	37.3%	10.1%	34.3%	88.3%	64.6%

A.M. DESIGN HR. TURNS		NORTH LEG RIGHT	NORTH LEG THRU	NORTH LEG LEFT	EAST LEG RIGHT	EAST LEG THRU	EAST LEG LEFT	SOUTH LEG RIGHT	SOUTH LEG THRU	SOUTH LEG LEFT	WEST LEG RIGHT	WEST LEG THRU	WEST LEG LEFT
2013	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2013	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2023	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2033	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
P.M. DESIGN HR. TURNS													
2013	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2013	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2023	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2033	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

LINK VOLUME CHECK

DESIGN HOUR A.M.:		NORTH LEG FROM	NORTH LEG TO	NORTH LEG LINK	EAST LEG FROM	EAST LEG TO	EAST LEG LINK	SOUTH LEG FROM	SOUTH LEG TO	SOUTH LEG LINK	WEST LEG FROM	WEST LEG TO	WEST LEG LINK
CONTROL LINK VOLUMES		#DIV/0!	#DIV/0!	#DIV/0!	661	3969	4630	112	988	1100	4826	634	5460
2013	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		#DIV/0!	#DIV/0!	#DIV/0!	661	3969	4630	112	988	1100	4826	634	5460
2013	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		#DIV/0!	#DIV/0!	#DIV/0!	661	3969	4630	112	988	1100	4826	634	5460
2023	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		#DIV/0!	#DIV/0!	#DIV/0!	661	3969	4630	112	988	1100	4826	634	5460
2033	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		#DIV/0!	#DIV/0!	#DIV/0!	1916	3224	5140	219	421	640	3340	1830	5170
2013	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		#DIV/0!	#DIV/0!	#DIV/0!	1916	3224	5140	219	421	640	3340	1830	5170
2013	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		#DIV/0!	#DIV/0!	#DIV/0!	1916	3224	5140	219	421	640	3340	1830	5170
2023	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		#DIV/0!	#DIV/0!	#DIV/0!	1916	3224	5140	219	421	640	3340	1830	5170
2033	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Note: Boxed number indicates manual adjustment.

PGA BOULEVARD (NORTH MILITARY TRAIL TO LAKE VICTORIA)

CORRIDOR

Intersection: Lake Victoria

TMTOOL INPUT SHEET

Project Description:

SECTION NO:		PREPARED BY:	
FM NO.:		FILE:	
PROJECT LIMITS:		DATE:	
DESIGN YEAR:			
INTERSECTION:	PGA Blvd. & Lake Victoria Gardens		

NOTES:

AADT data collected on machine 1057 (4/23, 4/24, 4/25) was averaged.
Machine **1057** was also labeled as 7501

Historical AADTs:

	YEAR STATION	NORTH LEG AADT 1070	EAST LEG AADT 1057	SOUTH LEG AADT 1068	WEST LEG AADT 6501
Actual AADT:	2004				
Actual AADT:	2005				
Actual AADT:	2006				
Actual AADT:	2013	8,291	57,768	9,305	69,391
TCRPM Volume:	2013	0	0	0	0

24-HOUR TOTAL

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic Trend GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	
Historic + Model Trend GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	
2000 Model to 2030 Model GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	CGR
Recommended Growth Rate:	**0.00%**	**CGR**	**0.00%**	**CGR**	**0.00%**	**CGR**	**0.00%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

			NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
			1		1		1		1	
		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
		2013		21,000		21,000		21,000		21,000
NO. YEARS	0	2013	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000
NO. YEARS	10	2023	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000
NO. YEARS	20	2033	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000

Percent Turns Calculated From Base Year AADTs:

JKTURNS		FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	21,000			21,000			21,000			21,000			
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	
21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	
33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	
2013 2-WAY ADT	21,000			21,000			21,000			21,000		
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	
21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	
33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	
2023 2-WAY ADT	21,000			21,000			21,000			21,000		
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	
21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	
33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	
2033 2-WAY ADT	21,000			21,000			21,000			21,000		
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	
21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	
33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	447			3,867			547			4,631			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
8:00 - 8:45	45	14	0	0	593	0	100	1	24	408	3,174	387	4,746
% TURNS:	76%	24%	0%	0%	100%	0%	80%	1%	19%	10%	80%	10%	
P.M.	2-Way Pk Hr Vol:	657			4,097			783			5,133			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
4:45 - 5:30	190	64	0	0	1,529	0	138	0	194	387	2,430	403	5,335
% TURNS:	75%	25%	0%	0%	100%	0%	42%	0%	58%	12%	75%	13%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		SB			WB			NB			EB		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	
A.M.													
2013	76%	24%	0%	0%	100%	0%	80%	1%	19%	10%	80%	10%	
2013	72%	25%	3%	3%	93%	3%	75%	4%	21%	13%	75%	12%	
2023	71%	25%	4%	4%	92%	4%	74%	5%	21%	13%	74%	13%	
2033	69%	25%	6%	6%	89%	6%	72%	6%	22%	14%	72%	14%	
P.M.													
2013	75%	25%	0%	0%	100%	0%	42%	0%	58%	12%	75%	13%	
2013	71%	26%	3%	3%	93%	3%	41%	3%	56%	14%	71%	15%	
2023	70%	26%	4%	4%	92%	4%	41%	4%	55%	15%	70%	15%	
2033	68%	27%	6%	6%	89%	6%	40%	6%	54%	16%	68%	16%	

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: 0
FM NO.: 0
PROJECT LIMITS: 0
DESIGN YEAR: 0
INTERSECTION: PGA Blvd. & Lake Victoria Gardens
PREPARED BY: 0
FILE: 0

DATE: 1/0/1900
NOTES: AADT data collected on machine 1057 (4/23, 4/24, 4/25) was averaged.
Machine 1057 was also labeled as 7501
0
0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	21,000	21,000	21,000	21,000
24 HR EST. AADT	2013	21,000	21,000	21,000	21,000
24 HR EST. AADT	2023	21,000	21,000	21,000	21,000
24 HR EST. AADT	2033	21,000	21,000	21,000	21,000

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	2.1%	3.1%	18.4%	19.5%	2.6%	3.7%	22.1%	24.4%
2013	Approach K30 factor	2.1%	3.1%	18.4%	19.5%	2.6%	3.7%	22.1%	24.4%
2023	Approach K30 factor	2.1%	3.1%	18.4%	19.5%	2.6%	3.7%	22.1%	24.4%
2033	Approach K30 factor	2.1%	3.1%	18.4%	19.5%	2.6%	3.7%	22.1%	24.4%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	13.2%	38.7%	15.3%	37.3%	22.9%	42.4%	85.7%	62.7%
2013	Approach D30 Factor	13.2%	38.7%	15.3%	37.3%	22.9%	42.4%	85.7%	62.7%
2023	Approach D30 Factor	13.2%	38.7%	15.3%	37.3%	22.9%	42.4%	85.7%	62.7%
2033	Approach D30 Factor	13.2%	38.7%	15.3%	37.3%	22.9%	42.4%	85.7%	62.7%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS	45	14	0	0	592	0	100	1	24	411	3,177	390
2013	EST. TURNS	44	15	2	13	588	14	93	4	29	396	3,183	374
2023	EST. TURNS	43	16	2	15	587	16	91	4	31	394	3,184	372
2033	EST. TURNS	43	16	2	18	586	19	89	5	33	390	3,186	368
P.M. DESIGN HR. TURNS													
2013	EST. TURNS	189	65	0	0	1527	0	139	0	193	383	2,432	406
2013	EST. TURNS	187	66	6	32	1516	32	122	7	207	350	2,442	366
2023	EST. TURNS	186	67	8	37	1,515	36	120	8	209	345	2,444	361
2033	EST. TURNS	184	69	9	43	1514	42	116	10	212	337	2,445	353

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		59	391	450	593	3277	3870	125	425	550	3969	661	4630
2013	TURN SUMMARY	59	391	450	592	3277	3869	125	425	550	3978	661	4639
CONTROL LINK VOLUMES		59	391	450	593	3277	3870	125	425	550	3969	661	4630
2013	TURN SUMMARY	61	391	452	615	3277	3892	126	425	551	3953	661	4614
CONTROL LINK VOLUMES		59	391	450	593	3277	3870	125	425	550	3969	661	4630
2023	TURN SUMMARY	61	391	452	618	3277	3895	126	425	551	3949	661	4610
CONTROL LINK VOLUMES		59	391	450	593	3277	3870	125	425	550	3969	661	4630
2033	TURN SUMMARY	61	391	452	623	3277	3900	126	425	551	3944	661	4605
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		254	406	660	1529	2571	4100	332	448	780	3220	1910	5130
2013	TURN SUMMARY	254	406	660	1527	2571	4098	332	448	780	3222	1910	5132
CONTROL LINK VOLUMES		254	406	660	1529	2571	4100	332	448	780	3220	1910	5130
2013	TURN SUMMARY	260	406	666	1580	2571	4151	336	448	784	3159	1910	5069
CONTROL LINK VOLUMES		254	406	660	1529	2571	4100	332	448	780	3220	1910	5130
2023	TURN SUMMARY	260	406	666	1588	2571	4159	337	448	785	3149	1910	5059
CONTROL LINK VOLUMES		254	406	660	1529	2571	4100	332	448	780	3220	1910	5130
2033	TURN SUMMARY	262	406	668	1600	2571	4171	338	448	786	3135	1910	5045

Note: Boxed number indicates manual adjustment.

NORTHLAKE BOULEVARD

CORRIDOR

From: Keating Drive

To: Sandtree Drive

NORTHLAKE BOULEVARD

CORRIDOR

Intersection: Keating Drive

TMTOOL INPUT SHEET

Project Description:

SECTION NO:		PREPARED BY:	
FM NO.:		FILE:	
PROJECT LIMITS:		DATE:	
DESIGN YEAR:			
INTERSECTION:	Northlake Blvd & Keating Dr.		

NOTES:

Historical AADTs:

	YEAR STATION	NORTH LEG AADT 1139	EAST LEG AADT 7311	SOUTH LEG AADT 1138	WEST LEG AADT 411	
Actual AADT:	2004					
Actual AADT:	2005					24-HOUR TOTAL
Actual AADT:	2006					
Actual AADT:	2013	11797	49533	3371	50615	
TCRPM Volume:	2013	0	0	0	0	

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic Trend GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	
Historic + Model Trend GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	
2000 Model to 2030 Model GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	CGR
Recommended Growth Rate:	**0.00%**	**CGR**	**0.00%**	**CGR**	**0.00%**	**CGR**	**0.00%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	NORTH LEG FACTOR	NORTH LEG AADT	EAST LEG FACTOR	EAST LEG AADT	SOUTH LEG FACTOR	SOUTH LEG AADT	WEST LEG FACTOR	WEST LEG AADT
			1		**1**		**1**		**1**	
		2013		21,000		21,000		21,000		21,000
NO. YEARS	0	2013	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000
NO. YEARS	10	2023	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000
NO. YEARS	20	2033	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000

Percent Turns Calculated From Base Year AADTs:

JKTURNS		FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	21,000			21,000			21,000			21,000			
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT		
21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000		
33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%		
2013 2-WAY ADT	21,000			21,000			21,000			21,000			
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT		
21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000		
33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%		
2023 2-WAY ADT	21,000			21,000			21,000			21,000			
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT		
21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000		
33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%		
2033 2-WAY ADT	21,000			21,000			21,000			21,000			
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT		
21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000		
33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%		

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	263			4,014			346			3,821			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:45 - 8:30	27	13	124	66	1,408	118	76	4	53	82	2,222	29	4,222
% TURNS:	16%	8%	76%	4%	88%	7%	57%	3%	40%	4%	95%	1%	
P.M.	2-Way Pk Hr Vol:	509			4,107			1,140			3,926			
5:00 - 5:45	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL	
	66	31	155	173	1,728	276	246	34	308	245	1,529	50	4,841	
% TURNS:	26%	12%	62%	8%	79%	13%	42%	6%	52%	13%	84%	3%		

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		SB			WB			NB			EB		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	
A.M.													
2013	16%	8%	76%	4%	88%	7%	57%	3%	40%	4%	95%	1%	
2013	18%	10%	71%	7%	83%	10%	55%	6%	39%	6%	89%	4%	
2023	19%	11%	70%	8%	82%	11%	54%	7%	39%	7%	88%	5%	
2033	19%	12%	69%	9%	79%	12%	53%	8%	39%	8%	85%	7%	
P.M.													
2013	26%	12%	62%	8%	79%	13%	42%	6%	52%	13%	84%	3%	
2013	27%	14%	59%	10%	75%	15%	41%	9%	50%	15%	79%	6%	
2023	27%	15%	58%	11%	74%	15%	41%	9%	50%	16%	78%	7%	
2033	27%	16%	57%	12%	72%	16%	40%	10%	49%	17%	75%	8%	

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: 0
FM NO.: 0
PROJECT LIMITS: 0
DESIGN YEAR: 0
INTERSECTION: Northlake Blvd & Keating Dr.
PREPARED BY: 0
FILE: 0

DATE: 1/0/1900
NOTES: 0
0
0
0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	21,000	21,000	21,000	21,000
24 HR EST. AADT	2013	21,000	21,000	21,000	21,000
24 HR EST. AADT	2023	21,000	21,000	21,000	21,000
24 HR EST. AADT	2033	21,000	21,000	21,000	21,000

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	1.3%	2.4%	19.1%	19.6%	1.6%	5.4%	18.2%	18.7%
2013	Approach K30 factor	1.3%	2.4%	19.1%	19.6%	1.6%	5.4%	18.2%	18.7%
2023	Approach K30 factor	1.3%	2.4%	19.1%	19.6%	1.6%	5.4%	18.2%	18.7%
2033	Approach K30 factor	1.3%	2.4%	19.1%	19.6%	1.6%	5.4%	18.2%	18.7%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	62.4%	49.5%	39.7%	53.0%	38.4%	51.6%	61.1%	46.5%
2013	Approach D30 Factor	62.4%	49.5%	39.7%	53.0%	38.4%	51.6%	61.1%	46.5%
2023	Approach D30 Factor	62.4%	49.5%	39.7%	53.0%	38.4%	51.6%	61.1%	46.5%
2033	Approach D30 Factor	62.4%	49.5%	39.7%	53.0%	38.4%	51.6%	61.1%	46.5%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS	27	13	124	64	1407	120	76	4	53	84	2,218	28
2013	EST. TURNS	29	23	112	51	1408	104	79	3	51	89	2,227	42
2023	EST. TURNS	30	26	109	50	1,407	101	79	3	50	89	2,230	43
2033	EST. TURNS	31	31	103	48	1407	97	80	3	50	89	2,235	45
P.M. DESIGN HR. TURNS													
2013	EST. TURNS	66	31	155	174	1731	276	246	34	309	245	1,532	50
2013	EST. TURNS	70	41	143	156	1736	279	256	33	300	232	1,534	69
2023	EST. TURNS	71	43	139	154	1,737	279	258	32	298	230	1,535	72
2033	EST. TURNS	72	47	133	151	1738	279	262	32	295	226	1,538	76

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		164	96	260	1592	2418	4010	133	217	350	2333	1487	3820
2013	TURN SUMMARY	164	96	260	1591	2418	4009	133	217	350	2330	1487	3817
CONTROL LINK VOLUMES		164	96	260	1592	2418	4010	133	217	350	2333	1487	3820
2013	TURN SUMMARY	165	96	261	1563	2418	3981	133	217	350	2358	1487	3845
CONTROL LINK VOLUMES		164	96	260	1592	2418	4010	133	217	350	2333	1487	3820
2023	TURN SUMMARY	165	96	261	1558	2418	3976	133	217	350	2362	1487	3849
CONTROL LINK VOLUMES		164	96	260	1592	2418	4010	133	217	350	2333	1487	3820
2033	TURN SUMMARY	165	96	261	1552	2418	3970	133	217	350	2369	1487	3856
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		252	258	510	2177	1933	4110	588	552	1140	1824	2106	3930
2013	TURN SUMMARY	252	258	510	2181	1933	4114	589	552	1141	1827	2106	3933
CONTROL LINK VOLUMES		252	258	510	2177	1933	4110	588	552	1140	1824	2106	3930
2013	TURN SUMMARY	253	258	511	2172	1933	4105	589	552	1141	1835	2106	3941
CONTROL LINK VOLUMES		252	258	510	2177	1933	4110	588	552	1140	1824	2106	3930
2023	TURN SUMMARY	253	258	511	2170	1933	4103	589	552	1141	1837	2106	3943
CONTROL LINK VOLUMES		252	258	510	2177	1933	4110	588	552	1140	1824	2106	3930
2033	TURN SUMMARY	253	258	511	2168	1933	4101	589	552	1141	1839	2106	3945

Note: Boxed number indicates manual adjustment.

NORTHLAKE BOULEVARD

CORRIDOR

Intersection: I-95 West Ramp

TMTOOL INPUT SHEET

Project Description:

SECTION NO:		PREPARED BY:	
FM NO.:		FILE:	
PROJECT LIMITS:		DATE:	
DESIGN YEAR:			
INTERSECTION:	Northlake Blvd. & I-95 West Ramp		

NOTES:

Historical AADTs:

	YEAR / STATION	NORTH LEG AADT 1136	EAST LEG AADT 1141	SOUTH LEG AADT 1142	WEST LEG AADT 1137
Actual AADT:	2004				
Actual AADT:	2005				
Actual AADT:	2006				
Actual AADT:	2013	7025	50900	10652	49333
TCRPM Volume:	2013	0	0	0	0

24-HOUR TOTAL

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic Trend GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	
Historic + Model Trend GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	
2000 Model to 2030 Model GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	CGR
Recommended Growth Rate:	**0.00%**	**CGR**	**0.00%**	**CGR**	**0.00%**	**CGR**	**0.00%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	NORTH LEG FACTOR	NORTH LEG AADT	EAST LEG FACTOR	EAST LEG AADT	SOUTH LEG FACTOR	SOUTH LEG AADT	WEST LEG FACTOR	WEST LEG AADT
			1		1		1		1	
		2013		21,000		21,000		21,000		21,000
NO. YEARS	0	2013	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000
NO. YEARS	10	2023	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000
NO. YEARS	20	2033	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000

Percent Turns Calculated From Base Year AADTs:

JKTURNS		FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	21,000				21,000			21,000			21,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000
	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%
2013 2-WAY ADT	21,000				21,000			21,000			21,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000
	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%
2023 2-WAY ADT	21,000				21,000			21,000			21,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000
	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%
2033 2-WAY ADT	21,000				21,000			21,000			21,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000
	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	1,112			4,441			1,795			4,016			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:45 - 8:30	460	0	651	1	1,134	1,014	0	0	0	781	1,641	0	5,682
% TURNS:	41%	0%	59%	0%	53%	47%	0%	0%	0%	32%	68%	0%	
P.M.	2-Way Pk Hr Vol:	864			4,527			1,350			4,109			
5:00 - 5:45	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL	
	414	1	447	2	1,765	866	0	0	0	483	1,447	0	5,425	
% TURNS:	48%	0%	52%	0%	67%	33%	0%	0%	0%	25%	75%	0%		

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		SB			WB			NB			EB		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
A.M.												
2013	41%	0%	59%	0%	53%	47%	0%	0%	0%	32%	68%	0%
2013	41%	3%	56%	3%	51%	46%	3%	3%	3%	32%	64%	3%
2023	40%	4%	55%	4%	50%	45%	4%	4%	4%	32%	63%	4%
2033	40%	6%	54%	6%	50%	45%	6%	6%	6%	32%	62%	6%
P.M.												
2013	48%	0%	52%	0%	67%	33%	0%	0%	0%	25%	75%	0%
2013	47%	3%	50%	3%	64%	33%	3%	3%	3%	26%	71%	3%
2023	46%	4%	50%	4%	63%	33%	4%	4%	4%	26%	70%	4%
2033	46%	6%	49%	6%	61%	33%	6%	6%	6%	26%	68%	6%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: 0
FM NO.: 0
PROJECT LIMITS: 0
DESIGN YEAR: 0
INTERSECTION: Northlake Blvd. & I-95 West Ramp
PREPARED BY: 0
FILE: 0

DATE: 1/0/1900
NOTES: 0
0
0
0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	21,000	21,000	21,000	21,000
24 HR EST. AADT	2013	21,000	21,000	21,000	21,000
24 HR EST. AADT	2023	21,000	21,000	21,000	21,000
24 HR EST. AADT	2033	21,000	21,000	21,000	21,000

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	5.3%	4.1%	21.1%	21.6%	8.5%	6.4%	19.1%	19.6%
2013	Approach K30 factor	5.3%	4.1%	21.1%	21.6%	8.5%	6.4%	19.1%	19.6%
2023	Approach K30 factor	5.3%	4.1%	21.1%	21.6%	8.5%	6.4%	19.1%	19.6%
2033	Approach K30 factor	5.3%	4.1%	21.1%	21.6%	8.5%	6.4%	19.1%	19.6%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	99.9%	99.8%	48.4%	58.2%	0.0%	0.0%	60.3%	47.0%
2013	Approach D30 Factor	99.9%	99.8%	48.4%	58.2%	0.0%	0.0%	60.3%	47.0%
2023	Approach D30 Factor	99.9%	99.8%	48.4%	58.2%	0.0%	0.0%	60.3%	47.0%
2033	Approach D30 Factor	99.9%	99.8%	48.4%	58.2%	0.0%	0.0%	60.3%	47.0%

A.M. DESIGN HR. TURNS		NORTH LEG RIGHT	NORTH LEG THRU	NORTH LEG LEFT	EAST LEG RIGHT	EAST LEG THRU	EAST LEG LEFT	SOUTH LEG RIGHT	SOUTH LEG THRU	SOUTH LEG LEFT	WEST LEG RIGHT	WEST LEG THRU	WEST LEG LEFT
2013	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2013	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2023	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2033	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
P.M. DESIGN HR. TURNS													
2013	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2013	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2023	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2033	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

LINK VOLUME CHECK

DESIGN HOUR A.M.:		NORTH LEG FROM	NORTH LEG TO	NORTH LEG LINK	EAST LEG FROM	EAST LEG TO	EAST LEG LINK	SOUTH LEG FROM	SOUTH LEG TO	SOUTH LEG LINK	WEST LEG FROM	WEST LEG TO	WEST LEG LINK
CONTROL LINK VOLUMES		1111	-1	1110	2149	2291	4440	0	1800	1800	2422	1598	4020
2013	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		1111	-1	1110	2149	2291	4440	0	1800	1800	2422	1598	4020
2013	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		1111	-1	1110	2149	2291	4440	0	1800	1800	2422	1598	4020
2023	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		1111	-1	1110	2149	2291	4440	0	1800	1800	2422	1598	4020
2033	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		862	-2	860	2633	1897	4530	0	1350	1350	1930	2180	4110
2013	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		862	-2	860	2633	1897	4530	0	1350	1350	1930	2180	4110
2013	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		862	-2	860	2633	1897	4530	0	1350	1350	1930	2180	4110
2023	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		862	-2	860	2633	1897	4530	0	1350	1350	1930	2180	4110
2033	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Note: Boxed number indicates manual adjustment.

NORTHLAKE BOULEVARD

CORRIDOR

Intersection: I-95 East Ramp

TMTOOL INPUT SHEET

Project Description:

SECTION NO:		PREPARED BY:	
FM NO.:		FILE:	
PROJECT LIMITS:		DATE:	
DESIGN YEAR:			
INTERSECTION:	Northlake Blvd. & I-95 East Ramp		

NOTES:

Historical AADTs:

	YEAR / STATION	NORTH LEG AADT 1136	EAST LEG AADT 1127	SOUTH LEG AADT 1126	WEST LEG AADT 1141
Actual AADT:	2004				
Actual AADT:	2005				
Actual AADT:	2006				
Actual AADT:	2013	7025	50900	10652	49333
TCRPM Volume:	2013	0	0	0	0

24-HOUR TOTAL

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic Trend GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	
Historic + Model Trend GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	
2000 Model to 2030 Model GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	CGR
Recommended Growth Rate:	**0.00%**	**CGR**	**0.00%**	**CGR**	**0.00%**	**CGR**	**0.00%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	NORTH LEG FACTOR	NORTH LEG AADT	EAST LEG FACTOR	EAST LEG AADT	SOUTH LEG FACTOR	SOUTH LEG AADT	WEST LEG FACTOR	WEST LEG AADT
			1		1		1		1	
		2013		21,000		21,000		21,000		21,000
NO. YEARS	0	2013	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000
NO. YEARS	10	2023	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000
NO. YEARS	20	2033	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000

Percent Turns Calculated From Base Year AADTs:

JKTURNS		FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	21,000				21,000			21,000			21,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000
	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%
2013 2-WAY ADT	21,000				21,000			21,000			21,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000
	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%
2023 2-WAY ADT	21,000				21,000			21,000			21,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000
	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%
2033 2-WAY ADT	21,000				21,000			21,000			21,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000
	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	1,036			4,823			1,498			4,441			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:30 - 8:15	0	0	0	412	1,697	0	1,044	2	452	0	1,670	622	5,899
% TURNS:	0%	0%	0%	20%	80%	0%	70%	0%	30%	0%	73%	27%	
P.M.	2-Way Pk Hr Vol:	1,051			4,895			1,193			4,527			
5:00 - 5:45	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL	
	0	0	0	658	2,088	0	647	1	545	0	1,502	392	5,833	
% TURNS:	0%	0%	0%	24%	76%	0%	54%	0%	46%	0%	79%	21%		

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		SB RIGHT	SB THRU	SB LEFT	WB RIGHT	WB THRU	WB LEFT	NB RIGHT	NB THRU	NB LEFT	EB RIGHT	EB THRU	EB LEFT
A.M.													
	2013	0%	0%	0%	20%	80%	0%	70%	0%	30%	0%	73%	27%
	2013	3%	3%	3%	21%	76%	3%	66%	3%	30%	3%	69%	28%
	2023	4%	4%	4%	21%	75%	4%	65%	4%	31%	4%	68%	28%
	2033	6%	6%	6%	22%	73%	6%	64%	6%	31%	6%	66%	28%
P.M.													
	2013	0%	0%	0%	24%	76%	0%	54%	0%	46%	0%	79%	21%
	2013	3%	3%	3%	25%	72%	3%	52%	3%	44%	3%	75%	22%
	2023	4%	4%	4%	25%	71%	4%	52%	4%	44%	4%	74%	22%
	2033	6%	6%	6%	26%	69%	6%	51%	6%	44%	6%	72%	23%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: 0
FM NO.: 0
PROJECT LIMITS: 0
DESIGN YEAR: 0
INTERSECTION: Northlake Blvd. & i-95 East Ramp
PREPARED BY: 0
FILE: 0

DATE: 1/0/1900
NOTES: 0
0
0
0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	21,000	21,000	21,000	21,000
24 HR EST. AADT	2013	21,000	21,000	21,000	21,000
24 HR EST. AADT	2023	21,000	21,000	21,000	21,000
24 HR EST. AADT	2033	21,000	21,000	21,000	21,000

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	4.9%	5.0%	23.0%	23.3%	7.1%	5.7%	21.1%	21.6%
2013	Approach K30 factor	4.9%	5.0%	23.0%	23.3%	7.1%	5.7%	21.1%	21.6%
2023	Approach K30 factor	4.9%	5.0%	23.0%	23.3%	7.1%	5.7%	21.1%	21.6%
2033	Approach K30 factor	4.9%	5.0%	23.0%	23.3%	7.1%	5.7%	21.1%	21.6%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	0.0%	0.0%	43.7%	56.1%	100.0%	100.0%	51.6%	41.8%
2013	Approach D30 Factor	0.0%	0.0%	43.7%	56.1%	100.0%	100.0%	51.6%	41.8%
2023	Approach D30 Factor	0.0%	0.0%	43.7%	56.1%	100.0%	100.0%	51.6%	41.8%
2033	Approach D30 Factor	0.0%	0.0%	43.7%	56.1%	100.0%	100.0%	51.6%	41.8%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2013	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2023	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2033	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
P.M. DESIGN HR. TURNS													
2013	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2013	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2023	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2033	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		0	1040	1040	2109	2711	4820	1498	2	1500	2292	2148	4440
2013	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		0	1040	1040	2109	2711	4820	1498	2	1500	2292	2148	4440
2013	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		0	1040	1040	2109	2711	4820	1498	2	1500	2292	2148	4440
2023	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		0	1040	1040	2109	2711	4820	1498	2	1500	2292	2148	4440
2033	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		0	1050	1050	2746	2154	4900	1193	-3	1190	1894	2636	4530
2013	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		0	1050	1050	2746	2154	4900	1193	-3	1190	1894	2636	4530
2013	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		0	1050	1050	2746	2154	4900	1193	-3	1190	1894	2636	4530
2023	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		0	1050	1050	2746	2154	4900	1193	-3	1190	1894	2636	4530
2033	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Note: Boxed number indicates manual adjustment.

NORTHLAKE BOULEVARD

CORRIDOR

Intersection: Roan Lane

TMTOOL INPUT SHEET

Project Description:

SECTION NO:		PREPARED BY:	
FM NO.:		FILE:	
PROJECT LIMITS:		DATE:	
DESIGN YEAR:			
INTERSECTION:	Northlake & Roan Ln		

NOTES:

Historical AADTs:

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT	
	STATION	1132	1128	0	1127	
Actual AADT:	2004					
Actual AADT:	2005					24-HOUR TOTAL
Actual AADT:	2006					
Actual AADT:	2013	2926	58804	0	70355	
TCRPM Volume:	2013	0	0	0	0	

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic Trend GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	
Historic + Model Trend GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	
2000 Model to 2030 Model GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	CGR
Recommended Growth Rate:	**0.00%**	**CGR**	**0.00%**	**CGR**	**0.00%**	**CGR**	**0.00%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

			NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
			1		1		1		1	
		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
		2013		21,000		21,000		21,000		21,000
NO. YEARS	0	2013	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000
NO. YEARS	10	2023	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000
NO. YEARS	20	2033	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000

Percent Turns Calculated From Base Year AADTs:

JKTURNS		FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT		21,000			21,000			21,000			21,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000
	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%
2013 2-WAY ADT		21,000			21,000			21,000			21,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000
	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%
2023 2-WAY ADT		21,000			21,000			21,000			21,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000
	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%
2033 2-WAY ADT		21,000			21,000			21,000			21,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000
	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	361			4,706			0			4,823			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:30-8:15	111	0	0	122	1,998	0	0	0	0	0	2,586	128	4,945
% TURNS:	100%	0%	0%	6%	94%	0%	0%	0%	0%	0%	95%	5%	
P.M.	2-Way Pk Hr Vol:	344			5,322			0			5,426			
5:00 - 5:45	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
	145	0	0	120	2,601	0	0	0	0	0	2,601	79	5,546
% TURNS:	100%	0%	0%	4%	96%	0%	0%	0%	0%	0%	97%	3%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		SB			WB			NB			EB		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
A.M.												
2013	100%	0%	0%	6%	94%	0%	0%	0%	0%	0%	95%	5%
2013	93%	3%	3%	9%	88%	3%	3%	3%	3%	3%	89%	8%
2023	92%	4%	4%	9%	87%	4%	4%	4%	4%	4%	88%	8%
2033	89%	6%	6%	10%	84%	6%	6%	6%	6%	6%	85%	9%
P.M.												
2013	100%	0%	0%	4%	96%	0%	0%	0%	0%	0%	97%	3%
2013	93%	3%	3%	7%	89%	3%	3%	3%	3%	3%	91%	6%
2023	92%	4%	4%	8%	88%	4%	4%	4%	4%	4%	89%	7%
2033	89%	6%	6%	9%	85%	6%	6%	6%	6%	6%	86%	8%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: 0
FM NO.: 0
PROJECT LIMITS: 0
DESIGN YEAR: 0
INTERSECTION: Northlake & Roan Ln
PREPARED BY: 0
FILE: 0

DATE: 1/0/1900
NOTES: 0
0
0
0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	21,000	21,000	21,000	21,000
24 HR EST. AADT	2013	21,000	21,000	21,000	21,000
24 HR EST. AADT	2023	21,000	21,000	21,000	21,000
24 HR EST. AADT	2033	21,000	21,000	21,000	21,000

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	1.7%	1.6%	22.4%	25.3%	0.0%	0.0%	23.0%	25.8%
2013	Approach K30 factor	1.7%	1.6%	22.4%	25.3%	0.0%	0.0%	23.0%	25.8%
2023	Approach K30 factor	1.7%	1.6%	22.4%	25.3%	0.0%	0.0%	23.0%	25.8%
2033	Approach K30 factor	1.7%	1.6%	22.4%	25.3%	0.0%	0.0%	23.0%	25.8%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	30.7%	42.2%	45.0%	51.1%	#DIV/0!	#DIV/0!	56.3%	49.4%
2013	Approach D30 Factor	30.7%	42.2%	45.0%	51.1%	#DIV/0!	#DIV/0!	56.3%	49.4%
2023	Approach D30 Factor	30.7%	42.2%	45.0%	51.1%	#DIV/0!	#DIV/0!	56.3%	49.4%
2033	Approach D30 Factor	30.7%	42.2%	45.0%	51.1%	#DIV/0!	#DIV/0!	56.3%	49.4%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2013	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2023	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2033	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
P.M. DESIGN HR. TURNS													
2013	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2013	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2023	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2033	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		111	249	360	2120	2590	4710	#DIV/0!	#DIV/0!	#DIV/0!	2714	2106	4820
2013	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		111	249	360	2120	2590	4710	#DIV/0!	#DIV/0!	#DIV/0!	2714	2106	4820
2013	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		111	249	360	2120	2590	4710	#DIV/0!	#DIV/0!	#DIV/0!	2714	2106	4820
2023	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		111	249	360	2120	2590	4710	#DIV/0!	#DIV/0!	#DIV/0!	2714	2106	4820
2033	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		145	195	340	2721	2599	5320	#DIV/0!	#DIV/0!	#DIV/0!	2680	2750	5430
2013	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		145	195	340	2721	2599	5320	#DIV/0!	#DIV/0!	#DIV/0!	2680	2750	5430
2013	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		145	195	340	2721	2599	5320	#DIV/0!	#DIV/0!	#DIV/0!	2680	2750	5430
2023	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		145	195	340	2721	2599	5320	#DIV/0!	#DIV/0!	#DIV/0!	2680	2750	5430
2033	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Note: Boxed number indicates manual adjust	122	0	0	128	
	120	0	0	79	

NORTHLAKE BOULEVARD

CORRIDOR

Intersection: Sandtree Drive

TMTOOL INPUT SHEET

Project Description:

SECTION NO:		PREPARED BY:	
FM NO.:		FILE:	
PROJECT LIMITS:		DATE:	
DESIGN YEAR:			
INTERSECTION:	NORTHLAKE Blvd. & Sandtree Dr.		

NOTES:

Historical AADTs:

	YEAR / STATION	NORTH LEG AADT 1131	EAST LEG AADT 1130	SOUTH LEG AADT 1129	WEST LEG AADT 8211
Actual AADT:	2004				
Actual AADT:	2005				
Actual AADT:	2006				
Actual AADT:	2013	4,369	52,934	10,015	59,443
TCRPM Volume:	2013	0	0	0	0

24-HOUR TOTAL

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic Trend GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	
Historic + Model Trend GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	
2000 Model to 2030 Model GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	CGR
Recommended Growth Rate:	**0.00%**	**CGR**	**0.00%**	**CGR**	**0.00%**	**CGR**	**0.00%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	NORTH LEG FACTOR	NORTH LEG AADT	EAST LEG FACTOR	EAST LEG AADT	SOUTH LEG FACTOR	SOUTH LEG AADT	WEST LEG FACTOR	WEST LEG AADT
			1		1		1		1	
		2013		21,000		21,000		21,000		21,000
NO. YEARS	0	2013	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000
NO. YEARS	10	2023	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000
NO. YEARS	20	2033	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000

Percent Turns Calculated From Base Year AADTs:

JKTURNS		FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT		21,000			21,000			21,000			21,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000
	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%
2013 2-WAY ADT		21,000			21,000			21,000			21,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000
	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%
2023 2-WAY ADT		21,000			21,000			21,000			21,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000
	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%
2033 2-WAY ADT		21,000			21,000			21,000			21,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000
	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	293			4,543			739			4,707			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:45 - 8:30	51	26	135	25	1,784	129	107	12	286	179	2,363	44	5,141
% TURNS:	24%	12%	64%	1%	92%	7%	26%	3%	71%	7%	91%	2%	
P.M.	2-Way Pk Hr Vol:	273			4,707			1,070			4,870			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:00 - 5:45	44	17	99	42	2,219	205	214	13	459	162	1,928	58	5,460
% TURNS:	28%	11%	62%	2%	90%	8%	31%	2%	67%	8%	90%	3%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		SB RIGHT	SB THRU	SB LEFT	WB RIGHT	WB THRU	WB LEFT	NB RIGHT	NB THRU	NB LEFT	EB RIGHT	EB THRU	EB LEFT
A.M.													
	2013	24%	12%	64%	1%	92%	7%	26%	3%	71%	7%	91%	2%
	2013	25%	14%	61%	4%	86%	9%	27%	6%	67%	10%	86%	5%
	2023	25%	15%	60%	5%	85%	10%	27%	7%	66%	10%	84%	6%
	2033	26%	16%	59%	7%	82%	11%	28%	8%	64%	11%	82%	7%
P.M.													
	2013	28%	11%	62%	2%	90%	8%	31%	2%	67%	8%	90%	3%
	2013	28%	13%	59%	5%	84%	11%	31%	5%	64%	10%	84%	6%
	2023	28%	13%	58%	6%	83%	11%	31%	6%	63%	11%	83%	7%
	2033	28%	14%	57%	7%	81%	12%	32%	7%	61%	12%	80%	8%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: 0
FM NO.: 0
PROJECT LIMITS: 0
DESIGN YEAR: 0
INTERSECTION: NORTHLAKE Blvd. & Sandtree Dr.
PREPARED BY: 0
FILE: 0

DATE: 1/0/1900
NOTES: 0
0
0
0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	21,000	21,000	21,000	21,000
24 HR EST. AADT	2013	21,000	21,000	21,000	21,000
24 HR EST. AADT	2023	21,000	21,000	21,000	21,000
24 HR EST. AADT	2033	21,000	21,000	21,000	21,000

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	1.4%	1.3%	21.6%	22.4%	3.5%	5.1%	22.4%	23.2%
2013	Approach K30 factor	1.4%	1.3%	21.6%	22.4%	3.5%	5.1%	22.4%	23.2%
2023	Approach K30 factor	1.4%	1.3%	21.6%	22.4%	3.5%	5.1%	22.4%	23.2%
2033	Approach K30 factor	1.4%	1.3%	21.6%	22.4%	3.5%	5.1%	22.4%	23.2%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	72.4%	58.6%	42.7%	52.4%	54.8%	64.1%	54.9%	44.1%
2013	Approach D30 Factor	72.4%	58.6%	42.7%	52.4%	54.8%	64.1%	54.9%	44.1%
2023	Approach D30 Factor	72.4%	58.6%	42.7%	52.4%	54.8%	64.1%	54.9%	44.1%
2033	Approach D30 Factor	72.4%	58.6%	42.7%	52.4%	54.8%	64.1%	54.9%	44.1%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS	51	26	135	24	1786	129	106	12	287	180	2,361	42
2013	EST. TURNS	55	38	118	29	1785	125	114	8	283	172	2,370	42
2023	EST. TURNS	56	42	114	29	1,786	123	116	7	282	170	2,372	42
2033	EST. TURNS	58	47	107	29	1787	121	119	7	279	167	2,376	42
P.M. DESIGN HR. TURNS													
2013	EST. TURNS	44	17	99	41	2219	205	215	13	459	162	1,930	56
2013	EST. TURNS	47	26	87	47	2223	197	221	13	452	162	1,935	49
2023	EST. TURNS	48	28	84	48	2,225	195	223	13	450	161	1,936	49
2033	EST. TURNS	49	32	79	49	2227	192	227	13	446	160	1,938	48

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		212	78	290	1938	2602	4540	405	335	740	2586	2124	4710
2013	TURN SUMMARY	212	78	290	1939	2602	4541	405	335	740	2583	2124	4707
CONTROL LINK VOLUMES		212	78	290	1938	2602	4540	405	335	740	2586	2124	4710
2013	TURN SUMMARY	212	78	290	1939	2602	4541	405	335	740	2584	2124	4708
CONTROL LINK VOLUMES		212	78	290	1938	2602	4540	405	335	740	2586	2124	4710
2023	TURN SUMMARY	212	78	290	1938	2602	4540	405	335	740	2584	2124	4708
CONTROL LINK VOLUMES		212	78	290	1938	2602	4540	405	335	740	2586	2124	4710
2033	TURN SUMMARY	212	78	290	1938	2602	4540	405	335	740	2584	2124	4708
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		160	110	270	2466	2244	4710	686	384	1070	2148	2722	4870
2013	TURN SUMMARY	160	110	270	2465	2244	4709	686	384	1070	2149	2722	4871
CONTROL LINK VOLUMES		160	110	270	2466	2244	4710	686	384	1070	2148	2722	4870
2013	TURN SUMMARY	160	110	270	2467	2244	4711	686	384	1070	2147	2722	4869
CONTROL LINK VOLUMES		160	110	270	2466	2244	4710	686	384	1070	2148	2722	4870
2023	TURN SUMMARY	160	110	270	2467	2244	4711	686	384	1070	2146	2722	4868
CONTROL LINK VOLUMES		160	110	270	2466	2244	4710	686	384	1070	2148	2722	4870
2033	TURN SUMMARY	160	110	270	2468	2244	4712	686	384	1070	2146	2722	4868

Note: Boxed number indicates manual adjustment.

CENTRAL BOULEVARD

CORRIDOR

From: Donald Ross Road

To: PGA Boulevard

CENTRAL BOULEVARD

CORRIDOR

Intersection: Donald Ross Road

TMTOOL INPUT SHEET

Project Description:

SECTION NO:		PREPARED BY:	
FM NO.:		FILE:	
PROJECT LIMITS:		DATE:	
DESIGN YEAR:			
INTERSECTION:	Central Blvd. & Donald Ross Rd.		

NOTES:

AADT values for machines 1147 & 1150 were compiled on dates (4/30, 5/01, 5/02) only; data was averaged.
Machine **1150** was also labeled as 0511.

Historical AADTs:

	YEAR / STATION	NORTH LEG AADT 1148	EAST LEG AADT 1147	SOUTH LEG AADT 1149	WEST LEG AADT 1150
Actual AADT:	2004				
Actual AADT:	2005				
Actual AADT:	2006				
Actual AADT:	2013	12,484	28,402	13,856	30,789
TCRPM Volume:	2013	0	0	0	0

24-HOUR TOTAL

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic Trend GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	
Historic + Model Trend GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	
2000 Model to 2030 Model GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	CGR
Recommended Growth Rate:	**0.00%**	**CGR**	**0.00%**	**CGR**	**0.00%**	**CGR**	**0.00%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	NORTH LEG FACTOR	NORTH LEG AADT	EAST LEG FACTOR	EAST LEG AADT	SOUTH LEG FACTOR	SOUTH LEG AADT	WEST LEG FACTOR	WEST LEG AADT
			1		1		1		1	
		2013		21,000		21,000		21,000		21,000
NO. YEARS	0	2013	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000
NO. YEARS	10	2023	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000
NO. YEARS	20	2033	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000

Percent Turns Calculated From Base Year AADTs:

JKTURNS		FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	21,000				21,000			21,000			21,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000
	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%
2013 2-WAY ADT	21,000				21,000			21,000			21,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000
	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%
2023 2-WAY ADT	21,000				21,000			21,000			21,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000
	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%
2033 2-WAY ADT	21,000				21,000			21,000			21,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000
	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	1,175			2,948			1,488			2,997			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:15 - 8:00	209	221	139	79	704	357	242	269	123	276	1,427	258	4,304
% TURNS:	37%	39%	24%	7%	62%	31%	38%	42%	19%	14%	73%	13%	
P.M.	2-Way Pk Hr Vol:	1,322			2,722			1,294			2,648			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:00 - 5:45	150	243	194	144	1,219	296	136	332	197	90	733	259	3,993
% TURNS:	26%	41%	33%	9%	73%	18%	20%	50%	30%	8%	68%	24%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		SB RIGHT	SB THRU	SB LEFT	WB RIGHT	WB THRU	WB LEFT	NB RIGHT	NB THRU	NB LEFT	EB RIGHT	EB THRU	EB LEFT
A.M.													
	2013	37%	39%	24%	7%	62%	31%	38%	42%	19%	14%	73%	13%
	2013	36%	38%	25%	10%	59%	32%	38%	42%	21%	16%	69%	15%
	2023	36%	38%	26%	10%	58%	32%	38%	41%	21%	16%	68%	16%
	2033	36%	38%	26%	11%	57%	32%	37%	41%	22%	17%	66%	17%
P.M.													
	2013	26%	41%	33%	9%	73%	18%	20%	50%	30%	8%	68%	24%
	2013	26%	41%	33%	11%	69%	19%	22%	48%	30%	11%	64%	25%
	2023	27%	40%	33%	12%	68%	20%	22%	48%	30%	11%	63%	25%
	2033	27%	40%	33%	13%	67%	20%	23%	47%	30%	12%	62%	26%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: 0
FM NO.: 0
PROJECT LIMITS: 0
DESIGN YEAR: 0
INTERSECTION: Central Blvd. & Donald Ross Rd.
PREPARED BY: 0
FILE: 0

DATE: 1/0/1900
NOTES: AADT values for machines 1147 & 1150 were compiled on dates (4/30, 5/01, 5/02) only; data was averaged. Machine 1150 was also labeled as 0511.
0
0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	21,000	21,000	21,000	21,000
24 HR EST. AADT	2013	21,000	21,000	21,000	21,000
24 HR EST. AADT	2023	21,000	21,000	21,000	21,000
24 HR EST. AADT	2033	21,000	21,000	21,000	21,000

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	5.6%	6.3%	14.0%	13.0%	7.1%	6.2%	14.3%	12.6%
2013	Approach K30 factor	5.6%	6.3%	14.0%	13.0%	7.1%	6.2%	14.3%	12.6%
2023	Approach K30 factor	5.6%	6.3%	14.0%	13.0%	7.1%	6.2%	14.3%	12.6%
2033	Approach K30 factor	5.6%	6.3%	14.0%	13.0%	7.1%	6.2%	14.3%	12.6%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	48.4%	44.4%	38.7%	60.9%	42.6%	51.4%	65.4%	40.9%
2013	Approach D30 Factor	48.4%	44.4%	38.7%	60.9%	42.6%	51.4%	65.4%	40.9%
2023	Approach D30 Factor	48.4%	44.4%	38.7%	60.9%	42.6%	51.4%	65.4%	40.9%
2033	Approach D30 Factor	48.4%	44.4%	38.7%	60.9%	42.6%	51.4%	65.4%	40.9%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS	210	221	139	80	706	358	242	271	123	277	1,429	260
2013	EST. TURNS	209	221	140	101	694	345	258	243	135	290	1,413	267
2023	EST. TURNS	209	221	140	106	692	342	261	237	138	293	1,409	268
2033	EST. TURNS	208	221	140	115	687	337	267	226	143	298	1,403	270
P.M. DESIGN HR. TURNS													
2013	EST. TURNS	150	243	193	143	1221	293	136	331	198	89	732	259
2013	EST. TURNS	158	240	187	174	1200	281	150	304	209	103	723	255
2023	EST. TURNS	160	240	186	181	1,195	279	154	298	212	106	721	254
2033	EST. TURNS	164	239	183	193	1187	275	160	287	217	111	718	253

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		569	611	1180	1140	1810	2950	634	856	1490	1961	1039	3000
2013	TURN SUMMARY	571	611	1182	1143	1810	2953	636	856	1492	1966	1039	3005
CONTROL LINK VOLUMES		569	611	1180	1140	1810	2950	634	856	1490	1961	1039	3000
2013	TURN SUMMARY	570	611	1181	1141	1810	2951	636	856	1492	1969	1039	3008
CONTROL LINK VOLUMES		569	611	1180	1140	1810	2950	634	856	1490	1961	1039	3000
2023	TURN SUMMARY	570	611	1181	1140	1810	2950	636	856	1492	1970	1039	3009
CONTROL LINK VOLUMES		569	611	1180	1140	1810	2950	634	856	1490	1961	1039	3000
2033	TURN SUMMARY	570	611	1181	1139	1810	2949	636	856	1492	1971	1039	3010
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		587	733	1320	1659	1061	2720	665	625	1290	1082	1568	2650
2013	TURN SUMMARY	586	733	1319	1657	1061	2718	664	625	1289	1080	1568	2648
CONTROL LINK VOLUMES		587	733	1320	1659	1061	2720	665	625	1290	1082	1568	2650
2013	TURN SUMMARY	586	733	1319	1656	1061	2717	664	625	1289	1081	1568	2649
CONTROL LINK VOLUMES		587	733	1320	1659	1061	2720	665	625	1290	1082	1568	2650
2023	TURN SUMMARY	586	733	1319	1655	1061	2716	664	625	1289	1081	1568	2649
CONTROL LINK VOLUMES		587	733	1320	1659	1061	2720	665	625	1290	1082	1568	2650
2033	TURN SUMMARY	586	733	1319	1655	1061	2716	664	625	1289	1082	1568	2650

Note: Boxed number indicates manual adjustment.

CENTRAL BOULEVARD

CORRIDOR

Intersection: Hood Road

TMTOOL INPUT SHEET

Project Description:

SECTION NO:		PREPARED BY:	
FM NO.:		FILE:	
PROJECT LIMITS:		DATE:	
DESIGN YEAR:			
INTERSECTION:	Central Blvd. & Hood Rd.		

NOTES:

AADT & TMC values were collected for (4/18/2013) only.

Historical AADTs:

	YEAR STATION	NORTH LEG AADT 1010	EAST LEG AADT 1011	SOUTH LEG AADT 1012	WEST LEG AADT 1013	
Actual AADT:	2004					24-HOUR TOTAL
Actual AADT:	2005					
Actual AADT:	2006					
Actual AADT:	2013	12,345	10,678	11,803	9,720	
TCRPM Volume:	2013	0	0	0	0	

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic Trend GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	
Historic + Model Trend GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	
2000 Model to 2030 Model GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	CGR
Recommended Growth Rate:	**0.00%**	**CGR**	**0.00%**	**CGR**	**0.00%**	**CGR**	**0.00%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		NORTH LEG: 1		EAST LEG: 1		SOUTH LEG: 1		WEST LEG: 1	
	YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
	2013		21,000		21,000		21,000		21,000
NO. YEARS	0 2013	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000
NO. YEARS	10 2023	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000
NO. YEARS	20 2033	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	21,000			21,000			21,000			21,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000
	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%
2013 2-WAY ADT	21,000			21,000			21,000			21,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000
	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%
2023 2-WAY ADT	21,000			21,000			21,000			21,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000
	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%
2033 2-WAY ADT	21,000			21,000			21,000			21,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000
	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	1,488			1,252			1,424			1,044			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:30 - 8:15	86	568	199	97	278	191	83	422	77	83	404	116	2,604
% TURNS:	10%	67%	23%	17%	49%	34%	14%	73%	13%	14%	67%	19%	
P.M.	2-Way Pk Hr Vol:	1,294			1,031			1,136			895			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:00 - 5:45	92	404	132	127	317	117	67	436	57	55	271	103	2,178
% TURNS:	15%	64%	21%	23%	57%	21%	12%	78%	10%	13%	63%	24%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		SB			WB			NB			EB		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
A.M.												
2013	10%	67%	23%	17%	49%	34%	14%	73%	13%	14%	67%	19%
2013	12%	63%	24%	19%	48%	34%	16%	69%	15%	16%	64%	21%
2023	13%	62%	25%	19%	47%	34%	17%	68%	16%	16%	63%	21%
2033	14%	61%	25%	20%	46%	34%	17%	66%	17%	17%	61%	22%
P.M.												
2013	15%	64%	21%	23%	57%	21%	12%	78%	10%	13%	63%	24%
2013	17%	61%	22%	24%	54%	22%	14%	73%	12%	15%	60%	25%
2023	17%	60%	23%	24%	54%	22%	15%	72%	13%	15%	59%	25%
2033	18%	59%	23%	24%	53%	23%	16%	70%	14%	16%	58%	26%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: 0
FM NO.: 0
PROJECT LIMITS: 0
DESIGN YEAR: 0
INTERSECTION: Central Blvd. & Hood Rd.
PREPARED BY: 0
FILE: 0

DATE: 1/0/1900
NOTES: AADT & TMC values were collected for (4/18/2013) only.
0
0
0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	21,000	21,000	21,000	21,000
24 HR EST. AADT	2013	21,000	21,000	21,000	21,000
24 HR EST. AADT	2023	21,000	21,000	21,000	21,000
24 HR EST. AADT	2033	21,000	21,000	21,000	21,000

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	7.1%	6.2%	6.0%	4.9%	6.8%	5.4%	5.0%	4.3%
2013	Approach K30 factor	7.1%	6.2%	6.0%	4.9%	6.8%	5.4%	5.0%	4.3%
2023	Approach K30 factor	7.1%	6.2%	6.0%	4.9%	6.8%	5.4%	5.0%	4.3%
2033	Approach K30 factor	7.1%	6.2%	6.0%	4.9%	6.8%	5.4%	5.0%	4.3%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	57.3%	48.5%	45.2%	54.4%	40.9%	49.3%	57.8%	47.9%
2013	Approach D30 Factor	57.3%	48.5%	45.2%	54.4%	40.9%	49.3%	57.8%	47.9%
2023	Approach D30 Factor	57.3%	48.5%	45.2%	54.4%	40.9%	49.3%	57.8%	47.9%
2033	Approach D30 Factor	57.3%	48.5%	45.2%	54.4%	40.9%	49.3%	57.8%	47.9%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS	85	566	199	98	276	190	82	422	76	82	403	117
2013	EST. TURNS	99	542	210	109	255	200	94	403	83	97	380	125
2023	EST. TURNS	103	536	213	112	250	202	97	398	84	100	374	127
2033	EST. TURNS	108	526	217	117	242	206	102	391	87	107	365	130
P.M. DESIGN HR. TURNS													
2013	EST. TURNS	93	405	131	125	319	118	67	435	58	56	271	102
2013	EST. TURNS	103	386	140	135	300	127	76	416	69	66	253	110
2023	EST. TURNS	105	382	143	138	295	129	78	412	71	69	248	112
2033	EST. TURNS	109	374	146	142	287	133	82	404	75	73	241	116

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		853	637	1490	566	684	1250	582	838	1420	603	437	1040
2013	TURN SUMMARY	850	637	1487	564	684	1248	580	838	1418	601	437	1038
CONTROL LINK VOLUMES		853	637	1490	566	684	1250	582	838	1420	603	437	1040
2013	TURN SUMMARY	851	637	1488	564	684	1248	580	838	1418	601	437	1038
CONTROL LINK VOLUMES		853	637	1490	566	684	1250	582	838	1420	603	437	1040
2023	TURN SUMMARY	851	637	1488	564	684	1248	580	838	1418	601	437	1038
CONTROL LINK VOLUMES		853	637	1490	566	684	1250	582	838	1420	603	437	1040
2033	TURN SUMMARY	851	637	1488	564	684	1248	580	838	1418	601	437	1038
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		628	662	1290	561	469	1030	560	580	1140	429	471	900
2013	TURN SUMMARY	630	662	1292	562	469	1031	561	580	1141	430	471	901
CONTROL LINK VOLUMES		628	662	1290	561	469	1030	560	580	1140	429	471	900
2013	TURN SUMMARY	629	662	1291	562	469	1031	561	580	1141	430	471	901
CONTROL LINK VOLUMES		628	662	1290	561	469	1030	560	580	1140	429	471	900
2023	TURN SUMMARY	629	662	1291	562	469	1031	561	580	1141	430	471	901
CONTROL LINK VOLUMES		628	662	1290	561	469	1030	560	580	1140	429	471	900
2033	TURN SUMMARY	629	662	1291	562	469	1031	561	580	1141	430	471	901

Note: Boxed number indicates manual adjustment.

CENTRAL BOULEVARD

CORRIDOR

Intersection: Victoria Falls Boulevard

TMTOOL INPUT SHEET

Project Description:

SECTION NO:		PREPARED BY:	
FM NO.:		FILE:	
PROJECT LIMITS:		DATE:	
DESIGN YEAR:			
INTERSECTION:	Central Blvd. & Victoria Falls Blvd.		

NOTES:

3 leg intersection.
Machine 1012 was also labeled as 2101.
TMC values compiled for (4/18) only.

Historical AADTs:

	YEAR STATION	NORTH LEG AADT 1012	EAST LEG AADT 1015	SOUTH LEG AADT 1014	WEST LEG AADT 0	
Actual AADT:	2004					24-HOUR TOTAL
Actual AADT:	2005					
Actual AADT:	2006					
Actual AADT:	2013	11,803	1,119	11,891	0	
TCRPM Volume:	2013	0	0	0	0	

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic Trend GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	
Historic + Model Trend GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	
2000 Model to 2030 Model GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	CGR
Recommended Growth Rate:	**0.00%**	**CGR**	**0.00%**	**CGR**	**0.00%**	**CGR**	**0.00%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	NORTH LEG FACTOR	NORTH LEG AADT	EAST LEG FACTOR	EAST LEG AADT	SOUTH LEG FACTOR	SOUTH LEG AADT	WEST LEG FACTOR	WEST LEG AADT
			1		1		1		1	
		2013		21,000		21,000		21,000		21,000
NO. YEARS	0	2013	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000
NO. YEARS	10	2023	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000
NO. YEARS	20	2033	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000

Percent Turns Calculated From Base Year AADTs:

JKTURNS		FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT		21,000			21,000			21,000			21,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000
	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%
2013 2-WAY ADT		21,000			21,000			21,000			21,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000
	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%
2023 2-WAY ADT		21,000			21,000			21,000			21,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000
	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%
2033 2-WAY ADT		21,000			21,000			21,000			21,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000
	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	1,424			202			1,518			8			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:30 - 8:15	3	814	24	31	0	100	47	552	5	0	0	0	1,576
% TURNS:	0%	97%	3%	24%	0%	76%	8%	91%	1%	0%	0%	0%	
P.M.	2-Way Pk Hr Vol:	1,136			107			1,103			0			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:00 - 5:45	0	547	28	42	0	11	26	519	0	0	0	0	1,173
% TURNS:	0%	95%	5%	79%	0%	21%	5%	95%	0%	0%	0%	0%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		SB			WB			NB			EB		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
A.M.												
2013	0%	97%	3%	24%	0%	76%	8%	91%	1%	0%	0%	0%
2013	4%	90%	6%	25%	3%	72%	10%	86%	4%	3%	3%	3%
2023	4%	89%	7%	25%	4%	71%	11%	84%	5%	4%	4%	4%
2033	6%	86%	8%	25%	6%	69%	12%	82%	6%	6%	6%	6%
P.M.												
2013	0%	95%	5%	79%	0%	21%	5%	95%	0%	0%	0%	0%
2013	3%	89%	8%	75%	3%	22%	8%	89%	3%	3%	3%	3%
2023	4%	87%	8%	74%	4%	22%	8%	87%	4%	4%	4%	4%
2033	6%	85%	10%	72%	6%	23%	10%	85%	6%	6%	6%	6%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: 0
FM NO.: 0
PROJECT LIMITS: 0
DESIGN YEAR: 0
INTERSECTION: Central Blvd. & Victoria Falls Blvd.
PREPARED BY: 0
FILE: 0

DATE: 1/0/1900
NOTES: 3 leg intersection.
Machine 1012 was also labeled as 2101.
TMC values compiled for (4/18) only.
0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	21,000	21,000	21,000	21,000
24 HR EST. AADT	2013	21,000	21,000	21,000	21,000
24 HR EST. AADT	2023	21,000	21,000	21,000	21,000
24 HR EST. AADT	2033	21,000	21,000	21,000	21,000

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	6.8%	5.4%	1.0%	0.5%	7.2%	5.3%	0.0%	0.0%
2013	Approach K30 factor	6.8%	5.4%	1.0%	0.5%	7.2%	5.3%	0.0%	0.0%
2023	Approach K30 factor	6.8%	5.4%	1.0%	0.5%	7.2%	5.3%	0.0%	0.0%
2033	Approach K30 factor	6.8%	5.4%	1.0%	0.5%	7.2%	5.3%	0.0%	0.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	59.1%	50.6%	64.9%	49.5%	39.8%	49.4%	0.0%	#DIV/0!
2013	Approach D30 Factor	59.1%	50.6%	64.9%	49.5%	39.8%	49.4%	0.0%	#DIV/0!
2023	Approach D30 Factor	59.1%	50.6%	64.9%	49.5%	39.8%	49.4%	0.0%	#DIV/0!
2033	Approach D30 Factor	59.1%	50.6%	64.9%	49.5%	39.8%	49.4%	0.0%	#DIV/0!

A.M. DESIGN HR. TURNS		NORTH LEG RIGHT	NORTH LEG THRU	NORTH LEG LEFT	EAST LEG RIGHT	EAST LEG THRU	EAST LEG LEFT	SOUTH LEG RIGHT	SOUTH LEG THRU	SOUTH LEG LEFT	WEST LEG RIGHT	WEST LEG THRU	WEST LEG LEFT
2013	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2013	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2023	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2033	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
P.M. DESIGN HR. TURNS													
2013	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2013	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2023	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2033	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

LINK VOLUME CHECK

DESIGN HOUR A.M.:		NORTH LEG FROM	NORTH LEG TO	NORTH LEG LINK	EAST LEG FROM	EAST LEG TO	EAST LEG LINK	SOUTH LEG FROM	SOUTH LEG TO	SOUTH LEG LINK	WEST LEG FROM	WEST LEG TO	WEST LEG LINK
CONTROL LINK VOLUMES		841	579	1420	131	69	200	604	916	1520	0	10	10
2013	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		841	579	1420	131	69	200	604	916	1520	0	10	10
2013	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		841	579	1420	131	69	200	604	916	1520	0	10	10
2023	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		841	579	1420	131	69	200	604	916	1520	0	10	10
2033	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		575	565	1140	53	57	110	545	555	1100	#DIV/0!	#DIV/0!	#DIV/0!
2013	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		575	565	1140	53	57	110	545	555	1100	#DIV/0!	#DIV/0!	#DIV/0!
2013	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		575	565	1140	53	57	110	545	555	1100	#DIV/0!	#DIV/0!	#DIV/0!
2023	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		575	565	1140	53	57	110	545	555	1100	#DIV/0!	#DIV/0!	#DIV/0!
2033	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Note: Boxed number indicates manual adjustment.

CENTRAL BOULEVARD

CORRIDOR

Intersection: 117th Court

TMTOOL INPUT SHEET

Project Description:

SECTION NO:		PREPARED BY:	
FM NO.:		FILE:	
PROJECT LIMITS:		DATE:	
DESIGN YEAR:			
INTERSECTION:	Central Blvd. & 117th CT.		

NOTES: AADT & TMC data collected for 4/18/2013 only

Historical AADTs:

	YEAR / STATION	NORTH LEG AADT 1024	EAST LEG AADT 1023	SOUTH LEG AADT 1022	WEST LEG AADT 0
Actual AADT:	2004				
Actual AADT:	2005				
Actual AADT:	2006				
Actual AADT:	2013	11,830	4,998	13,691	0
TCRPM Volume:	2013	0	0	0	0

24-HOUR TOTAL

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic Trend GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	
Historic + Model Trend GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	
2000 Model to 2030 Model GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	CGR
Recommended Growth Rate:	**0.00%**	**CGR**	**0.00%**	**CGR**	**0.00%**	**CGR**	**0.00%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		NORTH LEG: 1		EAST LEG: 1		SOUTH LEG: 1		WEST LEG: 1	
	YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
	2013		21,000		21,000		21,000		21,000
NO. YEARS	0 2013	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000
NO. YEARS	10 2023	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000
NO. YEARS	20 2033	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	21,000			21,000			21,000			21,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000
	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%
2013 2-WAY ADT	21,000			21,000			21,000			21,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000
	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%
2023 2-WAY ADT	21,000			21,000			21,000			21,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000
	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%
2033 2-WAY ADT	21,000			21,000			21,000			21,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000
	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	1,518			1,652			2,271			5			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:15 - 8:00	0	651	262	190	0	658	542	415	5	0	0	0	2,723
% TURNS:	0%	71%	29%	22%	0%	78%	56%	43%	1%	0%	0%	0%	
P.M.	2-Way Pk Hr Vol:	1,103			978			1,380			1			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
3:45 - 4:30	0	378	179	172	0	391	236	374	1	0	0	0	1,731
% TURNS:	0%	68%	32%	31%	0%	69%	39%	61%	0%	0%	0%	0%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		SB			WB			NB			EB		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
A.M.												
2013	0%	71%	29%	22%	0%	78%	56%	43%	1%	0%	0%	0%
2013	3%	68%	29%	23%	3%	73%	54%	42%	4%	3%	3%	3%
2023	4%	67%	29%	24%	4%	72%	53%	42%	5%	4%	4%	4%
2033	6%	65%	29%	24%	6%	70%	53%	42%	6%	6%	6%	6%
P.M.												
2013	0%	68%	32%	31%	0%	69%	39%	61%	0%	0%	0%	0%
2013	3%	64%	32%	31%	3%	66%	38%	58%	3%	3%	3%	3%
2023	4%	64%	32%	31%	4%	65%	38%	58%	4%	4%	4%	4%
2033	6%	62%	32%	31%	6%	63%	38%	57%	6%	6%	6%	6%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: 0
FM NO.: 0
PROJECT LIMITS: 0
DESIGN YEAR: 0
INTERSECTION: Central Blvd. & 117th CT.
PREPARED BY: 0
FILE: 0

DATE: 1/0/1900
NOTES: AADT & TMC data collected for 4/18/2013 only
0
0
0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	21,000	21,000	21,000	21,000
24 HR EST. AADT	2013	21,000	21,000	21,000	21,000
24 HR EST. AADT	2023	21,000	21,000	21,000	21,000
24 HR EST. AADT	2033	21,000	21,000	21,000	21,000

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	7.2%	5.3%	7.9%	4.7%	10.8%	6.6%	0.0%	0.0%
2013	Approach K30 factor	7.2%	5.3%	7.9%	4.7%	10.8%	6.6%	0.0%	0.0%
2023	Approach K30 factor	7.2%	5.3%	7.9%	4.7%	10.8%	6.6%	0.0%	0.0%
2033	Approach K30 factor	7.2%	5.3%	7.9%	4.7%	10.8%	6.6%	0.0%	0.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	60.1%	50.5%	51.3%	57.6%	42.4%	44.3%	0.0%	0.0%
2013	Approach D30 Factor	60.1%	50.5%	51.3%	57.6%	42.4%	44.3%	0.0%	0.0%
2023	Approach D30 Factor	60.1%	50.5%	51.3%	57.6%	42.4%	44.3%	0.0%	0.0%
2033	Approach D30 Factor	60.1%	50.5%	51.3%	57.6%	42.4%	44.3%	0.0%	0.0%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2013	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2023	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2033	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
P.M. DESIGN HR. TURNS													
2013	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2013	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2023	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2033	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		913	607	1520	848	802	1650	962	1308	2270	0	10	10
2013	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		913	607	1520	848	802	1650	962	1308	2270	0	10	10
2013	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		913	607	1520	848	802	1650	962	1308	2270	0	10	10
2023	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		913	607	1520	848	802	1650	962	1308	2270	0	10	10
2033	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		557	543	1100	563	417	980	611	769	1380	0	0	0
2013	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		557	543	1100	563	417	980	611	769	1380	0	0	0
2013	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		557	543	1100	563	417	980	611	769	1380	0	0	0
2023	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		557	543	1100	563	417	980	611	769	1380	0	0	0
2033	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Note: Boxed number indicates manual adjustment.

CENTRAL BOULEVARD

CORRIDOR

Intersection: PGA Boulevard

TMTOOL INPUT SHEET

Project Description:

SECTION NO:		PREPARED BY:	
FM NO.:		FILE:	
PROJECT LIMITS:		DATE:	
DESIGN YEAR:			
INTERSECTION:	Central Blvd. & PGA Blvd.		

NOTES:

Machine 1114 was also labeled as 4111.
AADT values for machine 1114 correspond to dates (4/23, 4/24, 4/25); data was averaged.
TMC values correspond to date (4/23).

Historical AADTs:

	YEAR STATION	NORTH LEG AADT 1115	EAST LEG AADT 1117	SOUTH LEG AADT 1116	WEST LEG AADT 1114	
Actual AADT:	2004					24-HOUR TOTAL
Actual AADT:	2005					
Actual AADT:	2006					
Actual AADT:	2013	15,078	40,198	3,053	43,236	
TCRPM Volume:	2013	0	0	0	0	

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic Trend GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	
Historic + Model Trend GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	
2000 Model to 2030 Model GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	CGR
Recommended Growth Rate:	**0.00%**	**CGR**	**0.00%**	**CGR**	**0.00%**	**CGR**	**0.00%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

			NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
			1		1		1		1	
		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
		2013		21,000		21,000		21,000		21,000
NO. YEARS	0	2013	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000
NO. YEARS	10	2023	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000
NO. YEARS	20	2033	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000

Percent Turns Calculated From Base Year AADTs:

JKTURNS		FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	21,000				21,000			21,000			21,000		
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT		
21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000		
33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%		
2013 2-WAY ADT	21,000				21,000			21,000			21,000		
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT		
21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000		
33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%		
2023 2-WAY ADT	21,000				21,000			21,000			21,000		
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT		
21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000		
33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%		
2033 2-WAY ADT	21,000				21,000			21,000			21,000		
RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT		
21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000		
33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%		

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	2,266			3,950			104			4,204			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:30 - 8:15	769	4	531	446	1,177	17	36	24	11	12	1,743	492	5,262
% TURNS:	59%	0%	41%	27%	72%	1%	51%	34%	15%	1%	78%	22%	
P.M.	2-Way Pk Hr Vol:	1,373			4,007			164			4,310			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:00 - 5:45	497	6	259	253	1,803	49	37	13	33	26	1,606	345	4,927
% TURNS:	65%	1%	34%	12%	86%	2%	45%	16%	40%	1%	81%	17%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		SB			WB			NB			EB		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	
A.M.													
2013	59%	0%	41%	27%	72%	1%	51%	34%	15%	1%	78%	22%	
2013	56%	4%	40%	28%	68%	4%	49%	34%	17%	4%	73%	23%	
2023	56%	4%	40%	28%	67%	5%	49%	34%	18%	5%	72%	23%	
2033	55%	6%	39%	28%	65%	6%	48%	34%	18%	6%	70%	24%	
P.M.													
2013	65%	1%	34%	12%	86%	2%	45%	16%	40%	1%	81%	17%	
2013	62%	4%	34%	14%	80%	5%	43%	17%	39%	5%	76%	19%	
2023	61%	5%	34%	15%	79%	6%	43%	18%	39%	5%	75%	19%	
2033	60%	6%	34%	16%	77%	7%	43%	19%	39%	7%	73%	20%	

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: 0
FM NO.: 0
PROJECT LIMITS: 0
DESIGN YEAR: 0
INTERSECTION: Central Blvd. & PGA Blvd.
PREPARED BY: 0
FILE: 0

DATE: 1/0/1900
NOTES: Machine 1114 was also labeled as 4111.
AADT values for machine 1114 correspond to dates (4/23, 4/24, 4/25); data was averaged.
TMC values correspond to date (4/23).
0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	21,000	21,000	21,000	21,000
24 HR EST. AADT	2013	21,000	21,000	21,000	21,000
24 HR EST. AADT	2023	21,000	21,000	21,000	21,000
24 HR EST. AADT	2033	21,000	21,000	21,000	21,000

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	10.8%	6.5%	18.8%	19.1%	0.5%	0.8%	20.0%	20.5%
2013	Approach K30 factor	10.8%	6.5%	18.8%	19.1%	0.5%	0.8%	20.0%	20.5%
2023	Approach K30 factor	10.8%	6.5%	18.8%	19.1%	0.5%	0.8%	20.0%	20.5%
2033	Approach K30 factor	10.8%	6.5%	18.8%	19.1%	0.5%	0.8%	20.0%	20.5%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	57.5%	55.5%	41.5%	52.5%	68.3%	50.6%	53.4%	45.9%
2013	Approach D30 Factor	57.5%	55.5%	41.5%	52.5%	68.3%	50.6%	53.4%	45.9%
2023	Approach D30 Factor	57.5%	55.5%	41.5%	52.5%	68.3%	50.6%	53.4%	45.9%
2033	Approach D30 Factor	57.5%	55.5%	41.5%	52.5%	68.3%	50.6%	53.4%	45.9%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS	767	4	532	449	1175	14	36	24	11	10	1,742	493
2013	EST. TURNS	761	27	510	449	1179	1	36	22	12	1	1,763	495
2023	EST. TURNS	763	28	506	448	1,177	1	37	22	13	1	1,768	496
2033	EST. TURNS	767	28	498	446	1173	0	37	21	13	0	1,775	499
P.M. DESIGN HR. TURNS													
2013	EST. TURNS	496	6	259	252	1804	46	37	13	33	24	1,609	343
2013	EST. TURNS	480	44	237	263	1819	19	37	12	33	15	1,631	333
2023	EST. TURNS	479	50	232	265	1,820	15	37	12	34	12	1,636	331
2033	EST. TURNS	478	57	225	267	1821	11	37	12	34	9	1,643	329

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		1304	966	2270	1640	2310	3950	71	29	100	2247	1953	4200
2013	TURN SUMMARY	1303	966	2269	1638	2310	3948	71	29	100	2246	1953	4199
CONTROL LINK VOLUMES		1304	966	2270	1640	2310	3950	71	29	100	2247	1953	4200
2013	TURN SUMMARY	1299	966	2265	1629	2310	3939	71	29	100	2260	1953	4213
CONTROL LINK VOLUMES		1304	966	2270	1640	2310	3950	71	29	100	2247	1953	4200
2023	TURN SUMMARY	1297	966	2263	1625	2310	3935	71	29	100	2265	1953	4218
CONTROL LINK VOLUMES		1304	966	2270	1640	2310	3950	71	29	100	2247	1953	4200
2033	TURN SUMMARY	1293	966	2259	1619	2310	3929	71	29	100	2275	1953	4228
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		762	608	1370	2105	1905	4010	83	77	160	1977	2333	4310
2013	TURN SUMMARY	761	608	1369	2103	1905	4008	83	77	160	1976	2333	4309
CONTROL LINK VOLUMES		762	608	1370	2105	1905	4010	83	77	160	1977	2333	4310
2013	TURN SUMMARY	761	608	1369	2100	1905	4005	83	77	160	1979	2333	4312
CONTROL LINK VOLUMES		762	608	1370	2105	1905	4010	83	77	160	1977	2333	4310
2023	TURN SUMMARY	761	608	1369	2100	1905	4005	83	77	160	1979	2333	4312
CONTROL LINK VOLUMES		762	608	1370	2105	1905	4010	83	77	160	1977	2333	4310
2033	TURN SUMMARY	760	608	1368	2099	1905	4004	83	77	160	1981	2333	4314

Note: Boxed number indicates manual adjustment.

NORTH MILITARY TRAIL

CORRIDOR

From: Donald Ross Road

To: PGA Boulevard

NORTH MILITARY TRAIL

CORRIDOR

Intersection: Donald Ross Road

TMTOOL INPUT SHEET

Project Description:

SECTION NO:		PREPARED BY:	
FM NO.:		FILE:	
PROJECT LIMITS:		DATE:	
DESIGN YEAR:			
INTERSECTION:	N Military Trail & Donald Ross Rd.		

NOTES: Machine 1147 was also labeled as 4117.

Historical AADTs:

	YEAR STATION	NORTH LEG AADT 1146	EAST LEG AADT 4411	SOUTH LEG AADT 1145	WEST LEG AADT 1147
Actual AADT:	2004				
Actual AADT:	2005				
Actual AADT:	2006				
Actual AADT:	2013	34924	27111	22742	29264
TCRPM Volume:	2013	0	0	0	0

24-HOUR TOTAL

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic Trend GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	
Historic + Model Trend GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	
2000 Model to 2030 Model GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	CGR
Recommended Growth Rate:	**0.00%**	**CGR**	**0.00%**	**CGR**	**0.00%**	**CGR**	**0.00%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		NORTH LEG: 1		EAST LEG: 1		SOUTH LEG: 1		WEST LEG: 1	
	YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
	2013		21,000		21,000		21,000		21,000
NO. YEARS	0 2013	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000
NO. YEARS	10 2023	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000
NO. YEARS	20 2033	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000

Percent Turns Calculated From Base Year AADTs:

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT	21,000			21,000			21,000			21,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000
	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%
2013 2-WAY ADT	21,000			21,000			21,000			21,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000
	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%
2023 2-WAY ADT	21,000			21,000			21,000			21,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000
	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%
2033 2-WAY ADT	21,000			21,000			21,000			21,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000
	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol: 3,347				2,509			2,454			2,826			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:15 - 8:00	412	827	443	314	482	140	163	855	182	287	967	496	5,568
% TURNS:	24%	49%	26%	34%	51%	15%	14%	71%	15%	16%	55%	28%	
P.M.	2-Way Pk Hr Vol: 3,104				3,222			2,421			2,725			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
4:30 - 5:15	330	875	486	414	1,165	163	438	635	171	139	556	364	5,736
% TURNS:	20%	52%	29%	24%	67%	9%	35%	51%	14%	13%	53%	34%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		SB			WB			NB			EB		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
A.M.												
2013	24%	49%	26%	34%	51%	15%	14%	71%	15%	16%	55%	28%
2013	25%	48%	27%	34%	50%	17%	16%	67%	17%	18%	53%	29%
2023	26%	47%	27%	34%	49%	17%	16%	67%	17%	19%	53%	29%
2033	26%	47%	28%	34%	48%	18%	17%	65%	18%	19%	52%	29%
P.M.												
2013	20%	52%	29%	24%	67%	9%	35%	51%	14%	13%	53%	34%
2013	21%	50%	29%	25%	64%	12%	35%	49%	16%	15%	51%	34%
2023	21%	49%	29%	25%	63%	12%	35%	49%	16%	16%	50%	34%
2033	22%	49%	30%	25%	61%	13%	35%	48%	17%	16%	49%	34%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: 0
FM NO.: 0
PROJECT LIMITS: 0
DESIGN YEAR: 0
INTERSECTION: N Military Trail & Donald Ross Rd.
PREPARED BY: 0
FILE: 0

DATE: 1/0/1900
NOTES: Machine 1147 was also labeled as 4117.
0
0
0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	21,000	21,000	21,000	21,000
24 HR EST. AADT	2013	21,000	21,000	21,000	21,000
24 HR EST. AADT	2023	21,000	21,000	21,000	21,000
24 HR EST. AADT	2033	21,000	21,000	21,000	21,000

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	15.9%	14.8%	11.9%	17.2%	11.7%	9.7%	13.5%	13.0%
2013	Approach K30 factor	15.9%	14.8%	11.9%	17.2%	11.7%	9.7%	13.5%	13.0%
2023	Approach K30 factor	15.9%	14.8%	11.9%	17.2%	11.7%	9.7%	13.5%	13.0%
2033	Approach K30 factor	15.9%	14.8%	11.9%	17.2%	11.7%	9.7%	13.5%	13.0%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	50.3%	54.5%	37.3%	48.2%	48.9%	61.2%	61.9%	38.9%
2013	Approach D30 Factor	50.3%	54.5%	37.3%	48.2%	48.9%	61.2%	61.9%	38.9%
2023	Approach D30 Factor	50.3%	54.5%	37.3%	48.2%	48.9%	61.2%	61.9%	38.9%
2033	Approach D30 Factor	50.3%	54.5%	37.3%	48.2%	48.9%	61.2%	61.9%	38.9%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS	414	826	443	314	484	139	163	856	182	285	968	498
2013	EST. TURNS	424	799	459	326	460	151	184	821	197	300	931	520
2023	EST. TURNS	426	792	463	329	454	153	189	813	200	304	921	526
2033	EST. TURNS	430	782	470	334	444	158	198	798	206	310	906	536
P.M. DESIGN HR. TURNS													
2013	EST. TURNS	331	486	874	412	1168	162	438	634	172	139	556	364
2013	EST. TURNS	354	485	851	443	1126	171	452	603	190	130	566	363
2023	EST. TURNS	360	485	845	451	1,116	173	455	595	195	128	568	363
2033	EST. TURNS	370	486	835	464	1100	175	462	582	202	125	572	363

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		1682	1668	3350	936	1574	2510	1200	1250	2450	1750	1080	2830
2013	TURN SUMMARY	1683	1668	3351	937	1574	2511	1201	1250	2451	1751	1080	2831
CONTROL LINK VOLUMES		1682	1668	3350	936	1574	2510	1200	1250	2450	1750	1080	2830
2013	TURN SUMMARY	1682	1668	3350	937	1574	2511	1202	1250	2452	1751	1080	2831
CONTROL LINK VOLUMES		1682	1668	3350	936	1574	2510	1200	1250	2450	1750	1080	2830
2023	TURN SUMMARY	1682	1668	3350	937	1574	2511	1202	1250	2452	1752	1080	2832
CONTROL LINK VOLUMES		1682	1668	3350	936	1574	2510	1200	1250	2450	1750	1080	2830
2033	TURN SUMMARY	1681	1668	3349	937	1574	2511	1202	1250	2452	1752	1080	2832
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		1691	1409	3100	1742	1868	3610	1244	786	2030	1059	1671	2730
2013	TURN SUMMARY	1690	1409	3099	1742	1868	3610	1244	786	2030	1059	1671	2730
CONTROL LINK VOLUMES		1691	1409	3100	1742	1868	3610	1244	786	2030	1059	1671	2730
2013	TURN SUMMARY	1690	1409	3099	1740	1868	3608	1244	786	2030	1059	1671	2730
CONTROL LINK VOLUMES		1691	1409	3100	1742	1868	3610	1244	786	2030	1059	1671	2730
2023	TURN SUMMARY	1690	1409	3099	1740	1868	3608	1245	786	2031	1060	1671	2731
CONTROL LINK VOLUMES		1691	1409	3100	1742	1868	3610	1244	786	2030	1059	1671	2730
2033	TURN SUMMARY	1690	1409	3099	1739	1868	3607	1245	786	2031	1060	1671	2731

Note: Boxed number indicates manual adjustment.

NORTH MILITARY TRAIL

CORRIDOR

Intersection: Hood Road

TMTOOL INPUT SHEET

Project Description:

SECTION NO:		PREPARED BY:	
FM NO.:		FILE:	
PROJECT LIMITS:		DATE:	
DESIGN YEAR:			
INTERSECTION:	N Military Trail & Hood Rd.		

NOTES:

Historical AADTs:

	YEAR STATION	NORTH LEG AADT 1021	EAST LEG AADT 1020	SOUTH LEG AADT 1019	WEST LEG AADT 1101	
Actual AADT:	2004					
Actual AADT:	2005					24-HOUR TOTAL
Actual AADT:	2006					
Actual AADT:	2013	24,774	13,479	24,873	10,678	
TCRPM Volume:	2013	0	0	0	0	

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic Trend GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	
Historic + Model Trend GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	
2000 Model to 2030 Model GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	CGR
Recommended Growth Rate:	**0.00%**	**CGR**	**0.00%**	**CGR**	**0.00%**	**CGR**	**0.00%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG		
			1		1		1		1	
	YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	
	2013		21,000		21,000		21,000		21,000	
NO. YEARS	0 2013	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000	
NO. YEARS	10 2023	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000	
NO. YEARS	20 2033	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000	

Percent Turns Calculated From Base Year AADTs:

JKTURNS		FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT		21,000			21,000			21,000			21,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	
	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	
	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	
2013 2-WAY ADT		21,000			21,000			21,000			21,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	
	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	
	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	
2023 2-WAY ADT		21,000			21,000			21,000			21,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	
	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	
	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	
2033 2-WAY ADT		21,000			21,000			21,000			21,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	
	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	
	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	2,454			1,298			2,352			1,302			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:15 - 8:00	83	1,064	106	396	235	113	93	629	37	416	355	176	3,703
% TURNS:	7%	85%	8%	53%	32%	15%	12%	83%	5%	44%	37%	19%	
P.M.	2-Way Pk Hr Vol:	2,032			1,407			2,337			1,094			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:00 - 5:45	38	682	67	298	333	266	166	862	109	252	277	85	3,435
% TURNS:	5%	87%	9%	33%	37%	30%	15%	76%	10%	41%	45%	14%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		SB			WB			NB			EB		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	
A.M.													
2013	7%	85%	8%	53%	32%	15%	12%	83%	5%	44%	37%	19%	
2013	9%	80%	11%	51%	32%	17%	14%	78%	8%	43%	37%	20%	
2023	10%	78%	12%	51%	32%	17%	15%	77%	8%	43%	37%	20%	
2033	11%	76%	13%	50%	32%	18%	16%	75%	10%	42%	37%	21%	
P.M.													
2013	5%	87%	9%	33%	37%	30%	15%	76%	10%	41%	45%	14%	
2013	8%	81%	11%	33%	37%	30%	16%	72%	12%	40%	44%	16%	
2023	8%	80%	12%	33%	37%	30%	17%	71%	13%	40%	44%	16%	
2033	10%	78%	13%	33%	36%	30%	18%	69%	14%	40%	43%	17%	

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: 0
FM NO.: 0
PROJECT LIMITS: 0
DESIGN YEAR: 0
INTERSECTION: N Military Trail & Hood Rd.
PREPARED BY: 0
FILE: 0

DATE: 1/0/1900
NOTES: 0
0
0
0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	21,000	21,000	21,000	21,000
24 HR EST. AADT	2013	21,000	21,000	21,000	21,000
24 HR EST. AADT	2023	21,000	21,000	21,000	21,000
24 HR EST. AADT	2033	21,000	21,000	21,000	21,000

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	11.7%	9.7%	6.2%	6.7%	11.2%	11.1%	6.2%	5.2%
2013	Approach K30 factor	11.7%	9.7%	6.2%	6.7%	11.2%	11.1%	6.2%	5.2%
2023	Approach K30 factor	11.7%	9.7%	6.2%	6.7%	11.2%	11.1%	6.2%	5.2%
2033	Approach K30 factor	11.7%	9.7%	6.2%	6.7%	11.2%	11.1%	6.2%	5.2%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	51.1%	38.7%	57.3%	63.8%	32.3%	48.7%	72.7%	56.1%
2013	Approach D30 Factor	51.1%	38.7%	57.3%	63.8%	32.3%	48.7%	72.7%	56.1%
2023	Approach D30 Factor	51.1%	38.7%	57.3%	63.8%	32.3%	48.7%	72.7%	56.1%
2033	Approach D30 Factor	51.1%	38.7%	57.3%	63.8%	32.3%	48.7%	72.7%	56.1%

A.M. DESIGN HR. TURNS		NORTH LEG RIGHT	NORTH LEG THRU	NORTH LEG LEFT	EAST LEG RIGHT	EAST LEG THRU	EAST LEG LEFT	SOUTH LEG RIGHT	SOUTH LEG THRU	SOUTH LEG LEFT	WEST LEG RIGHT	WEST LEG THRU	WEST LEG LEFT
2013	EST. TURNS	82	1,063	106	395	234	113	94	627	37	414	356	175
2013	EST. TURNS	99	1,012	143	397	204	140	99	607	50	439	314	193
2023	EST. TURNS	103	999	153	397	197	147	99	603	53	445	304	198
2033	EST. TURNS	109	978	169	395	187	159	101	597	57	454	287	206
P.M. DESIGN HR. TURNS													
2013	EST. TURNS	38	683	67	298	330	268	168	861	108	252	278	84
2013	EST. TURNS	55	644	90	306	298	292	174	837	123	267	249	99
2023	EST. TURNS	59	634	96	308	291	298	175	832	127	270	241	103
2033	EST. TURNS	65	618	107	310	278	308	177	824	133	276	229	109

LINK VOLUME CHECK

DESIGN HOUR A.M.:		NORTH LEG FROM	NORTH LEG TO	NORTH LEG LINK	EAST LEG FROM	EAST LEG TO	EAST LEG LINK	SOUTH LEG FROM	SOUTH LEG TO	SOUTH LEG LINK	WEST LEG FROM	WEST LEG TO	WEST LEG LINK
CONTROL LINK VOLUMES		1253	1197	2450	744	556	1300	759	1591	2350	947	353	1300
2013	TURN SUMMARY	1251	1197	2448	743	556	1299	758	1591	2349	946	353	1299
CONTROL LINK VOLUMES		1253	1197	2450	744	556	1300	759	1591	2350	947	353	1300
2013	TURN SUMMARY	1254	1197	2451	741	556	1297	755	1591	2346	946	353	1299
CONTROL LINK VOLUMES		1253	1197	2450	744	556	1300	759	1591	2350	947	353	1300
2023	TURN SUMMARY	1255	1197	2452	741	556	1297	755	1591	2346	946	353	1299
CONTROL LINK VOLUMES		1253	1197	2450	744	556	1300	759	1591	2350	947	353	1300
2033	TURN SUMMARY	1255	1197	2452	741	556	1297	754	1591	2345	947	353	1300
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		787	1243	2030	897	513	1410	1137	1203	2340	614	476	1090
2013	TURN SUMMARY	787	1243	2030	897	513	1410	1137	1203	2340	614	476	1090
CONTROL LINK VOLUMES		787	1243	2030	897	513	1410	1137	1203	2340	614	476	1090
2013	TURN SUMMARY	789	1243	2032	897	513	1410	1135	1203	2338	615	476	1091
CONTROL LINK VOLUMES		787	1243	2030	897	513	1410	1137	1203	2340	614	476	1090
2023	TURN SUMMARY	789	1243	2032	897	513	1410	1134	1203	2337	615	476	1091
CONTROL LINK VOLUMES		787	1243	2030	897	513	1410	1137	1203	2340	614	476	1090
2033	TURN SUMMARY	790	1243	2033	897	513	1410	1133	1203	2336	615	476	1091

Note: Boxed number indicates manual adjustment.

NORTH MILITARY TRAIL

CORRIDOR

Intersection: Kyoto Gardens

TMTOOL INPUT SHEET

Project Description:

SECTION NO:		PREPARED BY:	
FM NO.:		FILE:	
PROJECT LIMITS:		DATE:	
DESIGN YEAR:			
INTERSECTION:	N Military Trail & Kyoto Gardens Dr.		

NOTES:

Intersection has been rotated 90 degrees.
Machine 1043 has no TMC

Historical AADTs:

	YEAR STATION	NORTH LEG AADT 1047	EAST LEG AADT 1043	SOUTH LEG AADT 1044	WEST LEG AADT 1045	
Actual AADT:	2004					24-HOUR TOTAL
Actual AADT:	2005					
Actual AADT:	2006					
Actual AADT:	2013	3,393	28,483	7,974	31,498	
TCRPM Volume:	2013	0	0	0	0	

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic Trend GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	
Historic + Model Trend GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	
2000 Model to 2030 Model GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	CGR
Recommended Growth Rate:	**0.00%**	**CGR**	**0.00%**	**CGR**	**0.00%**	**CGR**	**0.00%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	NORTH LEG FACTOR	NORTH LEG AADT	EAST LEG FACTOR	EAST LEG AADT	SOUTH LEG FACTOR	SOUTH LEG AADT	WEST LEG FACTOR	WEST LEG AADT
			1		1		1		1	
		2013		21,000		21,000		21,000		21,000
NO. YEARS	0	2013	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000
NO. YEARS	10	2023	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000
NO. YEARS	20	2033	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000

Percent Turns Calculated From Base Year AADTs:

JKTURNS		FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT		21,000			21,000			21,000			21,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000
	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%
2013 2-WAY ADT		21,000			21,000			21,000			21,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000
	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%
2023 2-WAY ADT		21,000			21,000			21,000			21,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000
	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%
2033 2-WAY ADT		21,000			21,000			21,000			21,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000
	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	2,351			616			2,557			100			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:30 - 8:15	0	1,463	129	94	32	288	73	665	68	0	0	0	2,812
% TURNS:	0%	92%	8%	23%	8%	70%	9%	83%	8%	0%	0%	0%	
P.M.	2-Way Pk Hr Vol:	2,337			1,158			2,849			402			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:00 - 5:45	0	1,154	45	296	183	506	128	842	219	0	0	0	3,373
% TURNS:	0%	96%	4%	30%	19%	51%	11%	71%	18%	0%	0%	0%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		SB			WB			NB			EB		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	
A.M.													
2013	0%	92%	8%	23%	8%	70%	9%	83%	8%	0%	0%	0%	
2013	3%	86%	11%	24%	10%	66%	11%	78%	11%	3%	3%	3%	
2023	4%	85%	11%	24%	11%	65%	12%	76%	12%	4%	4%	4%	
2033	6%	82%	12%	24%	12%	64%	13%	74%	13%	6%	6%	6%	
P.M.													
2013	0%	96%	4%	30%	19%	51%	11%	71%	18%	0%	0%	0%	
2013	3%	90%	7%	30%	20%	50%	13%	67%	20%	3%	3%	3%	
2023	4%	88%	7%	30%	20%	49%	14%	66%	20%	4%	4%	4%	
2033	6%	86%	9%	31%	21%	48%	15%	65%	21%	6%	6%	6%	

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: 0
FM NO.: 0
PROJECT LIMITS: 0
DESIGN YEAR: 0
INTERSECTION: N Military Trail & Kyoto Gardens Dr.
PREPARED BY: 0
FILE: 0

DATE: 1/0/1900
NOTES: Intersection has been rotated 90 degrees.
Machine 1043 has no TMC
0
0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	21,000	21,000	21,000	21,000
24 HR EST. AADT	2013	21,000	21,000	21,000	21,000
24 HR EST. AADT	2023	21,000	21,000	21,000	21,000
24 HR EST. AADT	2033	21,000	21,000	21,000	21,000

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	11.2%	11.1%	2.9%	5.5%	12.2%	13.6%	0.5%	1.9%
2013	Approach K30 factor	11.2%	11.1%	2.9%	5.5%	12.2%	13.6%	0.5%	1.9%
2023	Approach K30 factor	11.2%	11.1%	2.9%	5.5%	12.2%	13.6%	0.5%	1.9%
2033	Approach K30 factor	11.2%	11.1%	2.9%	5.5%	12.2%	13.6%	0.5%	1.9%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	67.7%	51.3%	67.2%	85.1%	31.5%	41.7%	0.0%	0.0%
2013	Approach D30 Factor	67.7%	51.3%	67.2%	85.1%	31.5%	41.7%	0.0%	0.0%
2023	Approach D30 Factor	67.7%	51.3%	67.2%	85.1%	31.5%	41.7%	0.0%	0.0%
2033	Approach D30 Factor	67.7%	51.3%	67.2%	85.1%	31.5%	41.7%	0.0%	0.0%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2013	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2023	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2033	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
P.M. DESIGN HR. TURNS													
2013	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2013	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2023	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2033	EST. TURNS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		1592	758	2350	414	206	620	806	1754	2560	0	100	100
2013	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		1592	758	2350	414	206	620	806	1754	2560	0	100	100
2013	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		1592	758	2350	414	206	620	806	1754	2560	0	100	100
2023	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		1592	758	2350	414	206	620	806	1754	2560	0	100	100
2033	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		1199	1141	2340	985	175	1160	1189	1661	2850	0	400	400
2013	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		1199	1141	2340	985	175	1160	1189	1661	2850	0	400	400
2013	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		1199	1141	2340	985	175	1160	1189	1661	2850	0	400	400
2023	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CONTROL LINK VOLUMES		1199	1141	2340	985	175	1160	1189	1661	2850	0	400	400
2033	TURN SUMMARY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Note: Boxed number indicates manual adjustment.

NORTH MILITARY TRAIL

CORRIDOR

Intersection: PGA Boulevard

Appendix D - 2013 TMTools & Existing Conditions Analysis Synchro Reports

TMTOOL INPUT SHEET

Project Description:

SECTION NO:		PREPARED BY:	
FM NO.:		FILE:	
PROJECT LIMITS:		DATE:	
DESIGN YEAR:			
INTERSECTION:	PGA Blvd. & N Military Trail		

NOTES:

AADT & TMC data was compliled for all machines on (4/23, 4/24, 4/25).

Historical AADTs:

	YEAR / STATION	NORTH LEG AADT 1042	EAST LEG AADT 1050	SOUTH LEG AADT 1053	WEST LEG AADT 1052	
Actual AADT:	2004					24-HOUR TOTAL
Actual AADT:	2005					
Actual AADT:	2006					
Actual AADT:	2013	35,169	47,831	39,699	46,162	
TCRPM Volume:	2013	0	0	0	0	

Growth Rates:

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic Trend GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	
Historic + Model Trend GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	
2000 Model to 2030 Model GR =	0.00%	CGR	0.00%	CGR	0.00%	CGR	0.00%	CGR
Recommended Growth Rate:	**0.00%**	**CGR**	**0.00%**	**CGR**	**0.00%**	**CGR**	**0.00%**	**CGR**

Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)

1 = Compound Growth Throughout All Years
2 = Linear Growth Throughout All Years
3 = Blend of Compound First Ten Years, Linear Thereafter

		YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
			1		1		1		1	
		2013		21,000		21,000		21,000		21,000
NO. YEARS	0	2013	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000
NO. YEARS	10	2023	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000
NO. YEARS	20	2033	1.000	21,000	1.000	21,000	1.000	21,000	1.000	21,000

Percent Turns Calculated From Base Year AADTs:

JKTURNS		FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
2013 2-WAY ADT		21,000			21,000			21,000			21,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000
	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%
2013 2-WAY ADT		21,000			21,000			21,000			21,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000
	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%
2023 2-WAY ADT		21,000			21,000			21,000			21,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000
	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%
2033 2-WAY ADT		21,000			21,000			21,000			21,000		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000
	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%

Percent Turns Calculated From Base Year TMCs:

TURN STUDY		FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			
A.M.	2-Way Pk Hr Vol:	2,568			4,149			3,130			3,851			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
7:45 - 8:30	191	848	723	211	880	328	414	474	533	533	1,593	121	6,849
% TURNS:	11%	48%	41%	15%	62%	23%	29%	33%	38%	24%	71%	5%	
P.M.	2-Way Pk Hr Vol:	2,848			4,240			3,602			4,314			
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	TOTAL
5:00 - 5:45	260	940	459	354	1,476	324	462	649	674	553	1,165	186	7,502
% TURNS:	16%	57%	28%	16%	69%	15%	26%	36%	38%	29%	61%	10%	

Est. % Turns Calculated From Base Year AADTs & TMCs:

SUGGESTED STARTING POINTS

		SB			WB			NB			EB		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
A.M.												
2013	11%	48%	41%	15%	62%	23%	29%	33%	38%	24%	71%	5%
2013	13%	47%	40%	17%	59%	24%	30%	33%	37%	25%	67%	8%
2023	14%	46%	40%	17%	58%	24%	30%	33%	37%	25%	66%	9%
2033	15%	46%	40%	18%	57%	25%	30%	33%	37%	25%	65%	10%
P.M.												
2013	16%	57%	28%	16%	69%	15%	26%	36%	38%	29%	61%	10%
2013	17%	54%	28%	18%	65%	17%	27%	36%	37%	29%	58%	12%
2023	18%	54%	28%	19%	64%	17%	27%	36%	37%	30%	58%	13%
2033	19%	53%	29%	19%	63%	18%	27%	36%	37%	30%	57%	14%

PROJECT MANAGER "TURNS" REPORT

DESIGN HOUR TURNS CALCULATIONS

SECTION NO: 0
FM NO.: 0
PROJECT LIMITS: 0
DESIGN YEAR: 0
INTERSECTION: PGA Blvd. & N Military Trail
PREPARED BY: 0
FILE: 0

DATE: 1/0/1900
NOTES: AADT & TMC data was compliled for all machines on (4/23, 4/24, 4/25).
0
0
0

ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:

	YEAR	FROM NORTH	FROM EAST	FROM SOUTH	FROM WEST
24 HR EST. AADT	2013	21,000	21,000	21,000	21,000
24 HR EST. AADT	2013	21,000	21,000	21,000	21,000
24 HR EST. AADT	2023	21,000	21,000	21,000	21,000
24 HR EST. AADT	2033	21,000	21,000	21,000	21,000

K & D FACTORS:

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH K FACTOR	12.2%	13.6%	19.8%	20.2%	14.9%	17.2%	18.3%	20.5%
2013	Approach K30 factor	12.2%	13.6%	19.8%	20.2%	14.9%	17.2%	18.3%	20.5%
2023	Approach K30 factor	12.2%	13.6%	19.8%	20.2%	14.9%	17.2%	18.3%	20.5%
2033	Approach K30 factor	12.2%	13.6%	19.8%	20.2%	14.9%	17.2%	18.3%	20.5%

		AM	PM	AM	PM	AM	PM	AM	PM
2013	APPROACH D FACTOR	68.6%	58.3%	34.2%	50.8%	45.4%	49.6%	58.3%	44.1%
2013	Approach D30 Factor	68.6%	58.3%	34.2%	50.8%	45.4%	49.6%	58.3%	44.1%
2023	Approach D30 Factor	68.6%	58.3%	34.2%	50.8%	45.4%	49.6%	58.3%	44.1%
2033	Approach D30 Factor	68.6%	58.3%	34.2%	50.8%	45.4%	49.6%	58.3%	44.1%

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
A.M. DESIGN HR. TURNS		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2013	EST. TURNS	191	848	723	212	880	328	414	475	532	533	1,594	121
2013	EST. TURNS	227	827	710	218	848	350	460	432	528	532	1,561	158
2023	EST. TURNS	236	822	707	220	841	356	471	422	527	532	1,554	166
2033	EST. TURNS	251	813	701	223	828	364	489	407	524	532	1,542	178
P.M. DESIGN HR. TURNS													
2013	EST. TURNS	259	940	459	355	1474	324	462	650	672	552	1,165	186
2013	EST. TURNS	294	901	463	366	1427	360	490	609	685	554	1,133	216
2023	EST. TURNS	303	891	464	369	1,415	369	497	599	688	555	1,125	223
2033	EST. TURNS	318	874	466	373	1395	384	508	584	692	557	1,112	234

LINK VOLUME CHECK

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
DESIGN HOUR A.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		1762	808	2570	1419	2731	4150	1421	1709	3130	2247	1603	3850
2013	TURN SUMMARY	1763	808	2571	1419	2731	4150	1421	1709	3130	2248	1603	3851
CONTROL LINK VOLUMES		1762	808	2570	1419	2731	4150	1421	1709	3130	2247	1603	3850
2013	TURN SUMMARY	1764	808	2572	1416	2731	4147	1420	1709	3129	2251	1603	3854
CONTROL LINK VOLUMES		1762	808	2570	1419	2731	4150	1421	1709	3130	2247	1603	3850
2023	TURN SUMMARY	1764	808	2572	1416	2731	4147	1419	1709	3128	2252	1603	3855
CONTROL LINK VOLUMES		1762	808	2570	1419	2731	4150	1421	1709	3130	2247	1603	3850
2033	TURN SUMMARY	1764	808	2572	1415	2731	4146	1419	1709	3128	2253	1603	3856
DESIGN HOUR P.M.:		FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES		1659	1191	2850	2154	2086	4240	1785	1815	3600	1904	2406	4310
2013	TURN SUMMARY	1658	1191	2849	2153	2086	4239	1784	1815	3599	1903	2406	4309
CONTROL LINK VOLUMES		1659	1191	2850	2154	2086	4240	1785	1815	3600	1904	2406	4310
2013	TURN SUMMARY	1658	1191	2849	2152	2086	4238	1784	1815	3599	1903	2406	4309
CONTROL LINK VOLUMES		1659	1191	2850	2154	2086	4240	1785	1815	3600	1904	2406	4310
2023	TURN SUMMARY	1658	1191	2849	2152	2086	4238	1784	1815	3599	1903	2406	4309
CONTROL LINK VOLUMES		1659	1191	2850	2154	2086	4240	1785	1815	3600	1904	2406	4310
2033	TURN SUMMARY	1658	1191	2849	2152	2086	4238	1784	1815	3599	1904	2406	4310

Note: Boxed number indicates manual adjustment.

EXISTING CONDITIONS

SYNCHRO REPORTS

DONALD ROSS ROAD

CORRIDOR

FROM: 64th Dr/ E Pointe Ct

TO: N. Military Trail

DONALD ROSS ROAD

CORRIDOR

Intersection: 64th Dr N-E Pointe Ct

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	3	770	4	15	354	16	1	0	19	5	0	76
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	325	-	-	289	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	3	5	2	2	2	2	2	2
Mvmt Flow	3	837	4	16	385	17	1	0	21	5	0	83

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	402	0	0	841	0	0	1071	1281	421	851	1274	201
Stage 1	-	-	-	-	-	-	846	846	-	426	426	-
Stage 2	-	-	-	-	-	-	225	435	-	425	848	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1153	-	-	790	-	-	175	164	581	253	166	806
Stage 1	-	-	-	-	-	-	323	377	-	577	584	-
Stage 2	-	-	-	-	-	-	757	579	-	578	376	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1153	-	-	790	-	-	154	160	581	240	162	806
Mov Cap-2 Maneuver	-	-	-	-	-	-	154	160	-	240	162	-
Stage 1	-	-	-	-	-	-	322	376	-	575	572	-
Stage 2	-	-	-	-	-	-	666	567	-	556	375	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.4	12.4	10.8
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	510	1153	-	-	790	-	-	704
HCM Lane V/C Ratio	0.043	0.003	-	-	0.021	-	-	0.125
HCM Control Delay (s)	12.4	8.1	-	-	9.7	-	-	10.8
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0.1	-	-	0.4

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	3	432	0	44	687	50	6	0	31	35	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	325	-	-	289	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	3	2	2	2
Mvmt Flow	3	465	0	47	739	54	6	0	33	38	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	792	0	0	465	0	0	935	1358	232	1099	1331	396
Stage 1	-	-	-	-	-	-	471	471	-	860	860	-
Stage 2	-	-	-	-	-	-	464	887	-	239	471	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.96	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.33	3.52	4.02	3.32
Pot Cap-1 Maneuver	824	-	-	1093	-	-	220	148	767	167	153	603
Stage 1	-	-	-	-	-	-	542	558	-	317	371	-
Stage 2	-	-	-	-	-	-	548	360	-	743	558	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	824	-	-	1093	-	-	212	141	767	154	146	603
Mov Cap-2 Maneuver	-	-	-	-	-	-	212	141	-	154	146	-
Stage 1	-	-	-	-	-	-	540	556	-	316	355	-
Stage 2	-	-	-	-	-	-	524	345	-	708	556	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.5	12.2	35.8
HCM LOS			B	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	538	824	-	-	1093	-	-	154
HCM Lane V/C Ratio	0.074	0.004	-	-	0.043	-	-	0.244
HCM Control Delay (s)	12.2	9.4	-	-	8.4	-	-	35.8
HCM Lane LOS	B	A	-	-	A	-	-	E
HCM 95th %tile Q(veh)	0.2	0	-	-	0.1	-	-	0.9

DONALD ROSS ROAD

CORRIDOR

Intersection: West Ramp

HCM Signalized Intersection Capacity Analysis

1: West Ramps & Donald Ross AM Conditions 9/29/2014

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	447	347	1104	254	0	0	0	0	766	0	124
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0		4.0
Lane Util. Factor		0.86	1.00	0.97	0.95					0.97		1.00
Frpb, ped/bikes		1.00	0.93	1.00	1.00					1.00		0.93
Flpb, ped/bikes		1.00	1.00	1.00	1.00					1.00		1.00
Frt		1.00	0.85	1.00	1.00					1.00		0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (prot)		6408	1471	3433	3505					3433		1471
Flt Permitted		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (perm)		6408	1471	3433	3505					3433		1471
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	0	491	381	1213	279	0	0	0	0	842	0	136
RTOR Reduction (vph)	0	0	189	0	0	0	0	0	0	0	0	80
Lane Group Flow (vph)	0	491	192	1213	279	0	0	0	0	842	0	56
Confl. Peds. (#/hr)			20									20
Heavy Vehicles (%)	2%	2%	2%	2%	3%	2%	2%	2%	2%	2%	2%	2%
Turn Type		NA	Perm	Prot	NA					Perm		Perm
Protected Phases		4		2	1 2							
Permitted Phases			4							6		6
Actuated Green, G (s)		80.8	80.8	15.0	99.8					16.0		16.0
Effective Green, g (s)		80.8	80.8	15.0	99.8					16.0		16.0
Actuated g/C Ratio		0.50	0.50	0.09	0.62					0.10		0.10
Clearance Time (s)		4.0	4.0	4.0						4.0		4.0
Vehicle Extension (s)		4.7	4.7	4.7						4.7		4.7
Lane Grp Cap (vph)		3236	742	321	2186					343		147
v/s Ratio Prot		0.08		c0.35	0.08							
v/s Ratio Perm			c0.13							c0.25		0.04
v/c Ratio		0.15	0.26	3.78	0.13					2.45		0.38
Uniform Delay, d1		21.2	22.6	72.5	12.3					72.0		67.4
Progression Factor		1.00	1.00	1.65	1.64					1.00		1.00
Incremental Delay, d2		0.0	0.3	1257.6	0.0					663.4		3.1
Delay (s)		21.3	22.9	1377.4	20.3					735.4		70.4
Level of Service		C	C	F	C					F		E
Approach Delay (s)		22.0			1123.6			0.0			642.9	
Approach LOS		C			F			A			F	

Intersection Summary			
HCM 2000 Control Delay	695.5	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	112.0%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

HCM Signalized Intersection Capacity Analysis

1: West Ramrps/West Ramps & Donald Ross PM Conditions 9/29/2014

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	337	161	931	641	0	0	0	0	279	0	152
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0		4.0
Lane Util. Factor		0.86	1.00	0.97	0.95					0.97		1.00
Frpb, ped/bikes		1.00	0.98	1.00	1.00					1.00		0.98
Flpb, ped/bikes		1.00	1.00	1.00	1.00					1.00		1.00
Frt		1.00	0.85	1.00	1.00					1.00		0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (prot)		6408	1555	3433	3539					3433		1555
Flt Permitted		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (perm)		6408	1555	3433	3539					3433		1555
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	366	175	1012	697	0	0	0	0	303	0	165
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	366	175	1012	697	0	0	0	0	303	0	165
Confl. Peds. (#/hr)			20									20
Turn Type		NA	Free	Prot	NA					Perm		Free
Protected Phases		4		2	1 2							
Permitted Phases			Free							6		Free
Actuated Green, G (s)		55.8	120.0	15.6	75.4					15.4		120.0
Effective Green, g (s)		55.8	120.0	15.6	75.4					15.4		120.0
Actuated g/C Ratio		0.46	1.00	0.13	0.63					0.13		1.00
Clearance Time (s)		4.0		4.0						4.0		
Vehicle Extension (s)		4.7		4.7						4.7		
Lane Grp Cap (vph)		2979	1555	446	2223					440		1555
v/s Ratio Prot		0.06		c0.29	c0.20							
v/s Ratio Perm			c0.11							c0.09		0.11
v/c Ratio		0.12	0.11	2.27	0.31					0.69		0.11
Uniform Delay, d1		18.2	0.0	52.2	10.3					50.0		0.0
Progression Factor		1.00	1.00	1.69	1.58					1.00		1.00
Incremental Delay, d2		0.0	0.1	577.7	0.1					5.4		0.1
Delay (s)		18.2	0.1	665.8	16.4					55.4		0.1
Level of Service		B	A	F	B					E		A
Approach Delay (s)		12.4			400.9			0.0			35.9	
Approach LOS		B			F			A			D	

Intersection Summary			
HCM 2000 Control Delay	260.8	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	68.3%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

DONALD ROSS ROAD

CORRIDOR

Intersection: East Ramps

HCM Signalized Intersection Capacity Analysis

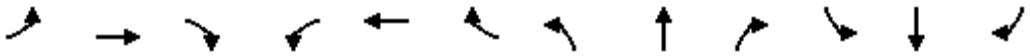
2: East Ramps & Donald Ross/Doanld Ross AM Conditions 9/29/2014

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	178	1378	0	0	1254	264	105	0	1288	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0	4.0		4.0			
Lane Util. Factor	0.97	0.95			0.86	1.00	0.97		0.88			
Frpb, ped/bikes	1.00	1.00			1.00	0.98	1.00		1.00			
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00		1.00			
Frt	1.00	1.00			1.00	0.85	1.00		0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (prot)	3433	3539			6408	1547	3400		2787			
Flt Permitted	0.95	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (perm)	3433	3539			6408	1547	3400		2787			
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	198	1531	0	0	1393	293	117	0	1431	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	132	0	0	297	0	0	0
Lane Group Flow (vph)	198	1531	0	0	1393	161	117	0	1134	0	0	0
Confl. Peds. (#/hr)						20			20			
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	3%	2%	2%	2%	2%	2%
Turn Type	Prot	NA			NA	Perm	Prot		Prot			
Protected Phases	5	4 5			1		3		3			
Permitted Phases						1						
Actuated Green, G (s)	8.0	88.8			87.8	87.8	32.2		32.2			
Effective Green, g (s)	8.0	88.8			87.8	87.8	32.2		32.2			
Actuated g/C Ratio	0.05	0.55			0.55	0.55	0.20		0.20			
Clearance Time (s)	4.0				4.0	4.0	4.0		4.0			
Vehicle Extension (s)	4.7				4.7	4.7	4.7		4.7			
Lane Grp Cap (vph)	171	1964			3516	848	684		560			
v/s Ratio Prot	c0.06	c0.43			c0.22		0.03		c0.41			
v/s Ratio Perm						0.10						
v/c Ratio	1.16	0.78			0.40	0.19	0.17		2.02			
Uniform Delay, d1	76.0	27.9			20.8	18.2	52.9		63.9			
Progression Factor	1.37	1.07			1.00	1.00	1.00		1.00			
Incremental Delay, d2	117.6	0.2			0.1	0.2	0.2		467.4			
Delay (s)	221.5	30.0			21.0	18.4	53.1		531.3			
Level of Service	F	C			C	B	D		F			
Approach Delay (s)		52.0			20.5			495.2			0.0	
Approach LOS		D			C			F			A	

Intersection Summary			
HCM 2000 Control Delay	179.5	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	112.0%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

HCM Signalized Intersection Capacity Analysis

2: East Ramps & Donald Ross PM Conditions 9/29/2014



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	127	489	0	0	1283	719	290	0	1224	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0	4.0		4.0			
Lane Util. Factor	0.97	0.95			0.86	1.00	0.97		0.88			
Frpb, ped/bikes	1.00	1.00			1.00	0.98	1.00		1.00			
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00		1.00			
Frt	1.00	1.00			1.00	0.85	1.00		0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (prot)	3367	3539			6408	1547	3433		2787			
Flt Permitted	0.95	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (perm)	3367	3539			6408	1547	3433		2787			
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	140	537	0	0	1410	790	319	0	1345	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	376	0	0	732	0	0	0
Lane Group Flow (vph)	140	537	0	0	1410	414	319	0	613	0	0	0
Confl. Peds. (#/hr)						20			20			
Heavy Vehicles (%)	4%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Turn Type	Prot	NA			NA	Perm	Prot		Prot			
Protected Phases	5	4 5			1		3		3			
Permitted Phases						1						
Actuated Green, G (s)	8.5	64.3			62.9	62.9	17.2		17.2			
Effective Green, g (s)	8.5	64.3			62.9	62.9	17.2		17.2			
Actuated g/C Ratio	0.07	0.54			0.52	0.52	0.14		0.14			
Clearance Time (s)	4.0				4.0	4.0	4.0		4.0			
Vehicle Extension (s)	4.7				4.7	4.7	4.7		4.7			
Lane Grp Cap (vph)	238	1896			3358	810	492		399			
v/s Ratio Prot	c0.04	0.15			0.22		0.09		c0.22			
v/s Ratio Perm						c0.27						
v/c Ratio	0.59	0.28			0.42	0.51	0.65		1.54			
Uniform Delay, d1	54.1	15.2			17.4	18.6	48.5		51.4			
Progression Factor	1.49	0.94			1.00	1.00	1.00		1.00			
Incremental Delay, d2	5.3	0.1			0.2	1.0	3.8		254.1			
Delay (s)	85.6	14.5			17.6	19.5	52.3		305.5			
Level of Service	F	B			B	B	D		F			
Approach Delay (s)		29.2			18.3			257.0			0.0	
Approach LOS		C			B			F			A	

Intersection Summary			
HCM 2000 Control Delay	107.4	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	68.3%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

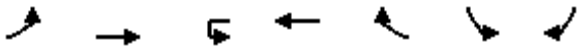
DONALD ROSS ROAD

CORRIDOR

Intersection: Parkside Drive

HCM Signalized Intersection Capacity Analysis

12: Donald Ross & Parkside Dr AM Conditions 9/29/2014



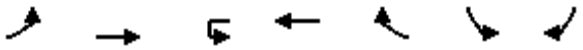
Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (vph)	278	2083	0	1113	87	79	402
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	8.0	8.5		7.5	7.5	8.5	8.5
Lane Util. Factor	1.00	0.91		0.91	1.00	1.00	1.00
Frt	1.00	1.00		1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00		1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	5036		5036	1583	1752	1583
Flt Permitted	0.17	1.00		1.00	1.00	0.95	1.00
Satd. Flow (perm)	314	5036		5036	1583	1752	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	293	2193	0	1172	92	83	423
RTOR Reduction (vph)	0	0	0	0	44	0	165
Lane Group Flow (vph)	293	2193	0	1172	48	83	258
Heavy Vehicles (%)	2%	3%	2%	3%	2%	3%	2%
Turn Type	pm+pt	NA	pm+pt	NA	Perm	Prot	Prot
Protected Phases	1	6	5	2		7	7
Permitted Phases	6		2		2		
Actuated Green, G (s)	95.7	95.7		73.3	73.3	26.7	26.7
Effective Green, g (s)	95.7	95.7		73.3	73.3	26.7	26.7
Actuated g/C Ratio	0.69	0.69		0.53	0.53	0.19	0.19
Clearance Time (s)	8.0	8.5		7.5	7.5	8.5	8.5
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	376	3457		2648	832	335	303
v/s Ratio Prot	0.09	c0.44		0.23		0.05	c0.16
v/s Ratio Perm	c0.45				0.03		
v/c Ratio	0.78	0.63		0.44	0.06	0.25	0.85
Uniform Delay, d1	13.3	12.1		20.4	16.2	47.8	54.4
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	9.8	0.9		0.1	0.0	0.4	20.0
Delay (s)	23.2	13.0		20.5	16.2	48.2	74.4
Level of Service	C	B		C	B	D	E
Approach Delay (s)		14.2		20.2		70.1	
Approach LOS		B		C		E	

Intersection Summary			
HCM 2000 Control Delay	22.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	139.4	Sum of lost time (s)	25.0
Intersection Capacity Utilization	68.8%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis

12: Donald Ross & Parkside Dr PM Conditions 9/29/2014



Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (vph)	320	1392	6	1283	106	65	297
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	8.0	8.5	8.0	7.5	7.5	8.5	8.5
Lane Util. Factor	1.00	0.91	1.00	0.91	1.00	1.00	1.00
Frt	1.00	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	4988	1770	4988	1583	1770	1568
Flt Permitted	0.13	1.00	0.17	1.00	1.00	0.95	1.00
Satd. Flow (perm)	244	4988	308	4988	1583	1770	1568
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	340	1481	6	1365	113	69	316
RTOR Reduction (vph)	0	0	0	0	52	0	147
Lane Group Flow (vph)	340	1481	6	1365	61	69	169
Heavy Vehicles (%)	2%	4%	2%	4%	2%	2%	3%
Turn Type	pm+pt	NA	pm+pt	NA	Perm	Prot	Prot
Protected Phases	1	6	5	2		7	7
Permitted Phases	6		2		2		
Actuated Green, G (s)	81.8	72.7	62.0	60.9	60.9	13.5	13.5
Effective Green, g (s)	81.8	72.7	62.0	60.9	60.9	13.5	13.5
Actuated g/C Ratio	0.73	0.65	0.55	0.54	0.54	0.12	0.12
Clearance Time (s)	8.0	8.5	8.0	7.5	7.5	8.5	8.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	366	3229	184	2704	858	212	188
v/s Ratio Prot	c0.11	0.30	0.00	0.27		0.04	c0.11
v/s Ratio Perm	c0.56		0.02		0.04		
v/c Ratio	0.93	0.46	0.03	0.50	0.07	0.33	0.90
Uniform Delay, d1	22.1	9.9	11.3	16.2	12.2	45.2	48.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	29.3	0.5	0.1	0.1	0.0	0.9	38.2
Delay (s)	51.4	10.4	11.4	16.3	12.3	46.1	87.0
Level of Service	D	B	B	B	B	D	F
Approach Delay (s)		18.1		16.0		79.6	
Approach LOS		B		B		E	

Intersection Summary			
HCM 2000 Control Delay	23.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	112.3	Sum of lost time (s)	25.0
Intersection Capacity Utilization	66.1%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

DONALD ROSS ROAD

CORRIDOR

Intersection: Central Boulevard

HCM 2010 Signalized Intersection Summary

14: Central Blvd & Donald Ross AM Conditions 9/24/2014

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	313	1518	331	304	731	69	202	277	221	121	227	270
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1845	1845	1863	1863	1845	1863	1845	1827	1863	1863	1863
Adj Flow Rate, veh/h	340	1650	360	330	795	75	220	301	240	132	247	293
Adj No. of Lanes	2	3	1	2	3	1	2	2	1	2	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	3	3	2	2	3	2	3	4	2	2	2
Cap, veh/h	384	1851	576	378	1860	573	270	852	377	182	782	350
Arrive On Green	0.11	0.37	0.37	0.11	0.37	0.37	0.08	0.24	0.24	0.05	0.22	0.22
Sat Flow, veh/h	3442	5036	1568	3442	5085	1568	3442	3505	1553	3442	3539	1583
Grp Volume(v), veh/h	340	1650	360	330	795	75	220	301	240	132	247	293
Grp Sat Flow(s),veh/h/ln	1721	1679	1568	1721	1695	1568	1721	1752	1553	1721	1770	1583
Q Serve(g_s), s	14.4	45.5	27.8	13.9	17.4	4.7	9.3	10.5	20.4	5.6	8.6	26.1
Cycle Q Clear(g_c), s	14.4	45.5	27.8	13.9	17.4	4.7	9.3	10.5	20.4	5.6	8.6	26.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	384	1851	576	378	1860	573	270	852	377	182	782	350
V/C Ratio(X)	0.89	0.89	0.62	0.87	0.43	0.13	0.82	0.35	0.64	0.72	0.32	0.84
Avail Cap(c_a), veh/h	396	1851	576	420	1860	573	361	914	405	396	971	434
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	64.7	43.9	38.3	64.7	35.2	31.2	67.0	46.3	50.0	68.9	48.2	55.0
Incr Delay (d2), s/veh	20.3	5.9	2.1	16.9	0.7	0.5	10.2	0.2	3.0	5.4	0.2	11.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	12.5	29.8	18.1	12.0	12.9	3.8	8.4	8.8	14.0	5.0	7.6	18.3
LnGrp Delay(d),s/veh	84.9	49.9	40.5	81.7	35.9	31.7	77.2	46.5	53.0	74.2	48.4	66.2
LnGrp LOS	F	D	D	F	D	C	E	D	D	E	D	E
Approach Vol, veh/h		2350			1200			761			672	
Approach Delay, s/veh		53.5			48.2			57.4			61.2	
Approach LOS		D			D			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	25.5	62.0	16.8	43.4	25.2	62.3	20.1	40.1
Change Period (Y+Rc), s	9.0	* 8	9.0	* 7.5	9.0	8.0	8.5	7.5
Max Green Setting (Gmax), s	17.0	* 54	17.0	* 39	18.0	53.0	15.5	40.5
Max Q Clear Time (g_c+I1), s	16.4	19.4	7.6	22.4	15.9	47.5	11.3	28.1
Green Ext Time (p_c), s	0.1	27.3	0.2	5.1	0.3	5.2	0.3	4.5

Intersection Summary	
HCM 2010 Ctrl Delay	53.9
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

HCM Signalized Intersection Capacity Analysis

14: Central Blvd & Donald Ross PM Conditions 9/29/2014

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	488	850	118	335	1324	154	266	346	123	165	250	162
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	9.0	8.0	8.0	9.0	8.0	8.0	8.5	7.5	7.5	9.0	7.5	7.5
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5085	1583	3433	5085	1583	3433	3539	1583	3433	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5085	1583	3433	5085	1583	3433	3539	1583	3433	3539	1583
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	561	977	136	385	1522	177	306	398	141	190	287	186
RTOR Reduction (vph)	0	0	89	0	0	117	0	0	119	0	0	158
Lane Group Flow (vph)	561	977	47	385	1522	60	306	398	22	190	287	28
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6			2			4			8
Actuated Green, G (s)	15.0	40.1	40.1	14.0	39.1	39.1	11.5	18.2	18.2	10.3	17.5	17.5
Effective Green, g (s)	15.0	40.1	40.1	14.0	39.1	39.1	11.5	18.2	18.2	10.3	17.5	17.5
Actuated g/C Ratio	0.13	0.35	0.35	0.12	0.34	0.34	0.10	0.16	0.16	0.09	0.15	0.15
Clearance Time (s)	9.0	8.0	8.0	9.0	8.0	8.0	8.5	7.5	7.5	9.0	7.5	7.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	443	1756	546	413	1712	533	340	554	248	304	533	238
v/s Ratio Prot	c0.16	0.19		0.11	c0.30		c0.09	c0.11		0.06	0.08	
v/s Ratio Perm			0.03			0.04			0.01			0.02
v/c Ratio	1.27	0.56	0.09	0.93	0.89	0.11	0.90	0.72	0.09	0.62	0.54	0.12
Uniform Delay, d1	50.5	30.8	25.6	50.6	36.4	26.5	51.7	46.5	41.9	51.0	45.6	42.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	136.8	0.4	0.1	27.8	7.3	0.4	25.5	4.4	0.2	4.0	1.1	0.2
Delay (s)	187.3	31.2	25.7	78.4	43.8	27.0	77.3	51.0	42.0	55.0	46.6	42.8
Level of Service	F	C	C	E	D	C	E	D	D	E	D	D
Approach Delay (s)		83.1			48.8			59.0			48.0	
Approach LOS		F			D			E			D	

Intersection Summary			
HCM 2000 Control Delay	61.2	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	116.1	Sum of lost time (s)	33.5
Intersection Capacity Utilization	84.6%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

DONALD ROSS ROAD

CORRIOR

Intersection: North Military Trail

HCM 2010 Signalized Intersection Summary

17: Donald Ross & Military Trail AM Conditions 9/30/2014

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	561	996	295	146	496	323	167	877	188	456	852	424
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1863	1863	1863	1863	1863	1863	1863	1863	1863	1845	1827
Adj Flow Rate, veh/h	603	1071	317	157	533	347	180	943	202	490	916	456
Adj No. of Lanes	2	3	1	2	3	1	2	3	1	2	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	3	2	2	2	2	2	2	2	2	2	3	4
Cap, veh/h	462	1709	532	199	1313	409	223	1386	431	444	1181	523
Arrive On Green	0.14	0.34	0.34	0.06	0.26	0.26	0.06	0.27	0.27	0.13	0.34	0.34
Sat Flow, veh/h	3408	5085	1583	3442	5085	1583	3442	5085	1583	3442	3505	1553
Grp Volume(v), veh/h	603	1071	317	157	533	347	180	943	202	490	916	456
Grp Sat Flow(s),veh/h/ln	1704	1695	1583	1721	1695	1583	1721	1695	1583	1721	1752	1553
Q Serve(g_s), s	21.5	28.1	26.4	7.2	13.8	33.1	8.2	26.3	16.9	20.5	37.2	43.8
Cycle Q Clear(g_c), s	21.5	28.1	26.4	7.2	13.8	33.1	8.2	26.3	16.9	20.5	37.2	43.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	462	1709	532	199	1313	409	223	1386	431	444	1181	523
V/C Ratio(X)	1.31	0.63	0.60	0.79	0.41	0.85	0.81	0.68	0.47	1.10	0.78	0.87
Avail Cap(c_a), veh/h	462	1709	532	206	1313	409	249	1425	444	444	1181	523
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	68.6	44.3	43.8	73.9	48.8	55.9	73.3	51.6	48.2	69.1	47.2	49.4
Incr Delay (d2), s/veh	152.9	1.8	4.9	18.0	0.9	19.2	16.2	1.3	0.8	73.5	5.0	17.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	35.8	19.5	18.0	7.0	10.8	23.3	7.8	18.3	12.0	25.6	26.0	29.0
LnGrp Delay(d),s/veh	221.6	46.1	48.6	91.9	49.7	75.2	89.5	52.9	48.9	142.7	52.3	67.2
LnGrp LOS	F	D	D	F	D	E	F	D	D	F	D	E
Approach Vol, veh/h		1991			1037			1325			1862	
Approach Delay, s/veh		99.6			64.6			57.2			79.7	
Approach LOS		F			E			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	30.0	49.0	29.0	50.8	17.7	61.3	18.8	61.0
Change Period (Y+Rc), s	8.5	8.0	8.5	7.5	8.5	8.0	8.5	7.5
Max Green Setting (Gmax), s	21.5	41.0	20.5	44.5	9.5	53.0	11.5	53.5
Max Q Clear Time (g_c+I1), s	23.5	35.1	22.5	28.3	9.2	30.1	10.2	45.8
Green Ext Time (p_c), s	0.0	5.0	0.0	12.9	0.0	15.2	0.1	6.7

Intersection Summary	
HCM 2010 Ctrl Delay	78.8
HCM 2010 LOS	E

HCM 2010 Signalized Intersection Summary

17: Donald Ross & Military Trail PM Condition 9/30/2014

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	423	572	143	168	1199	426	165	608	88	470	901	504
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1845	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	450	609	152	179	1276	453	176	647	94	500	959	536
Adj No. of Lanes	2	3	1	2	3	1	2	3	1	2	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	3	2	2	2	2	2	2	2	2	2
Cap, veh/h	399	1418	437	340	1331	414	237	1179	367	399	987	442
Arrive On Green	0.12	0.28	0.28	0.10	0.26	0.26	0.07	0.23	0.23	0.12	0.28	0.28
Sat Flow, veh/h	3442	5085	1568	3442	5085	1583	3442	5085	1583	3442	3539	1583
Grp Volume(v), veh/h	450	609	152	179	1276	453	176	647	94	500	959	536
Grp Sat Flow(s),veh/h/ln	1721	1695	1568	1721	1695	1583	1721	1695	1583	1721	1770	1583
Q Serve(g_s), s	13.5	11.4	9.0	5.8	28.8	30.5	5.8	13.0	5.6	13.5	31.2	32.5
Cycle Q Clear(g_c), s	13.5	11.4	9.0	5.8	28.8	30.5	5.8	13.0	5.6	13.5	31.2	32.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	399	1418	437	340	1331	414	237	1179	367	399	987	442
V/C Ratio(X)	1.13	0.43	0.35	0.53	0.96	1.09	0.74	0.55	0.26	1.25	0.97	1.21
Avail Cap(c_a), veh/h	399	1418	437	340	1331	414	340	1331	414	399	987	442
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.5	34.4	33.5	49.9	42.4	43.0	53.2	39.4	36.5	51.5	41.6	42.0
Incr Delay (d2), s/veh	84.9	0.2	0.5	5.7	16.6	71.7	5.1	0.4	0.4	133.4	22.5	115.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	19.9	9.2	7.1	5.4	22.0	38.9	5.3	10.2	4.5	24.8	25.3	51.1
LnGrp Delay(d),s/veh	136.4	34.6	34.0	55.7	59.0	114.7	58.4	39.8	36.9	184.9	64.1	157.5
LnGrp LOS	F	C	C	E	E	F	E	D	D	F	E	F
Approach Vol, veh/h		1211			1908			917			1995	
Approach Delay, s/veh		72.4			71.9			43.1			119.5	
Approach LOS		E			E			D			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.0	34.5	20.0	40.0	16.5	40.0	22.0	38.0
Change Period (Y+Rc), s	8.5	7.5	8.5	7.5	8.5	7.5	8.5	7.5
Max Green Setting (Gmax), s	13.5	30.5	11.5	32.5	11.5	32.5	13.5	30.5
Max Q Clear Time (g_c+I1), s	15.5	15.0	7.8	13.4	7.8	34.5	15.5	32.5
Green Ext Time (p_c), s	0.0	11.4	0.2	14.7	0.2	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	83.3
HCM 2010 LOS	F

HOOD ROAD

CORRIDOR

FROM: Eastpointe Boulevard

TO: North Military Trail

HOOD ROAD

CORRIDOR

Intersection: Eastpointe Boulevard

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	13	575	353	47	59	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	399	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	79	79	79	79	79	79
Heavy Vehicles, %	2	2	3	17	2	10
Mvmt Flow	16	728	447	59	75	16

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	447	0	-	0	1208	447
Stage 1	-	-	-	-	447	-
Stage 2	-	-	-	-	761	-
Critical Hdwy	4.12	-	-	-	6.42	6.3
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.39
Pot Cap-1 Maneuver	1113	-	-	-	202	595
Stage 1	-	-	-	-	644	-
Stage 2	-	-	-	-	461	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1113	-	-	-	197	595
Mov Cap-2 Maneuver	-	-	-	-	197	-
Stage 1	-	-	-	-	644	-
Stage 2	-	-	-	-	450	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	31.7
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1113	-	-	-	224
HCM Lane V/C Ratio	0.015	-	-	-	0.407
HCM Control Delay (s)	8.3	0	-	-	31.7
HCM Lane LOS	A	A	-	-	D
HCM 95th %tile Q(veh)	0	-	-	-	1.9

HCM 2010 TWSC

3: Hood Road/Hood Rd & Eastpointe Blvd PM Conditions 9/29/2014

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	3	355	369	119	45	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	399	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	390	405	131	49	5

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	405	0	-	0	802	405
Stage 1	-	-	-	-	405	-
Stage 2	-	-	-	-	397	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1154	-	-	-	353	646
Stage 1	-	-	-	-	673	-
Stage 2	-	-	-	-	679	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1154	-	-	-	352	646
Mov Cap-2 Maneuver	-	-	-	-	352	-
Stage 1	-	-	-	-	673	-
Stage 2	-	-	-	-	677	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	16.5
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1154	-	-	-	369
HCM Lane V/C Ratio	0.003	-	-	-	0.149
HCM Control Delay (s)	8.1	0	-	-	16.5
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.5

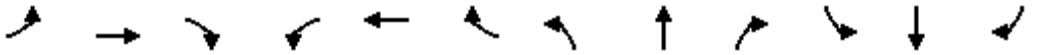
HOOD ROAD

CORRIDOR

Intersection: Central Boulevard

HCM 2010 Signalized Intersection Summary

5: Hood Rd/Hood Road & Central Blvd AM Condition 9/30/2014



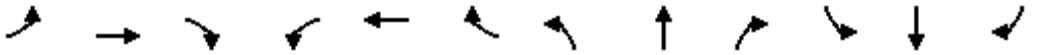
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	121	428	85	174	245	89	77	443	80	186	518	78
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1681	1854	1900	1759	1832	1900
Adj Flow Rate, veh/h	138	486	97	198	278	101	88	503	91	211	589	89
Adj No. of Lanes	2	1	1	2	2	1	1	2	0	1	2	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	13	2	2	8	4	4
Cap, veh/h	195	553	470	256	1112	498	304	1040	187	382	1195	180
Arrive On Green	0.06	0.30	0.30	0.07	0.31	0.31	0.05	0.35	0.35	0.09	0.39	0.39
Sat Flow, veh/h	3442	1863	1583	3442	3539	1583	1601	2984	537	1675	3034	457
Grp Volume(v), veh/h	138	486	97	198	278	101	88	296	298	211	337	341
Grp Sat Flow(s),veh/h/ln	1721	1863	1583	1721	1770	1583	1601	1762	1760	1675	1740	1751
Q Serve(g_s), s	5.1	32.1	5.9	7.3	7.5	6.0	4.5	17.0	17.2	10.1	18.8	18.9
Cycle Q Clear(g_c), s	5.1	32.1	5.9	7.3	7.5	6.0	4.5	17.0	17.2	10.1	18.8	18.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.31	1.00		0.26
Lane Grp Cap(c), veh/h	195	553	470	256	1112	498	304	614	613	382	686	690
V/C Ratio(X)	0.71	0.88	0.21	0.77	0.25	0.20	0.29	0.48	0.49	0.55	0.49	0.49
Avail Cap(c_a), veh/h	400	649	552	400	1233	552	411	614	613	417	686	690
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	59.9	43.2	34.0	58.7	33.0	32.4	25.6	33.0	33.0	23.6	29.4	29.4
Incr Delay (d2), s/veh	4.7	11.8	0.2	5.0	0.1	0.2	0.5	2.7	2.7	1.3	2.5	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.6	25.3	4.7	6.6	6.7	4.8	3.6	13.6	13.7	8.3	14.5	14.6
LnGrp Delay(d),s/veh	64.5	55.1	34.2	63.7	33.1	32.6	26.1	35.7	35.8	24.9	31.9	32.0
LnGrp LOS	E	E	C	E	C	C	C	D	D	C	C	C
Approach Vol, veh/h		721			577			682			889	
Approach Delay, s/veh		54.1			43.5			34.5			30.3	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.2	51.0	15.6	44.3	12.4	56.9	13.3	46.6
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	15.0	45.0	15.0	45.0	15.0	45.0	15.0	45.0
Max Q Clear Time (g_c+I1), s	12.1	19.2	9.3	34.1	6.5	20.9	7.1	9.5
Green Ext Time (p_c), s	0.2	9.1	0.3	4.2	0.1	8.9	0.2	6.6

Intersection Summary	
HCM 2010 Ctrl Delay	39.9
HCM 2010 LOS	D

HCM 2010 Signalized Intersection Summary

5: Hood Rd/Hood Road & Central Blvd PM Condition 10/2/2014



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	86	262	51	118	325	115	59	396	82	156	462	106
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1850	1900	1863	1863	1900
Adj Flow Rate, veh/h	88	267	52	120	325	117	60	404	84	159	471	108
Adj No. of Lanes	2	1	1	2	2	1	1	2	0	1	2	0
Peak Hour Factor	0.98	0.98	0.98	0.98	1.00	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	158	371	316	192	740	331	439	1279	264	509	1369	312
Arrive On Green	0.05	0.20	0.20	0.06	0.21	0.21	0.03	0.44	0.44	0.07	0.48	0.48
Sat Flow, veh/h	3442	1863	1583	3442	3539	1583	1774	2904	599	1774	2864	653
Grp Volume(v), veh/h	88	267	52	120	325	117	60	243	245	159	290	289
Grp Sat Flow(s),veh/h/ln	1721	1863	1583	1721	1770	1583	1774	1758	1745	1774	1770	1748
Q Serve(g_s), s	2.6	13.7	2.8	3.5	8.2	6.4	1.9	9.2	9.3	4.9	10.4	10.6
Cycle Q Clear(g_c), s	2.6	13.7	2.8	3.5	8.2	6.4	1.9	9.2	9.3	4.9	10.4	10.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.34	1.00		0.37
Lane Grp Cap(c), veh/h	158	371	316	192	740	331	439	774	768	509	846	835
V/C Ratio(X)	0.56	0.72	0.16	0.62	0.44	0.35	0.14	0.31	0.32	0.31	0.34	0.35
Avail Cap(c_a), veh/h	505	821	697	505	1559	697	642	774	768	647	846	835
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.7	38.2	33.9	47.2	35.2	34.5	15.0	18.6	18.6	14.0	16.7	16.7
Incr Delay (d2), s/veh	3.0	2.6	0.2	3.3	0.4	0.6	0.1	1.1	1.1	0.3	1.1	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.3	11.8	2.2	3.1	7.2	5.2	1.7	8.2	8.3	4.3	9.1	9.1
LnGrp Delay(d),s/veh	50.7	40.8	34.1	50.5	35.6	35.1	15.1	19.6	19.7	14.3	17.8	17.8
LnGrp LOS	D	D	C	D	D	D	B	B	B	B	B	B
Approach Vol, veh/h		407			562			548			738	
Approach Delay, s/veh		42.1			38.7			19.2			17.0	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.1	51.0	11.7	26.4	9.3	54.8	10.7	27.4
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	15.0	45.0	15.0	45.0	15.0	45.0	15.0	45.0
Max Q Clear Time (g_c+I1), s	6.9	11.3	5.5	15.7	3.9	12.6	4.6	10.2
Green Ext Time (p_c), s	0.2	7.9	0.2	4.7	0.1	7.8	0.1	4.8

Intersection Summary	
HCM 2010 Ctrl Delay	27.5
HCM 2010 LOS	C

HOOD ROAD

CORRIDOR

Intersection: North Military Trail

HCM 2010 Signalized Intersection Summary

8: Military Trail & Hood Road AM Condition 9/30/2014

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	128	389	185	47	246	280	77	852	189	236	945	184
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1712	1863	1863	1845	1863	1863	1845	1863	1863
Adj Flow Rate, veh/h	139	423	201	51	267	304	84	926	205	257	1027	200
Adj No. of Lanes	2	2	1	2	2	1	2	3	1	2	3	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	11	2	2	3	2	2	3	2	2
Cap, veh/h	186	907	406	83	807	361	127	2055	640	315	2336	727
Arrive On Green	0.05	0.26	0.26	0.03	0.23	0.23	0.04	0.40	0.40	0.09	0.46	0.46
Sat Flow, veh/h	3442	3539	1583	3163	3539	1583	3408	5085	1583	3408	5085	1583
Grp Volume(v), veh/h	139	423	201	51	267	304	84	926	205	257	1027	200
Grp Sat Flow(s),veh/h/ln	1721	1770	1583	1581	1770	1583	1704	1695	1583	1704	1695	1583
Q Serve(g_s), s	5.8	14.8	15.9	2.3	9.3	26.9	3.6	19.5	13.0	10.9	20.1	11.5
Cycle Q Clear(g_c), s	5.8	14.8	15.9	2.3	9.3	26.9	3.6	19.5	13.0	10.9	20.1	11.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	186	907	406	83	807	361	127	2055	640	315	2336	727
V/C Ratio(X)	0.75	0.47	0.50	0.62	0.33	0.84	0.66	0.45	0.32	0.82	0.44	0.27
Avail Cap(c_a), veh/h	269	988	442	204	939	420	220	2055	640	592	2336	727
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	68.5	46.2	46.6	70.8	47.3	54.2	69.8	31.9	30.0	65.5	26.9	24.6
Incr Delay (d2), s/veh	6.5	0.4	0.9	7.3	0.2	12.7	5.8	0.7	1.3	5.2	0.6	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	5.3	11.8	11.4	2.0	8.0	19.0	3.2	14.2	9.9	9.2	14.6	9.0
LnGrp Delay(d),s/veh	75.0	46.5	47.5	78.1	47.6	66.9	75.7	32.6	31.3	70.6	27.5	25.5
LnGrp LOS	E	D	D	E	D	E	E	C	C	E	C	C
Approach Vol, veh/h		763			622			1215			1484	
Approach Delay, s/veh		52.0			59.5			35.4			34.7	
Approach LOS		D			E			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.0	75.0	16.4	41.5	22.1	66.9	12.3	45.6
Change Period (Y+Rc), s	8.5	7.5	8.5	8.0	8.5	7.5	8.5	8.0
Max Green Setting (Gmax), s	9.5	67.5	11.5	39.0	25.5	51.5	9.5	41.0
Max Q Clear Time (g_c+I1), s	5.6	22.1	7.8	28.9	12.9	21.5	4.3	17.9
Green Ext Time (p_c), s	0.1	25.6	0.1	4.6	0.7	19.9	0.0	6.8

Intersection Summary	
HCM 2010 Ctrl Delay	41.9
HCM 2010 LOS	D

HCM 2010 Signalized Intersection Summary

8: Military Trail & Hood Road PM Condition 10/2/2014

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	75	282	142	150	339	270	119	829	180	168	930	99
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1759	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	82	307	154	163	368	293	129	901	196	183	1011	108
Adj No. of Lanes	2	2	1	2	2	1	2	3	1	2	3	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	8	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	203	501	224	272	560	251	244	2140	666	301	2225	693
Arrive On Green	0.06	0.14	0.14	0.08	0.16	0.16	0.07	0.42	0.42	0.09	0.44	0.44
Sat Flow, veh/h	3250	3539	1583	3442	3539	1583	3442	5085	1583	3442	5085	1583
Grp Volume(v), veh/h	82	307	154	163	368	293	129	901	196	183	1011	108
Grp Sat Flow(s),veh/h/ln	1625	1770	1583	1721	1770	1583	1721	1695	1583	1721	1695	1583
Q Serve(g_s), s	2.9	9.8	11.1	5.5	11.7	19.0	4.3	15.0	9.8	6.1	16.7	4.9
Cycle Q Clear(g_c), s	2.9	9.8	11.1	5.5	11.7	19.0	4.3	15.0	9.8	6.1	16.7	4.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	203	501	224	272	560	251	244	2140	666	301	2225	693
V/C Ratio(X)	0.40	0.61	0.69	0.60	0.66	1.17	0.53	0.42	0.29	0.61	0.45	0.16
Avail Cap(c_a), veh/h	203	501	224	272	560	251	244	2140	666	301	2225	693
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.1	48.4	49.0	53.4	47.4	50.5	53.8	24.5	23.0	52.8	23.7	20.4
Incr Delay (d2), s/veh	5.9	5.5	15.8	9.4	5.9	110.2	8.0	0.6	1.1	8.8	0.7	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.7	8.9	9.8	5.3	10.3	28.7	4.2	11.5	8.0	5.9	12.6	4.0
LnGrp Delay(d),s/veh	60.0	53.9	64.8	62.8	53.4	160.7	61.8	25.1	24.1	61.6	24.4	20.9
LnGrp LOS	E	D	E	E	D	F	E	C	C	E	C	C
Approach Vol, veh/h		543			824			1226			1302	
Approach Delay, s/veh		57.9			93.4			28.8			29.3	
Approach LOS		E			F			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.0	60.0	16.0	27.0	19.0	58.0	18.0	25.0
Change Period (Y+Rc), s	8.5	7.5	8.5	8.0	8.5	7.5	8.5	8.0
Max Green Setting (Gmax), s	8.5	52.5	7.5	19.0	10.5	50.5	9.5	17.0
Max Q Clear Time (g_c+I1), s	6.3	18.7	4.9	21.0	8.1	17.0	7.5	13.1
Green Ext Time (p_c), s	0.1	20.5	0.0	0.0	0.1	20.4	0.1	2.2

Intersection Summary	
HCM 2010 Ctrl Delay	46.7
HCM 2010 LOS	D

LAKE VICTORIA GARDENS

CORRIDOR

from: PGA Passage

To: PGA Boulevard

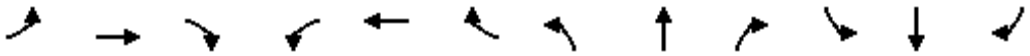
LAKE VICTORIA GARDENS

CORRIDOR

Intersection: PGA Passage

HCM Signalized Intersection Capacity Analysis

43: PGA Blvd & PGA Pass AM Conditions 9/26/2014



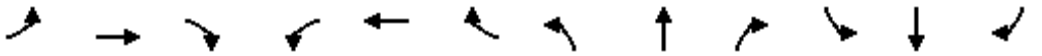
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	131	22	0	413	0	0	64	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					6.0	6.0		6.0			7.0	7.0
Lane Util. Factor					1.00	1.00		0.95			1.00	1.00
Frt					1.00	0.85		1.00			1.00	0.85
Flt Protected					1.00	1.00		1.00			1.00	1.00
Satd. Flow (prot)					1863	1583		3539			1743	1583
Flt Permitted					1.00	1.00		1.00			1.00	1.00
Satd. Flow (perm)					1863	1583		3539			1743	1583
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	0	0	139	23	0	439	0	0	68	15
RTOR Reduction (vph)	0	0	0	0	0	15	0	0	0	0	0	12
Lane Group Flow (vph)	0	0	0	0	139	8	0	439	0	0	68	3
Heavy Vehicles (%)	2%	2%	5%	2%	2%	2%	2%	2%	6%	2%	9%	2%
Turn Type					NA	Perm		NA			NA	Perm
Protected Phases					8			7			6	
Permitted Phases						8						6
Actuated Green, G (s)					54.3	54.3		25.7			28.6	28.6
Effective Green, g (s)					54.3	54.3		25.7			28.6	28.6
Actuated g/C Ratio					0.36	0.36		0.17			0.19	0.19
Clearance Time (s)					6.0	6.0		6.0			7.0	7.0
Vehicle Extension (s)					3.0	3.0		3.0			3.0	3.0
Lane Grp Cap (vph)					674	573		606			332	301
v/s Ratio Prot					c0.07			c0.12			c0.04	
v/s Ratio Perm						0.01						0.00
v/c Ratio					0.21	0.01		0.72			0.20	0.01
Uniform Delay, d1					33.0	30.7		58.8			51.1	49.2
Progression Factor					1.00	1.00		0.04			1.00	1.00
Incremental Delay, d2					0.2	0.0		3.2			1.4	0.1
Delay (s)					33.1	30.7		5.8			52.5	49.3
Level of Service					C	C		A			D	D
Approach Delay (s)		0.0			32.8			5.8			51.9	
Approach LOS		A			C			A			D	

Intersection Summary			
HCM 2000 Control Delay	17.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.29		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	25.0
Intersection Capacity Utilization	28.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis

43: PGA Pass & Lake Victoria Gardens PM Condition 9/30/2014



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	96	23	0	555	0	0	249	66
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					6.0	6.0		6.0			7.0	7.0
Lane Util. Factor					1.00	1.00		0.95			1.00	1.00
Frt					1.00	0.85		1.00			1.00	0.85
Flt Protected					1.00	1.00		1.00			1.00	1.00
Satd. Flow (prot)					1863	1583		3539			1863	1583
Flt Permitted					1.00	1.00		1.00			1.00	1.00
Satd. Flow (perm)					1863	1583		3539			1863	1583
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	0	0	102	24	0	590	0	0	265	70
RTOR Reduction (vph)	0	0	0	0	0	14	0	0	0	0	0	58
Lane Group Flow (vph)	0	0	0	0	102	10	0	590	0	0	265	12
Turn Type					NA	Perm		NA			NA	Perm
Protected Phases					8			7			6	
Permitted Phases						8						6
Actuated Green, G (s)					64.0	64.0		24.0			27.2	27.2
Effective Green, g (s)					64.0	64.0		24.0			27.2	27.2
Actuated g/C Ratio					0.40	0.40		0.15			0.17	0.17
Clearance Time (s)					6.0	6.0		6.0			7.0	7.0
Vehicle Extension (s)					3.0	3.0		3.0			3.0	3.0
Lane Grp Cap (vph)					745	633		530			316	269
v/s Ratio Prot					c0.05			c0.17			c0.14	
v/s Ratio Perm						0.01						0.01
v/c Ratio					0.14	0.02		1.11			0.84	0.04
Uniform Delay, d1					30.5	29.0		68.0			64.3	55.5
Progression Factor					1.00	1.00		0.21			1.00	1.00
Incremental Delay, d2					0.1	0.0		53.8			22.6	0.3
Delay (s)					30.6	29.0		68.4			86.9	55.8
Level of Service					C	C		E			F	E
Approach Delay (s)		0.0			30.3			68.4			80.4	
Approach LOS		A			C			E			F	

Intersection Summary			
HCM 2000 Control Delay	67.6	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	25.0
Intersection Capacity Utilization	30.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

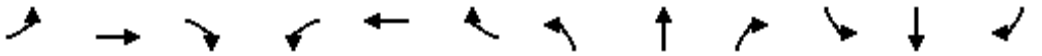
LAKE VICTORIA GARDENS

CORRIDOR

Intersections: PGA Boulevard

HCM Signalized Intersection Capacity Analysis

40: Lake Victoria Gnds & PGA Blvd AM Conditions 9/30/2014



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	413	3187	389	0	1028	0	250	0	100	0	0	64
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0		6.0		6.0		6.0			7.0
Lane Util. Factor	0.97	0.86	1.00		0.91		0.97		0.88			1.00
Frt	1.00	1.00	0.85		1.00		1.00		0.85			0.86
Flt Protected	0.95	1.00	1.00		1.00		0.95		1.00			1.00
Satd. Flow (prot)	3433	6408	1538		5036		3433		2682			1611
Flt Permitted	0.95	1.00	1.00		1.00		0.95		1.00			1.00
Satd. Flow (perm)	3433	6408	1538		5036		3433		2682			1611
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	439	3390	414	0	1094	0	266	0	106	0	0	68
RTOR Reduction (vph)	0	0	111	0	0	0	0	0	94	0	0	55
Lane Group Flow (vph)	439	3390	303	0	1094	0	266	0	12	0	0	13
Heavy Vehicles (%)	2%	2%	5%	2%	3%	2%	2%	2%	6%	2%	9%	2%
Turn Type	Prot	NA	Perm		NA		Prot		Prot			Perm
Protected Phases	7	4			8		5		5			
Permitted Phases			4									6
Actuated Green, G (s)	25.7	86.0	86.0		54.3		16.4		16.4			28.6
Effective Green, g (s)	25.7	86.0	86.0		54.3		16.4		16.4			28.6
Actuated g/C Ratio	0.17	0.57	0.57		0.36		0.11		0.11			0.19
Clearance Time (s)	6.0	6.0	6.0		6.0		6.0		6.0			7.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0		3.0			3.0
Lane Grp Cap (vph)	588	3673	881		1823		375		293			307
v/s Ratio Prot	0.13	c0.53			0.22		c0.08		0.00			
v/s Ratio Perm			0.20									c0.01
v/c Ratio	0.75	0.92	0.34		0.60		0.71		0.04			0.04
Uniform Delay, d1	59.1	29.0	17.0		39.0		64.5		59.8			49.5
Progression Factor	1.00	1.00	1.00		1.00		1.00		1.00			1.00
Incremental Delay, d2	5.1	4.5	0.2		0.6		6.0		0.1			0.3
Delay (s)	64.2	33.5	17.2		39.6		70.5		59.8			49.8
Level of Service	E	C	B		D		E		E			D
Approach Delay (s)		35.1			39.6			67.5			49.8	
Approach LOS		D			D			E			D	

Intersection Summary			
HCM 2000 Control Delay	38.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	25.0
Intersection Capacity Utilization	61.6%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis

40: Lake Victoria Gardens & PGA Blvd PM Conditions 9/26/2014

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	555	2465	408	0	2658	0	330	0	142	0	0	249
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0		6.0		6.0		6.0			7.0
Lane Util. Factor	0.97	0.86	1.00		0.91		0.97		0.88			1.00
Frt	1.00	1.00	0.85		1.00		1.00		0.85			0.86
Flt Protected	0.95	1.00	1.00		1.00		0.95		1.00			1.00
Satd. Flow (prot)	3433	6408	1583		5085		3433		2787			1611
Flt Permitted	0.95	1.00	1.00		1.00		0.95		1.00			1.00
Satd. Flow (perm)	3433	6408	1583		5085		3433		2787			1611
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	590	2622	434	0	2828	0	351	0	151	0	0	265
RTOR Reduction (vph)	0	0	141	0	0	0	0	0	132	0	0	204
Lane Group Flow (vph)	590	2622	293	0	2828	0	351	0	19	0	0	61
Turn Type	Prot	NA	Perm		NA		Prot		Prot			Perm
Protected Phases	7	4			8		5		5			
Permitted Phases			4									6
Actuated Green, G (s)	24.0	94.0	94.0		64.0		19.8		19.8			27.2
Effective Green, g (s)	24.0	94.0	94.0		64.0		19.8		19.8			27.2
Actuated g/C Ratio	0.15	0.59	0.59		0.40		0.12		0.12			0.17
Clearance Time (s)	6.0	6.0	6.0		6.0		6.0		6.0			7.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0		3.0			3.0
Lane Grp Cap (vph)	514	3764	930		2034		424		344			273
v/s Ratio Prot	c0.17	0.41			c0.56		c0.10		0.01			
v/s Ratio Perm			0.19									c0.04
v/c Ratio	1.15	0.70	0.31		1.39		0.83		0.05			0.22
Uniform Delay, d1	68.0	23.0	16.7		48.0		68.4		61.8			57.3
Progression Factor	1.00	1.00	1.00		1.00		1.00		1.00			0.87
Incremental Delay, d2	87.3	0.6	0.2		178.8		12.5		0.1			1.0
Delay (s)	155.3	23.6	16.9		226.8		80.9		61.9			50.6
Level of Service	F	C	B		F		F		E			D
Approach Delay (s)		44.1			226.8			75.2			50.6	
Approach LOS		D			F			E			D	

Intersection Summary			
HCM 2000 Control Delay	117.8	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.03		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	25.0
Intersection Capacity Utilization	90.4%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

PGA BOULEVARD(FL. TURNPIKE TO CENTRAL BOULEVARD)

CORRIDOR

From: FL. Turnpike

To: Central Boulevard

PGA BOULEVARD(FL. TURNPIKE TO CENTRAL BOULEVARD)

CORRIDOR

Intersection: FL. Turnpike

HCM Signalized Intersection Capacity Analysis

3: FL Turnpike AM Condition

9/30/2014

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	142	737	49	422	929	664	40	68	456	103	163	95
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	7.5		7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	0.95	0.95	0.91	0.91	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	0.89	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1752	3497		1770	3505	1553	1752	1571	1504	3159	1688	1583
Flt Permitted	0.11	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	207	3497		1770	3505	1553	1752	1571	1504	3159	1688	1583
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	146	760	51	435	958	685	41	70	470	106	168	98
RTOR Reduction (vph)	0	3	0	0	0	494	0	67	219	0	0	0
Lane Group Flow (vph)	146	808	0	435	958	191	41	210	44	95	179	98
Heavy Vehicles (%)	3%	2%	6%	2%	3%	4%	3%	2%	2%	4%	2%	2%
Turn Type	pm+pt	NA		Prot	NA	Perm	Split	NA	Prot	Split	NA	Free
Protected Phases	1	6		5	2		4	4	4	3	3	
Permitted Phases	6					2						Free
Actuated Green, G (s)	49.8	35.6		19.5	44.4	44.4	26.7	26.7	26.7	47.6	47.6	159.4
Effective Green, g (s)	49.8	35.6		19.5	44.4	44.4	26.7	26.7	26.7	47.6	47.6	159.4
Actuated g/C Ratio	0.31	0.22		0.12	0.28	0.28	0.17	0.17	0.17	0.30	0.30	1.00
Clearance Time (s)	4.0	7.5		7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	202	781		216	976	432	293	263	251	943	504	1583
v/s Ratio Prot	0.06	0.23		c0.25	c0.27		0.02	c0.13	0.03	0.03	c0.11	
v/s Ratio Perm	0.16					0.12						0.06
v/c Ratio	0.72	1.03		2.01	0.98	0.44	0.14	0.80	0.18	0.10	0.36	0.06
Uniform Delay, d1	44.1	61.9		70.0	57.1	47.3	56.6	63.8	56.9	40.4	43.9	0.0
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	12.0	41.4		472.2	24.7	3.3	0.2	15.8	0.3	0.2	2.0	0.1
Delay (s)	56.1	103.3		542.2	81.8	50.6	56.8	79.6	57.2	40.6	45.8	0.1
Level of Service	E	F		F	F	D	E	E	E	D	D	A
Approach Delay (s)		96.1			167.9			67.9			32.4	
Approach LOS		F			F			E			C	

Intersection Summary			
HCM 2000 Control Delay	123.4	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	159.4	Sum of lost time (s)	30.0
Intersection Capacity Utilization	91.8%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis

3: PGA Blvd & FL Turnpike PM Condition 9/30/2014

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	152	716	69	400	1011	979	67	236	829	555	56	160
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.5		7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	0.95	0.95	0.91	0.91	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	0.91	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.96	1.00
Satd. Flow (prot)	1770	3493		1770	3539	1583	1770	1618	1504	3221	1636	1583
Flt Permitted	0.17	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.96	1.00
Satd. Flow (perm)	317	3493		1770	3539	1583	1770	1618	1504	3221	1636	1583
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	155	731	70	408	1032	999	68	241	846	566	57	163
RTOR Reduction (vph)	0	7	0	0	0	400	0	48	171	0	0	0
Lane Group Flow (vph)	155	794	0	408	1032	599	68	514	354	413	210	163
Turn Type	pm+pt	NA		Prot	NA	Perm	Split	NA	Prot	Split	NA	Free
Protected Phases	1	6		5	2		4	4	4	3	3	
Permitted Phases	6					2						Free
Actuated Green, G (s)	30.5	23.5		11.5	28.5	28.5	17.5	17.5	17.5	17.5	17.5	100.0
Effective Green, g (s)	30.5	23.5		11.5	28.5	28.5	17.5	17.5	17.5	17.5	17.5	100.0
Actuated g/C Ratio	0.30	0.24		0.12	0.28	0.28	0.18	0.18	0.18	0.18	0.18	1.00
Clearance Time (s)	7.0	7.5		7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	198	820		203	1008	451	309	283	263	563	286	1583
v/s Ratio Prot	0.05	0.23		c0.23	0.29		0.04	c0.32	0.24	0.13	c0.13	
v/s Ratio Perm	0.18					c0.38						0.10
v/c Ratio	0.78	0.97		2.01	1.02	1.33	0.22	1.82	1.35	0.73	0.73	0.10
Uniform Delay, d1	28.4	37.9		44.2	35.8	35.8	35.4	41.2	41.2	39.0	39.0	0.0
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	18.0	24.6		471.4	34.5	162.7	1.6	381.2	179.2	8.2	15.4	0.1
Delay (s)	46.4	62.5		515.7	70.3	198.4	37.0	422.4	220.5	47.3	54.5	0.1
Level of Service	D	E		F	E	F	D	F	F	D	D	A
Approach Delay (s)		59.9			197.3			308.0			39.4	
Approach LOS		E			F			F			D	

Intersection Summary			
HCM 2000 Control Delay	173.4	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.51		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	30.0
Intersection Capacity Utilization	116.7%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

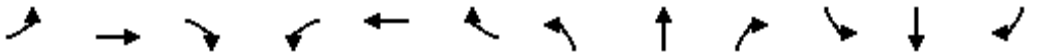
PGA BOULEVARD(FL. TURNPIKE TO CENTRAL BOULEVARD)

CORRIDOR

Intersection: Central Boulevard

HCM Signalized Intersection Capacity Analysis

10: PGA Blvd & Central Blvd AM Condition 9/29/2014



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	492	1795	12	18	1212	459	11	24	37	546	4	792
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.5	8.5		7.0	8.0	8.0		8.5	8.5	8.5	8.5	8.5
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00	0.95	0.95	1.00
Frt	1.00	1.00		1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.98	1.00	0.95	0.95	1.00
Satd. Flow (prot)	1736	5075		1703	5036	1583		1834	1583	1681	1680	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.77	1.00	0.11	0.11	1.00
Satd. Flow (perm)	1736	5075		1703	5036	1583		1443	1583	193	191	1583
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	541	1973	13	20	1332	504	12	26	41	600	4	870
RTOR Reduction (vph)	0	1	0	0	0	281	0	0	39	0	0	493
Lane Group Flow (vph)	541	1985	0	20	1332	223	0	38	2	300	304	377
Heavy Vehicles (%)	4%	2%	17%	6%	3%	2%	2%	2%	2%	2%	33%	2%
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	1	6		5	2			4			3	
Permitted Phases						2	4		4	3		3
Actuated Green, G (s)	24.6	57.0		4.6	37.0	37.0		7.3	7.3	36.6	36.6	36.6
Effective Green, g (s)	24.6	57.0		4.6	37.0	37.0		7.3	7.3	36.6	36.6	36.6
Actuated g/C Ratio	0.18	0.41		0.03	0.27	0.27		0.05	0.05	0.27	0.27	0.27
Clearance Time (s)	7.5	8.5		7.0	8.0	8.0		8.5	8.5	8.5	8.5	8.5
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	309	2096		56	1350	424		76	83	51	50	419
v/s Ratio Prot	c0.31	c0.39		0.01	0.26							
v/s Ratio Perm						0.14		c0.03	0.00	1.55	c1.59	0.24
v/c Ratio	1.75	0.95		0.36	0.99	0.53		0.50	0.03	5.88	6.08	0.90
Uniform Delay, d1	56.7	39.1		65.3	50.3	43.0		63.6	62.0	50.7	50.7	48.9
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	350.9	10.6		3.9	21.5	4.6		5.1	0.1	2238.8	2328.3	24.8
Delay (s)	407.6	49.7		69.1	71.8	47.6		68.7	62.1	2289.5	2379.0	73.8
Level of Service	F	D		E	E	D		E	E	F	F	E
Approach Delay (s)		126.3			65.2			65.3			1000.2	
Approach LOS		F			E			E			F	

Intersection Summary			
HCM 2000 Control Delay	323.4	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	2.87		
Actuated Cycle Length (s)	138.0	Sum of lost time (s)	32.5
Intersection Capacity Utilization	96.6%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis

10: PGA Blvd & Central Blvd PM Conditions 9/26/2014

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	367	1706	26	53	1857	279	38	13	32	266	6	483
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.5	8.5		7.0	8.0	8.0		8.5	8.5	8.5	8.5	8.5
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00		1.00	1.00	0.95	0.95	1.00
Frt	1.00	1.00		1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96	1.00	0.95	0.95	1.00
Satd. Flow (prot)	1770	5074		1770	5085	1583		1796	1583	1681	1689	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.69	1.00	0.20	0.20	1.00
Satd. Flow (perm)	1770	5074		1770	5085	1583		1282	1583	361	354	1583
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	382	1777	27	55	1934	291	40	14	33	277	6	503
RTOR Reduction (vph)	0	1	0	0	0	202	0	0	31	0	0	312
Lane Group Flow (vph)	382	1803	0	55	1934	89	0	54	2	141	142	191
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	1	6		5	2			4			3	
Permitted Phases						2	4		4	3		3
Actuated Green, G (s)	10.6	32.4		7.0	28.8	28.8		7.4	7.4	19.6	19.6	19.6
Effective Green, g (s)	10.6	32.4		7.0	28.8	28.8		7.4	7.4	19.6	19.6	19.6
Actuated g/C Ratio	0.11	0.33		0.07	0.29	0.29		0.07	0.07	0.20	0.20	0.20
Clearance Time (s)	7.5	8.5		7.0	8.0	8.0		8.5	8.5	8.5	8.5	8.5
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	189	1662		125	1480	460		95	118	71	70	313
v/s Ratio Prot	c0.22	c0.36		0.03	c0.38							
v/s Ratio Perm						0.06		c0.04	0.00	0.39	c0.40	0.12
v/c Ratio	2.02	1.08		0.44	1.31	0.19		0.57	0.02	1.99	2.03	0.61
Uniform Delay, d1	44.2	33.2		44.1	35.1	26.3		44.2	42.4	39.7	39.7	36.2
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	477.7	48.9		2.5	143.0	0.9		7.6	0.1	489.9	509.0	8.6
Delay (s)	521.8	82.1		46.5	178.1	27.3		51.8	42.5	529.6	548.6	44.8
Level of Service	F	F		D	F	C		D	D	F	F	D
Approach Delay (s)		159.0			155.7			48.3			222.8	
Approach LOS		F			F			D			F	

Intersection Summary			
HCM 2000 Control Delay	165.1	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.57		
Actuated Cycle Length (s)	98.9	Sum of lost time (s)	32.5
Intersection Capacity Utilization	90.4%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

PGA BOULEVARD (NORTH MILITARY TRAIL TO LAKE VICTORIA)

CORRIDOR

From: North Military Trail

To: Lake Victoria

PGA BOULEVARD (NORTH MILITARY TRAIL TO LAKE VICTORIA)

CORRIDOR

Intersection: North Military Trail

HCM 2010 Signalized Intersection Summary

20: N Military Trail & PGA Blvd 10/2/2014

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	121	1596	534	128	880	211	536	476	416	722	848	191
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1827	1845	1863	1827	1863	1863	1835	1900
Adj Flow Rate, veh/h	130	1716	0	138	946	0	576	512	0	776	912	205
Adj No. of Lanes	2	3	1	2	3	1	2	3	1	2	3	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	4	3	2	4	2	2	3	3
Cap, veh/h	176	1338	417	184	1357	427	650	1098	348	849	1153	258
Arrive On Green	0.05	0.26	0.00	0.05	0.27	0.00	0.19	0.22	0.00	0.25	0.28	0.28
Sat Flow, veh/h	3442	5085	1583	3442	4988	1568	3442	4988	1583	3442	4096	917
Grp Volume(v), veh/h	130	1716	0	138	946	0	576	512	0	776	743	374
Grp Sat Flow(s),veh/h/ln	1721	1695	1583	1721	1663	1568	1721	1663	1583	1721	1670	1673
Q Serve(g_s), s	5.6	39.5	0.0	5.9	25.6	0.0	24.5	13.4	0.0	32.9	30.9	31.1
Cycle Q Clear(g_c), s	5.6	39.5	0.0	5.9	25.6	0.0	24.5	13.4	0.0	32.9	30.9	31.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.55
Lane Grp Cap(c), veh/h	176	1338	417	184	1357	427	650	1098	348	849	940	471
V/C Ratio(X)	0.74	1.28	0.00	0.75	0.70	0.00	0.89	0.47	0.00	0.91	0.79	0.79
Avail Cap(c_a), veh/h	275	1338	417	252	1357	427	917	1446	459	997	1057	529
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	70.2	55.3	0.0	70.1	49.1	0.0	59.3	50.9	0.0	55.0	49.8	49.9
Incr Delay (d2), s/veh	5.9	132.8	0.0	8.0	3.0	0.0	7.8	0.3	0.0	11.3	3.7	7.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	5.1	62.9	0.0	5.4	17.8	0.0	18.2	10.3	0.0	23.7	21.0	21.7
LnGrp Delay(d),s/veh	76.1	188.1	0.0	78.0	52.1	0.0	67.1	51.2	0.0	66.3	53.6	57.3
LnGrp LOS	E	F		E	D		E	D		E	D	E
Approach Vol, veh/h		1846			1084			1088			1893	
Approach Delay, s/veh		180.2			55.4			59.6			59.5	
Approach LOS		F			E			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.7	68.2	45.5	40.5	17.0	66.9	36.3	49.7
Change Period (Y+Rc), s	8.0	7.5	8.5	7.5	9.0	7.5	8.0	7.5
Max Green Setting (Gmax), s	12.0	39.5	43.5	43.5	11.0	39.5	40.0	47.5
Max Q Clear Time (g_c+I1), s	7.6	27.6	34.9	15.4	7.9	41.5	26.5	33.1
Green Ext Time (p_c), s	0.1	10.7	2.1	13.8	0.1	0.0	1.9	9.2

Intersection Summary	
HCM 2010 Ctrl Delay	96.5
HCM 2010 LOS	F

HCM 2010 Signalized Intersection Summary
20: N Military Trail & PGA Blvd PM Conditions

9/30/2014

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	192	1199	569	364	1520	364	694	668	475	472	968	267
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	204	1276	0	387	1617	0	738	711	0	502	1030	284
Adj No. of Lanes	2	3	1	2	3	1	2	3	1	2	3	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	272	1297	404	413	1555	484	413	890	277	430	734	202
Arrive On Green	0.08	0.25	0.00	0.12	0.31	0.00	0.12	0.17	0.00	0.13	0.19	0.19
Sat Flow, veh/h	3442	5085	1583	3442	5085	1583	3442	5085	1583	3442	3967	1093
Grp Volume(v), veh/h	204	1276	0	387	1617	0	738	711	0	502	880	434
Grp Sat Flow(s),veh/h/ln	1721	1695	1583	1721	1695	1583	1721	1695	1583	1721	1695	1670
Q Serve(g_s), s	5.8	25.0	0.0	11.1	30.6	0.0	12.0	13.4	0.0	12.5	18.5	18.5
Cycle Q Clear(g_c), s	5.8	25.0	0.0	11.1	30.6	0.0	12.0	13.4	0.0	12.5	18.5	18.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.65
Lane Grp Cap(c), veh/h	272	1297	404	413	1555	484	413	890	277	430	627	309
V/C Ratio(X)	0.75	0.98	0.00	0.94	1.04	0.00	1.79	0.80	0.00	1.17	1.40	1.40
Avail Cap(c_a), veh/h	344	1297	404	413	1555	484	413	890	277	430	627	309
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.1	37.0	0.0	43.6	34.7	0.0	44.0	39.6	0.0	43.8	40.8	40.8
Incr Delay (d2), s/veh	6.7	21.5	0.0	28.9	33.8	0.0	363.8	5.2	0.0	97.6	190.9	200.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	5.4	20.5	0.0	11.3	34.4	0.0	47.8	10.9	0.0	21.1	45.5	46.3
LnGrp Delay(d),s/veh	51.8	58.5	0.0	72.6	68.5	0.0	407.8	44.8	0.0	141.4	231.7	241.2
LnGrp LOS	D	E		E	F		F	D		F	F	F
Approach Vol, veh/h		1480			2004			1449			1816	
Approach Delay, s/veh		57.6			69.3			229.6			209.0	
Approach LOS		E			E			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.9	38.1	21.0	25.0	21.0	33.0	20.0	26.0
Change Period (Y+Rc), s	8.0	7.5	8.5	7.5	9.0	7.5	8.0	7.5
Max Green Setting (Gmax), s	10.0	28.5	12.5	17.5	12.0	25.5	12.0	18.5
Max Q Clear Time (g_c+I1), s	7.8	32.6	14.5	15.4	13.1	27.0	14.0	20.5
Green Ext Time (p_c), s	0.1	0.0	0.0	1.9	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	138.7
HCM 2010 LOS	F

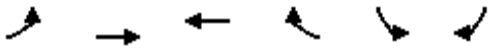
PGA BOULEVARD (NORTH MILITARY TRAIL TO LAKE VICTORIA)

CORRIDOR

Intersection: West Ramps

HCM Signalized Intersection Capacity Analysis

1: PGA Blvd & West Ramps AM Conditions 9/30/2014



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑↑		↰↰	↱↱
Volume (vph)	0	1626	1209	0	1000	58
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0	6.0		6.0	6.0
Lane Util. Factor		0.91	0.91		0.97	0.88
Frt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		5085	4988		3433	2787
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		5085	4988		3433	2787
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	0	1787	1329	0	1099	64
RTOR Reduction (vph)	0	0	0	0	0	45
Lane Group Flow (vph)	0	1787	1329	0	1099	19
Heavy Vehicles (%)	2%	2%	4%	2%	2%	2%
Turn Type		NA	NA		Prot	Prot
Protected Phases		2	2		4	4
Permitted Phases						
Actuated Green, G (s)		44.0	44.0		24.0	24.0
Effective Green, g (s)		44.0	44.0		24.0	24.0
Actuated g/C Ratio		0.55	0.55		0.30	0.30
Clearance Time (s)		6.0	6.0		6.0	6.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Lane Grp Cap (vph)		2796	2743		1029	836
v/s Ratio Prot		c0.35	0.27		c0.32	0.01
v/s Ratio Perm						
v/c Ratio		0.64	0.48		1.07	0.02
Uniform Delay, d1		12.5	11.0		28.0	19.7
Progression Factor		1.00	0.62		1.00	1.00
Incremental Delay, d2		1.1	0.1		48.1	0.0
Delay (s)		13.6	6.9		76.1	19.7
Level of Service		B	A		E	B
Approach Delay (s)		13.6	6.9		73.0	
Approach LOS		B	A		E	

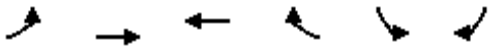
Intersection Summary			
HCM 2000 Control Delay	27.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	91.5%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis

1: PGA Blvd & West Ramps PM Conditions

9/30/2014



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	0	1191	2222	0	370	48
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0	6.0		6.0	6.0
Lane Util. Factor		0.91	0.91		0.97	0.88
Frt		1.00	1.00		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		5085	5085		3433	2760
Flt Permitted		1.00	1.00		0.95	1.00
Satd. Flow (perm)		5085	5085		3433	2760
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	0	1281	2389	0	398	52
RTOR Reduction (vph)	0	0	0	0	0	3
Lane Group Flow (vph)	0	1281	2389	0	398	49
Heavy Vehicles (%)	2%	2%	2%	2%	2%	3%
Turn Type		NA	NA		Prot	Prot
Protected Phases		2	2		4	4
Permitted Phases						
Actuated Green, G (s)		32.0	32.0		16.0	16.0
Effective Green, g (s)		32.0	32.0		16.0	16.0
Actuated g/C Ratio		0.53	0.53		0.27	0.27
Clearance Time (s)		6.0	6.0		6.0	6.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Lane Grp Cap (vph)		2712	2712		915	736
v/s Ratio Prot		0.25	c0.47		c0.12	0.02
v/s Ratio Perm						
v/c Ratio		0.47	0.88		0.43	0.07
Uniform Delay, d1		8.7	12.3		18.3	16.4
Progression Factor		1.00	0.50		1.00	1.00
Incremental Delay, d2		0.6	2.0		0.3	0.0
Delay (s)		9.3	8.2		18.6	16.5
Level of Service		A	A		B	B
Approach Delay (s)		9.3	8.2		18.3	
Approach LOS		A	A		B	

Intersection Summary			
HCM 2000 Control Delay	9.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	87.7%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

PGA BOULEVARD (NORTH MILITARY TRAIL TO LAKE VICTORIA)

CORRIDOR

Intersection: NB OFF Ramp

HCM Signalized Intersection Capacity Analysis

2: East Ramps & PGA Blvd AM Conditions 9/30/2014

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1210	0	0	2665	0	2491
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0			6.0		6.0
Lane Util. Factor	0.91			0.91		0.76
Frt	1.00			1.00		0.85
Flt Protected	1.00			1.00		1.00
Satd. Flow (prot)	5085			5036		3610
Flt Permitted	1.00			1.00		1.00
Satd. Flow (perm)	5085			5036		3610
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	1344	0	0	2961	0	2768
RTOR Reduction (vph)	0	0	0	0	0	65
Lane Group Flow (vph)	1344	0	0	2961	0	2703
Heavy Vehicles (%)	2%	2%	2%	3%	2%	2%
Turn Type	NA			NA		Prot
Protected Phases	6			2		8
Permitted Phases	6					
Actuated Green, G (s)	44.0			44.0		24.0
Effective Green, g (s)	44.0			44.0		24.0
Actuated g/C Ratio	0.55			0.55		0.30
Clearance Time (s)	6.0			6.0		6.0
Vehicle Extension (s)	3.0			3.0		3.0
Lane Grp Cap (vph)	2796			2769		1083
v/s Ratio Prot	0.26			c0.59		c0.75
v/s Ratio Perm						
v/c Ratio	0.48			1.07		2.50
Uniform Delay, d1	11.0			18.0		28.0
Progression Factor	0.71			1.00		1.00
Incremental Delay, d2	0.3			39.2		675.9
Delay (s)	8.2			57.2		703.9
Level of Service	A			E		F
Approach Delay (s)	8.2			57.2	703.9	
Approach LOS	A			E	F	

Intersection Summary			
HCM 2000 Control Delay	300.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.57		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	91.5%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis

2: East Ramps & PGA Blvd PM Conditions 9/30/2014

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1562	0	0	2223	0	2039
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0			6.0		6.0
Lane Util. Factor	0.91			0.91		0.76
Frt	1.00			1.00		0.85
Flt Protected	1.00			1.00		1.00
Satd. Flow (prot)	5085			5085		3610
Flt Permitted	1.00			1.00		1.00
Satd. Flow (perm)	5085			5085		3610
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1698	0	0	2416	0	2216
RTOR Reduction (vph)	0	0	0	0	0	23
Lane Group Flow (vph)	1698	0	0	2416	0	2193
Turn Type	NA			NA		Prot
Protected Phases	6			2		8
Permitted Phases	6					
Actuated Green, G (s)	32.0			32.0		16.0
Effective Green, g (s)	32.0			32.0		16.0
Actuated g/C Ratio	0.53			0.53		0.27
Clearance Time (s)	6.0			6.0		6.0
Vehicle Extension (s)	3.0			3.0		3.0
Lane Grp Cap (vph)	2712			2712		962
v/s Ratio Prot	0.33			c0.48		c0.61
v/s Ratio Perm						
v/c Ratio	0.63			0.89		2.28
Uniform Delay, d1	9.8			12.4		22.0
Progression Factor	0.61			1.00		1.00
Incremental Delay, d2	1.0			4.9		578.9
Delay (s)	7.0			17.4		600.9
Level of Service	A			B		F
Approach Delay (s)	7.0			17.4	600.9	
Approach LOS	A			B	F	

Intersection Summary			
HCM 2000 Control Delay	218.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.35		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	87.7%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

PGA BOULEVARD (NORTH MILITARY TRAIL TO LAKE VICTORIA)

CORRIDOR

Intersection: RCA Boulevard

HCM Unsignalized Intersection Capacity Analysis

46: PGA Blvd & RCA AM Conditions 9/30/2014

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Volume (veh/h)	0	115	3973	997	25	656
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Hourly flow rate (vph)	0	119	4096	1028	26	676
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			1299			
pX, platoon unblocked	0.89	0.89			0.89	
vC, conflicting volume	4887	1538			5124	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	4743	962			5011	
tC, single (s)	6.8	6.9			4.2	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	0	48			0	
cM capacity (veh/h)	0	227			13	

Direction, Lane #	NW 1	NE 1	NE 2	NE 3	NE 4	SW 1	SW 2	SW 3	SW 4
Volume Total	119	1170	1170	1170	1613	26	225	225	225
Volume Left	0	0	0	0	0	26	0	0	0
Volume Right	119	0	0	0	1028	0	0	0	0
cSH	227	1700	1700	1700	1700	13	1700	1700	1700
Volume to Capacity	0.52	0.69	0.69	0.69	0.95	1.92	0.13	0.13	0.13
Queue Length 95th (ft)	68	0	0	0	0	99	0	0	0
Control Delay (s)	37.1	0.0	0.0	0.0	0.0	1004.4	0.0	0.0	0.0
Lane LOS	E					F			
Approach Delay (s)	37.1	0.0				36.9			
Approach LOS	E								

Intersection Summary			
Average Delay	5.1		
Intersection Capacity Utilization	88.0%	ICU Level of Service	E
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis

46: PGA Blvd & RCA PM Conditions 9/26/2014

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Volume (veh/h)	0	225	1889	84	348	3092
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (vph)	0	234	1968	88	362	3221
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			1299			
pX, platoon unblocked						
vC, conflicting volume	3810	536			2055	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	3810	536			2055	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	0	52			0	
cM capacity (veh/h)	0	489			269	

Direction, Lane #	NW 1	NE 1	NE 2	NE 3	NE 4	SW 1	SW 2	SW 3	SW 4
Volume Total	234	562	562	562	369	362	1074	1074	1074
Volume Left	0	0	0	0	0	362	0	0	0
Volume Right	234	0	0	0	88	0	0	0	0
cSH	489	1700	1700	1700	1700	269	1700	1700	1700
Volume to Capacity	0.48	0.33	0.33	0.33	0.22	1.35	0.63	0.63	0.63
Queue Length 95th (ft)	64	0	0	0	0	472	0	0	0
Control Delay (s)	18.9	0.0	0.0	0.0	0.0	215.5	0.0	0.0	0.0
Lane LOS	C					F			
Approach Delay (s)	18.9	0.0				21.8			
Approach LOS	C								

Intersection Summary			
Average Delay	14.1		
Intersection Capacity Utilization	63.1%	ICU Level of Service	B
Analysis Period (min)	15		

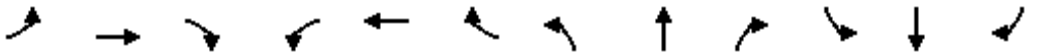
PGA BOULEVARD (NORTH MILITARY TRAIL TO LAKE VICTORIA)

CORRIDOR

Intersection: Lake Victoria

HCM Signalized Intersection Capacity Analysis

40: Lake Victoria Gnds & PGA Blvd AM Conditions 9/30/2014



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	413	3187	389	0	1028	0	250	0	100	0	0	64
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0		6.0		6.0		6.0			7.0
Lane Util. Factor	0.97	0.86	1.00		0.91		0.97		0.88			1.00
Frt	1.00	1.00	0.85		1.00		1.00		0.85			0.86
Flt Protected	0.95	1.00	1.00		1.00		0.95		1.00			1.00
Satd. Flow (prot)	3433	6408	1538		5036		3433		2682			1611
Flt Permitted	0.95	1.00	1.00		1.00		0.95		1.00			1.00
Satd. Flow (perm)	3433	6408	1538		5036		3433		2682			1611
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	439	3390	414	0	1094	0	266	0	106	0	0	68
RTOR Reduction (vph)	0	0	111	0	0	0	0	0	94	0	0	55
Lane Group Flow (vph)	439	3390	303	0	1094	0	266	0	12	0	0	13
Heavy Vehicles (%)	2%	2%	5%	2%	3%	2%	2%	2%	6%	2%	9%	2%
Turn Type	Prot	NA	Perm		NA		Prot		Prot			Perm
Protected Phases	7	4			8		5		5			
Permitted Phases			4									6
Actuated Green, G (s)	25.7	86.0	86.0		54.3		16.4		16.4			28.6
Effective Green, g (s)	25.7	86.0	86.0		54.3		16.4		16.4			28.6
Actuated g/C Ratio	0.17	0.57	0.57		0.36		0.11		0.11			0.19
Clearance Time (s)	6.0	6.0	6.0		6.0		6.0		6.0			7.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0		3.0			3.0
Lane Grp Cap (vph)	588	3673	881		1823		375		293			307
v/s Ratio Prot	0.13	c0.53			0.22		c0.08		0.00			
v/s Ratio Perm			0.20									c0.01
v/c Ratio	0.75	0.92	0.34		0.60		0.71		0.04			0.04
Uniform Delay, d1	59.1	29.0	17.0		39.0		64.5		59.8			49.5
Progression Factor	1.00	1.00	1.00		1.00		1.00		1.00			1.00
Incremental Delay, d2	5.1	4.5	0.2		0.6		6.0		0.1			0.3
Delay (s)	64.2	33.5	17.2		39.6		70.5		59.8			49.8
Level of Service	E	C	B		D		E		E			D
Approach Delay (s)		35.1			39.6			67.5			49.8	
Approach LOS		D			D			E			D	

Intersection Summary			
HCM 2000 Control Delay	38.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	25.0
Intersection Capacity Utilization	61.6%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis

40: Lake Victoria Gardens & PGA Blvd PM Conditions 9/26/2014

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	555	2465	408	0	2658	0	330	0	142	0	0	249
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0		6.0		6.0		6.0			7.0
Lane Util. Factor	0.97	0.86	1.00		0.91		0.97		0.88			1.00
Frt	1.00	1.00	0.85		1.00		1.00		0.85			0.86
Flt Protected	0.95	1.00	1.00		1.00		0.95		1.00			1.00
Satd. Flow (prot)	3433	6408	1583		5085		3433		2787			1611
Flt Permitted	0.95	1.00	1.00		1.00		0.95		1.00			1.00
Satd. Flow (perm)	3433	6408	1583		5085		3433		2787			1611
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	590	2622	434	0	2828	0	351	0	151	0	0	265
RTOR Reduction (vph)	0	0	141	0	0	0	0	0	132	0	0	204
Lane Group Flow (vph)	590	2622	293	0	2828	0	351	0	19	0	0	61
Turn Type	Prot	NA	Perm		NA		Prot		Prot			Perm
Protected Phases	7	4			8		5		5			
Permitted Phases			4									6
Actuated Green, G (s)	24.0	94.0	94.0		64.0		19.8		19.8			27.2
Effective Green, g (s)	24.0	94.0	94.0		64.0		19.8		19.8			27.2
Actuated g/C Ratio	0.15	0.59	0.59		0.40		0.12		0.12			0.17
Clearance Time (s)	6.0	6.0	6.0		6.0		6.0		6.0			7.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0		3.0			3.0
Lane Grp Cap (vph)	514	3764	930		2034		424		344			273
v/s Ratio Prot	c0.17	0.41			c0.56		c0.10		0.01			
v/s Ratio Perm			0.19									c0.04
v/c Ratio	1.15	0.70	0.31		1.39		0.83		0.05			0.22
Uniform Delay, d1	68.0	23.0	16.7		48.0		68.4		61.8			57.3
Progression Factor	1.00	1.00	1.00		1.00		1.00		1.00			0.87
Incremental Delay, d2	87.3	0.6	0.2		178.8		12.5		0.1			1.0
Delay (s)	155.3	23.6	16.9		226.8		80.9		61.9			50.6
Level of Service	F	C	B		F		F		E			D
Approach Delay (s)		44.1			226.8			75.2			50.6	
Approach LOS		D			F			E			D	

Intersection Summary			
HCM 2000 Control Delay	117.8	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.03		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	25.0
Intersection Capacity Utilization	90.4%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

NORTHLAKE BOULEVARD

CORRIDOR

From: Keating Drive

To: Sandtree Drive

NORTHLAKE BOULEVARD

CORRIDOR

Intersection: Keating Drive

HCM Signalized Intersection Capacity Analysis

3: keating Dr & Northlake Blvd AM Conditions 9/29/2014

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	30	2310	85	123	1464	69	55	4	79	129	14	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.0	5.0	4.0	5.0	5.0	6.0	6.0	6.0		6.0	
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	0.95	0.95	1.00		0.95	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85		0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.96	1.00		0.96	
Satd. Flow (prot)	1656	5085	1583	1752	4988	1538	1633	1651	1538		3253	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.96	1.00		0.96	
Satd. Flow (perm)	1656	5085	1583	1752	4988	1538	1633	1651	1538		3253	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	32	2484	91	132	1574	74	59	4	85	139	15	30
RTOR Reduction (vph)	0	0	43	0	0	29	0	0	80	0	12	0
Lane Group Flow (vph)	32	2484	48	132	1574	45	31	32	5	0	172	0
Heavy Vehicles (%)	9%	2%	2%	3%	4%	5%	5%	3%	5%	4%	8%	4%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	5	2		1	6		4	4		8	8	
Permitted Phases			2			6			4			
Actuated Green, G (s)	5.0	58.5	58.5	13.0	66.5	66.5	6.3	6.3	6.3		11.1	
Effective Green, g (s)	5.0	58.5	58.5	13.0	66.5	66.5	6.3	6.3	6.3		11.1	
Actuated g/C Ratio	0.05	0.53	0.53	0.12	0.61	0.61	0.06	0.06	0.06		0.10	
Clearance Time (s)	4.0	5.0	5.0	4.0	5.0	5.0	6.0	6.0	6.0		6.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)	75	2706	842	207	3018	930	93	94	88		328	
v/s Ratio Prot	0.02	c0.49		c0.08	0.32		0.02	c0.02			c0.05	
v/s Ratio Perm			0.03			0.03			0.00			
v/c Ratio	0.43	0.92	0.06	0.64	0.52	0.05	0.33	0.34	0.06		0.53	
Uniform Delay, d1	51.1	23.5	12.4	46.2	12.5	8.8	49.8	49.8	49.0		46.9	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	
Incremental Delay, d2	3.9	6.4	0.1	6.3	0.6	0.1	2.1	2.2	0.3		1.5	
Delay (s)	54.9	29.9	12.5	52.5	13.2	8.9	51.9	52.0	49.2		48.4	
Level of Service	D	C	B	D	B	A	D	D	D		D	
Approach Delay (s)		29.6			15.9			50.4			48.4	
Approach LOS		C			B			D			D	

Intersection Summary			
HCM 2000 Control Delay	25.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	109.9	Sum of lost time (s)	21.0
Intersection Capacity Utilization	77.8%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis

3: keating Dr & NorthLake Blvd PM Conditions 9/29/2014

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	52	1590	254	287	1797	180	320	35	255	161	32	68
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.0	5.0	4.0	5.0	5.0	6.0	6.0	6.0		12.0	
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	0.95	0.95	1.00		0.95	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85		0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.96	1.00		0.97	
Satd. Flow (prot)	1770	5085	1583	1770	5085	1583	1681	1701	1583		3295	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.96	1.00		0.97	
Satd. Flow (perm)	1770	5085	1583	1770	5085	1583	1681	1701	1583		3295	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	54	1656	265	299	1872	188	333	36	266	168	33	71
RTOR Reduction (vph)	0	0	134	0	0	83	0	0	188	0	22	0
Lane Group Flow (vph)	54	1656	131	299	1872	105	183	186	78	0	250	0
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	3%	2%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	5	2		1	6		4	4		8	8	
Permitted Phases			2			6			4			
Actuated Green, G (s)	8.6	67.1	67.1	17.1	75.6	75.6	22.6	22.6	22.6		15.6	
Effective Green, g (s)	8.6	67.1	67.1	17.1	75.6	75.6	22.6	22.6	22.6		15.6	
Actuated g/C Ratio	0.06	0.45	0.45	0.11	0.51	0.51	0.15	0.15	0.15		0.10	
Clearance Time (s)	4.0	5.0	5.0	4.0	5.0	5.0	6.0	6.0	6.0		12.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)	101	2283	710	202	2573	801	254	257	239		344	
v/s Ratio Prot	0.03	0.33		c0.17	c0.37		0.11	c0.11			c0.08	
v/s Ratio Perm			0.08			0.07			0.05			
v/c Ratio	0.53	0.73	0.18	1.48	0.73	0.13	0.72	0.72	0.32		0.73	
Uniform Delay, d1	68.5	33.6	24.7	66.2	28.8	19.5	60.4	60.4	56.6		64.8	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	
Incremental Delay, d2	5.4	2.0	0.6	240.7	1.8	0.3	9.6	9.7	0.8		7.4	
Delay (s)	73.8	35.7	25.3	306.9	30.7	19.9	70.0	70.1	57.4		72.2	
Level of Service	E	D	C	F	C	B	E	E	E		E	
Approach Delay (s)		35.3			64.8			64.8			72.2	
Approach LOS		D			E			E			E	

Intersection Summary			
HCM 2000 Control Delay	54.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	149.4	Sum of lost time (s)	27.0
Intersection Capacity Utilization	79.7%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

NORTHLAKE BOULEVARD

CORRIDOR

Intersection: I-95 West Ramp

HCM Signalized Intersection Capacity Analysis

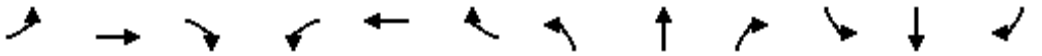
1: West Ramps & Northlake Blvd AM Condition 9/29/2014

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1706	812	1054	1179	0	0	0	0	677	0	478
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0		4.0
Lane Util. Factor		0.81	1.00	0.97	0.91					0.97		0.88
Frpb, ped/bikes		1.00	0.93	1.00	1.00					1.00		0.93
Flpb, ped/bikes		1.00	1.00	1.00	1.00					1.00		1.00
Frt		1.00	0.85	1.00	1.00					1.00		0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (prot)		7544	1465	3433	4988					3400		2505
Flt Permitted		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (perm)		7544	1465	3433	4988					3400		2505
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1854	883	1146	1282	0	0	0	0	736	0	520
RTOR Reduction (vph)	0	0	417	0	0	0	0	0	0	0	0	319
Lane Group Flow (vph)	0	1854	466	1146	1282	0	0	0	0	736	0	201
Confl. Peds. (#/hr)			20									20
Heavy Vehicles (%)	2%	2%	2%	2%	4%	2%	2%	2%	2%	3%	2%	5%
Turn Type		NA	Perm	Prot	NA					Perm		Perm
Protected Phases		4		2	1 2							
Permitted Phases			4							6		6
Actuated Green, G (s)		83.0	83.0	18.0	105.0					29.0		29.0
Effective Green, g (s)		83.0	83.0	18.0	105.0					29.0		29.0
Actuated g/C Ratio		0.49	0.49	0.11	0.62					0.17		0.17
Clearance Time (s)		4.0	4.0	4.0						4.0		4.0
Vehicle Extension (s)		4.7	4.7	4.7						4.7		4.7
Lane Grp Cap (vph)		3683	715	363	3080					580		427
v/s Ratio Prot		0.25		c0.33	0.26							
v/s Ratio Perm			c0.32							c0.22		0.08
v/c Ratio		0.50	0.65	3.16	0.42					1.27		0.47
Uniform Delay, d1		29.5	32.7	76.0	16.7					70.5		63.6
Progression Factor		1.00	1.00	1.58	1.30					1.00		1.00
Incremental Delay, d2		0.2	2.7	976.3	0.1					134.2		1.5
Delay (s)		29.7	35.4	1096.1	21.9					204.7		65.1
Level of Service		C	D	F	C					F		E
Approach Delay (s)		31.5			528.9			0.0			146.9	
Approach LOS		C			F			A			F	

Intersection Summary			
HCM 2000 Control Delay	242.2	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	170.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	111.6%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

HCM Signalized Intersection Capacity Analysis

1: West Ramps & Donald Ross PM Conditions 9/29/2014



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1504	502	900	1835	0	0	0	0	464	0	430
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0		4.0
Lane Util. Factor		0.81	1.00	0.97	0.91					0.97		0.88
Frpb, ped/bikes		1.00	0.94	1.00	1.00					1.00		0.94
Flpb, ped/bikes		1.00	1.00	1.00	1.00					1.00		1.00
Frt		1.00	0.85	1.00	1.00					1.00		0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (prot)		7544	1495	3367	5085					3433		2630
Flt Permitted		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (perm)		7544	1495	3367	5085					3433		2630
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	1567	523	938	1911	0	0	0	0	483	0	448
RTOR Reduction (vph)	0	0	266	0	0	0	0	0	0	0	0	379
Lane Group Flow (vph)	0	1567	257	938	1911	0	0	0	0	483	0	69
Confl. Peds. (#/hr)			20									20
Heavy Vehicles (%)	2%	2%	2%	4%	2%	2%	2%	2%	2%	2%	2%	2%
Turn Type		NA	Perm	Prot	NA					Perm		Perm
Protected Phases		4		2	1 2							
Permitted Phases			4							6		6
Actuated Green, G (s)		59.0	59.0	12.0	75.0					14.0		14.0
Effective Green, g (s)		59.0	59.0	12.0	75.0					14.0		14.0
Actuated g/C Ratio		0.49	0.49	0.10	0.62					0.12		0.12
Clearance Time (s)		4.0	4.0	4.0						4.0		4.0
Vehicle Extension (s)		4.7	4.7	4.7						4.7		4.7
Lane Grp Cap (vph)		3709	735	336	3178					400		306
v/s Ratio Prot		0.21		c0.28	c0.38							
v/s Ratio Perm			0.17							c0.14		0.03
v/c Ratio		0.42	0.35	2.79	0.60					1.21		0.23
Uniform Delay, d1		19.6	18.7	54.0	13.5					53.0		48.1
Progression Factor		1.00	1.00	1.47	0.87					1.00		1.00
Incremental Delay, d2		0.1	0.5	811.6	0.2					114.7		0.7
Delay (s)		19.7	19.3	890.9	11.9					167.7		48.8
Level of Service		B	B	F	B					F		D
Approach Delay (s)		19.6			301.3			0.0			110.5	
Approach LOS		B			F			A			F	

Intersection Summary			
HCM 2000 Control Delay	170.7	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	82.0%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

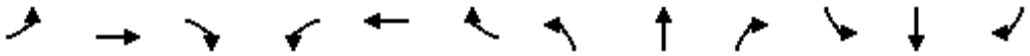
NORTHLAKE BOULEVARD

CORRIDOR

Intersection: I-95 East Ramp

HCM Signalized Intersection Capacity Analysis

2: East Ramps & Northlake Blvd AM Condition 9/29/2014



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	646	1736	0	0	1764	428	470	0	1085	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0	4.0		4.0			
Lane Util. Factor	0.97	0.91			0.86	1.00	0.97		0.88			
Frpb, ped/bikes	1.00	1.00			1.00	0.98	1.00		1.00			
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00		1.00			
Frt	1.00	1.00			1.00	0.85	1.00		0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (prot)	3433	5085			6408	1501	3367		2760			
Flt Permitted	0.95	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (perm)	3433	5085			6408	1501	3367		2760			
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	718	1929	0	0	1960	476	522	0	1206	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	194	0	0	386	0	0	0
Lane Group Flow (vph)	718	1929	0	0	1960	282	522	0	820	0	0	0
Confl. Peds. (#/hr)						20			20			
Heavy Vehicles (%)	2%	2%	2%	2%	2%	5%	4%	2%	3%	2%	2%	2%
Turn Type	Prot	NA			NA	Perm	Prot		Prot			
Protected Phases	5	4 5			1		3		3			
Permitted Phases						1						
Actuated Green, G (s)	18.0	105.0			83.0	83.0	24.0		24.0			
Effective Green, g (s)	18.0	105.0			83.0	83.0	24.0		24.0			
Actuated g/C Ratio	0.11	0.62			0.49	0.49	0.14		0.14			
Clearance Time (s)	4.0				4.0	4.0	4.0		4.0			
Vehicle Extension (s)	4.7				4.7	4.7	4.7		4.7			
Lane Grp Cap (vph)	363	3140			3128	732	475		389			
v/s Ratio Prot	c0.21	c0.38			0.31		0.16		c0.30			
v/s Ratio Perm						0.19						
v/c Ratio	1.98	0.61			0.63	0.38	1.10		2.11			
Uniform Delay, d1	76.0	20.0			32.1	27.4	73.0		73.0			
Progression Factor	1.60	0.58			1.00	1.00	1.00		1.00			
Incremental Delay, d2	448.8	0.3			0.5	0.6	70.9		507.7			
Delay (s)	570.6	11.9			32.6	28.0	143.9		580.7			
Level of Service	F	B			C	C	F		F			
Approach Delay (s)		163.5			31.7			448.8			0.0	
Approach LOS		F			C			F			A	

Intersection Summary			
HCM 2000 Control Delay	188.7	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	170.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	111.6%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

HCM Signalized Intersection Capacity Analysis

2: East Ramps & Donald Ross/Doanld Ross PM Conditions 9/29/2014

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	407	1562	0	0	2171	684	566	0	672	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0	4.0		4.0			
Lane Util. Factor	0.97	0.91			0.86	1.00	0.97		0.88			
Frpb, ped/bikes	1.00	1.00			1.00	0.98	1.00		1.00			
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00		1.00			
Frt	1.00	1.00			1.00	0.85	1.00		0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (prot)	3367	5085			6408	1545	3433		2787			
Flt Permitted	0.95	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (perm)	3367	5085			6408	1545	3433		2787			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	442	1698	0	0	2360	743	615	0	730	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	357	0	0	300	0	0	0
Lane Group Flow (vph)	442	1698	0	0	2360	386	615	0	430	0	0	0
Confl. Peds. (#/hr)						20			20			
Heavy Vehicles (%)	4%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Turn Type	Prot	NA			NA	Perm	Prot		Prot			
Protected Phases	5	4 5			1		3		3			
Permitted Phases						1						
Actuated Green, G (s)	12.0	75.0			59.0	59.0	19.0		19.0			
Effective Green, g (s)	12.0	75.0			59.0	59.0	19.0		19.0			
Actuated g/C Ratio	0.10	0.62			0.49	0.49	0.16		0.16			
Clearance Time (s)	4.0				4.0	4.0	4.0		4.0			
Vehicle Extension (s)	4.7				4.7	4.7	4.7		4.7			
Lane Grp Cap (vph)	336	3178			3150	759	543		441			
v/s Ratio Prot	c0.13	0.33			c0.37		c0.18		0.15			
v/s Ratio Perm						0.25						
v/c Ratio	1.32	0.53			0.75	0.51	1.13		0.97			
Uniform Delay, d1	54.0	12.7			24.5	20.7	50.5		50.3			
Progression Factor	1.55	0.44			1.00	1.00	1.00		1.00			
Incremental Delay, d2	160.4	0.2			1.2	1.0	80.6		36.1			
Delay (s)	244.2	5.9			25.7	21.7	131.1		86.4			
Level of Service	F	A			C	C	F		F			
Approach Delay (s)		55.1			24.7			106.8			0.0	
Approach LOS		E			C			F			A	

Intersection Summary			
HCM 2000 Control Delay	51.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	82.0%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

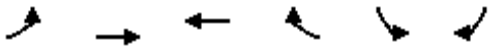
NORTHLAKE BOULEVARD

CORRIDOR

Intersection: Roan Lane

HCM Signalized Intersection Capacity Analysis

12: NorthLake Blvd & Roan LN AM Conditions 9/30/2014



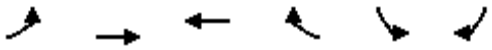
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	133	2689	2077	127	0	115
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	8.0	6.5	6.5	4.0		8.0
Lane Util. Factor	1.00	0.91	0.81	1.00		1.00
Frt	1.00	1.00	1.00	0.85		0.86
Flt Protected	0.95	1.00	1.00	1.00		1.00
Satd. Flow (prot)	1770	5085	7471	1583		1611
Flt Permitted	0.95	1.00	1.00	1.00		1.00
Satd. Flow (perm)	1770	5085	7471	1583		1611
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	151	3056	2360	144	0	131
RTOR Reduction (vph)	0	0	0	0	0	14
Lane Group Flow (vph)	151	3056	2360	144	0	117
Heavy Vehicles (%)	2%	2%	3%	2%	2%	2%
Turn Type	Prot	NA	NA	Free		Over
Protected Phases	1	6	2			1
Permitted Phases				Free		
Actuated Green, G (s)	19.4	170.0	136.1	170.0		19.4
Effective Green, g (s)	19.4	170.0	136.1	170.0		19.4
Actuated g/C Ratio	0.11	1.00	0.80	1.00		0.11
Clearance Time (s)	8.0	6.5	6.5			8.0
Vehicle Extension (s)	3.0	3.0	3.0			3.0
Lane Grp Cap (vph)	201	5085	5981	1583		183
v/s Ratio Prot	0.09	c0.60	0.32			0.07
v/s Ratio Perm				0.09		
v/c Ratio	0.75	0.60	0.39	0.09		0.64
Uniform Delay, d1	73.0	0.0	4.9	0.0		71.9
Progression Factor	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	14.6	0.2	0.0	0.1		7.1
Delay (s)	87.6	0.2	5.0	0.1		79.1
Level of Service	F	A	A	A		E
Approach Delay (s)		4.3	4.7		79.1	
Approach LOS		A	A		E	

Intersection Summary			
HCM 2000 Control Delay	6.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	170.0	Sum of lost time (s)	14.5
Intersection Capacity Utilization	57.4%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis

12: NorthLake Blvd & Roan LN PM Conditions 9/30/2014



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	133	2689	2077	127	0	115
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	8.0	6.5	6.5	4.0		8.0
Lane Util. Factor	1.00	0.91	0.81	1.00		1.00
Frt	1.00	1.00	1.00	0.85		0.86
Flt Protected	0.95	1.00	1.00	1.00		1.00
Satd. Flow (prot)	1770	5085	7471	1583		1611
Flt Permitted	0.95	1.00	1.00	1.00		1.00
Satd. Flow (perm)	1770	5085	7471	1583		1611
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	151	3056	2360	144	0	131
RTOR Reduction (vph)	0	0	0	0	0	14
Lane Group Flow (vph)	151	3056	2360	144	0	117
Heavy Vehicles (%)	2%	2%	3%	2%	2%	2%
Turn Type	Prot	NA	NA	Free		Over
Protected Phases	1	6	2			1
Permitted Phases				Free		
Actuated Green, G (s)	19.4	170.0	136.1	170.0		19.4
Effective Green, g (s)	19.4	170.0	136.1	170.0		19.4
Actuated g/C Ratio	0.11	1.00	0.80	1.00		0.11
Clearance Time (s)	8.0	6.5	6.5			8.0
Vehicle Extension (s)	3.0	3.0	3.0			3.0
Lane Grp Cap (vph)	201	5085	5981	1583		183
v/s Ratio Prot	0.09	c0.60	0.32			0.07
v/s Ratio Perm				0.09		
v/c Ratio	0.75	0.60	0.39	0.09		0.64
Uniform Delay, d1	73.0	0.0	4.9	0.0		71.9
Progression Factor	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	14.6	0.2	0.0	0.1		7.1
Delay (s)	87.6	0.2	5.0	0.1		79.1
Level of Service	F	A	A	A		E
Approach Delay (s)		4.3	4.7		79.1	
Approach LOS		A	A		E	

Intersection Summary			
HCM 2000 Control Delay	6.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	170.0	Sum of lost time (s)	14.5
Intersection Capacity Utilization	57.4%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

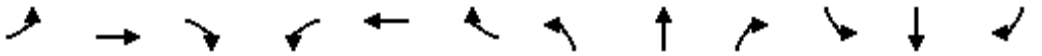
NORTHLAKE BOULEVARD

CORRIDOR

Intersection: Sandtree Drive

HCM Signalized Intersection Capacity Analysis

14: NorthLake Blvd & Sandtree Dr AM Conditions 9/30/2014



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	46	2457	186	134	1855	26	286	12	107	140	27	53
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.5	7.5	7.0	7.5		6.0	6.5	6.5		6.5	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91		0.97	0.95	0.95		0.95	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	0.88	0.85		0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.97	
Satd. Flow (prot)	1752	5036	1524	3400	4976		3433	1487	1475		3229	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.75	
Satd. Flow (perm)	1752	5036	1524	3400	4976		3433	1487	1475		2495	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	51	2700	204	147	2038	29	314	13	118	154	30	58
RTOR Reduction (vph)	0	0	87	0	1	0	0	32	39	0	21	0
Lane Group Flow (vph)	51	2700	117	147	2066	0	314	34	26	0	221	0
Heavy Vehicles (%)	3%	3%	6%	3%	4%	5%	2%	18%	4%	2%	18%	4%
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6						4			
Actuated Green, G (s)	7.7	65.2	65.2	10.8	68.3		16.5	65.4	65.4		42.9	
Effective Green, g (s)	7.7	65.2	65.2	10.8	68.3		16.5	65.4	65.4		42.9	
Actuated g/C Ratio	0.05	0.40	0.40	0.07	0.42		0.10	0.40	0.40		0.26	
Clearance Time (s)	7.0	7.5	7.5	7.0	7.5		6.0	6.5	6.5		6.5	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)	83	2021	611	226	2092		348	598	593		659	
v/s Ratio Prot	0.03	c0.54		c0.04	c0.42		c0.09	0.02				
v/s Ratio Perm			0.08						0.02		c0.09	
v/c Ratio	0.61	1.34	0.19	0.65	0.99		0.90	0.06	0.04		5.31dl	
Uniform Delay, d1	75.9	48.6	31.5	74.0	46.6		72.2	29.7	29.5		48.2	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	
Incremental Delay, d2	12.8	154.6	0.7	6.5	17.0		25.4	0.0	0.0		0.3	
Delay (s)	88.6	203.2	32.2	80.5	63.6		97.6	29.7	29.5		48.5	
Level of Service	F	F	C	F	E		F	C	C		D	
Approach Delay (s)		189.5			64.8			77.6			48.5	
Approach LOS		F			E			E			D	

Intersection Summary			
HCM 2000 Control Delay	128.0	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	162.4	Sum of lost time (s)	27.0
Intersection Capacity Utilization	83.6%	ICU Level of Service	E
Analysis Period (min)	15		

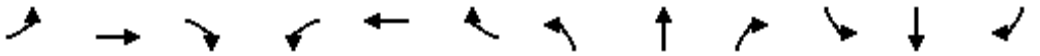
dl Defacto Left Lane. Recode with 1 though lane as a left lane.

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis

14: Northlake Blvd & Sandtree Dr PM Condition 9/30/2014



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	60	2005	168	213	2307	44	477	14	222	103	18	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.5	7.5	7.0	7.5		6.0	6.5	6.5		6.5	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91		0.97	0.95	0.95		0.95	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	0.87	0.85		0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.97	
Satd. Flow (prot)	1770	5085	1568	3433	5071		3433	1536	1504		3283	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.74	
Satd. Flow (perm)	1770	5085	1568	3433	5071		3433	1536	1504		2517	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	64	2133	179	227	2454	47	507	15	236	110	19	49
RTOR Reduction (vph)	0	0	103	0	2	0	0	79	89	0	38	0
Lane Group Flow (vph)	64	2133	76	227	2499	0	507	47	36	0	140	0
Heavy Vehicles (%)	2%	2%	3%	2%	2%	2%	2%	2%	2%	2%	2%	3%
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6						4			
Actuated Green, G (s)	8.2	50.0	50.0	12.6	54.4		15.0	33.5	33.5		12.5	
Effective Green, g (s)	8.2	50.0	50.0	12.6	54.4		15.0	33.5	33.5		12.5	
Actuated g/C Ratio	0.07	0.43	0.43	0.11	0.46		0.13	0.29	0.29		0.11	
Clearance Time (s)	7.0	7.5	7.5	7.0	7.5		6.0	6.5	6.5		6.5	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)	123	2171	669	369	2355		439	439	430		268	
v/s Ratio Prot	0.04	0.42		c0.07	c0.49		c0.15	0.03				
v/s Ratio Perm			0.05						0.02		c0.06	
v/c Ratio	0.52	0.98	0.11	0.62	1.06		1.15	0.11	0.08		2.56dl	
Uniform Delay, d1	52.6	33.1	20.2	49.9	31.3		51.0	30.8	30.6		49.5	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	
Incremental Delay, d2	3.9	15.6	0.3	3.0	37.4		92.7	0.1	0.1		1.8	
Delay (s)	56.5	48.7	20.6	53.0	68.7		143.7	30.9	30.7		51.3	
Level of Service	E	D	C	D	E		F	C	C		D	
Approach Delay (s)		46.8			67.4			106.3			51.3	
Approach LOS		D			E			F			D	

Intersection Summary			
HCM 2000 Control Delay	63.7	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	117.1	Sum of lost time (s)	27.0
Intersection Capacity Utilization	86.7%	ICU Level of Service	E
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

c Critical Lane Group

CENTRAL BOULEVARD

CORRIDOR

From: Donald Ross Road

To: PGA Boulevard

CENTRAL BOULEVARD

CORRIDOR

Intersection: Victoria Falls Boulevard

HCM 2010 TWSC

13: Victoria Falls Blvd & Central Blvd- AM Conditions 9/19/2014

Intersection	
Int Delay, s/veh	4.8

Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Vol, veh/h	104	32	5	574	49	25	846
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	None
Storage Length	0	336	-	-	-	383	-
Veh in Median Storage, #	0	-	-	0	-	-	0
Grade, %	0	-	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	4	2	20	3
Mvmt Flow	118	36	6	652	56	28	961

Major/Minor	Minor1			Major1		Major2	
Conflicting Flow All	1229	354	702	0	0	708	0
Stage 1	691	-	-	-	-	-	-
Stage 2	538	-	-	-	-	-	-
Critical Hdwy	6.84	6.94	6.44	-	-	4.5	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.52	-	-	2.4	-
Pot Cap-1 Maneuver	170	642	515	-	-	777	-
Stage 1	459	-	-	-	-	-	-
Stage 2	549	-	-	-	-	-	-
Platoon blocked, %				-	-		-
Mov Cap-1 Maneuver	164	642	515	-	-	777	-
Mov Cap-2 Maneuver	164	-	-	-	-	-	-
Stage 1	459	-	-	-	-	-	-
Stage 2	529	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	55.6	0.1	0.3
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	164	642	777	-
HCM Lane V/C Ratio	-	-	0.721	0.057	0.037	-
HCM Control Delay (s)	-	-	69.3	10.9	9.8	-
HCM Lane LOS	-	-	F	B	A	-
HCM 95th %tile Q(veh)	-	-	4.4	0.2	0.1	-

HCM 2010 TWSC

13: Victoria Falls Blvd & Central Blvd PM Conditions 9/29/2014

Intersection	
Int Delay, s/veh	0.8

Movement	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Vol, veh/h	12	43	540	27	1	29	568
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	-	None
Storage Length	0	336	-	-	-	383	-
Veh in Median Storage, #	0	-	0	-	-	-	0
Grade, %	0	-	0	-	-	-	0
Peak Hour Factor	96	96	96	96	96	96	96
Heavy Vehicles, %	7	2	2	4	2	8	2
Mvmt Flow	12	45	562	28	1	30	592

Major/Minor	Minor1		Major1		Major2		
Conflicting Flow All	935	295	0	0	635	591	0
Stage 1	577	-	-	-	-	-	-
Stage 2	358	-	-	-	-	-	-
Critical Hdwy	6.94	6.94	-	-	6.44	4.26	-
Critical Hdwy Stg 1	5.94	-	-	-	-	-	-
Critical Hdwy Stg 2	5.94	-	-	-	-	-	-
Follow-up Hdwy	3.57	3.32	-	-	2.52	2.28	-
Pot Cap-1 Maneuver	255	701	-	-	568	941	-
Stage 1	511	-	-	-	-	-	-
Stage 2	664	-	-	-	-	-	-
Platoon blocked, %			-	-			-
Mov Cap-1 Maneuver	255	701	-	-	918	918	-
Mov Cap-2 Maneuver	255	-	-	-	-	-	-
Stage 1	511	-	-	-	-	-	-
Stage 2	664	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.5	0	0.5
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	255	701	918	-
HCM Lane V/C Ratio	-	-	0.049	0.064	0.034	-
HCM Control Delay (s)	-	-	19.8	10.5	9.1	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	0.2	0.2	0.1	-

CENTRAL BOULEVARD

CORRIDOR

Intersection: 117th Court

HCM 2010 Signalized Intersection Summary
8: 117 Ct & Central Blvd-AM Conditions

9/19/2014

Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Volume (veh/h)	684	198	5	431	563	272	677
Number	3	18		2	12	1	6
Initial Q (Qb), veh	0	0		0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00			1.00	1.00	
Parking Bus, Adj	1.00	1.00		1.00	0.90	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863		1827	1863	1863	1845
Adj Flow Rate, veh/h	888	257		560	731	353	879
Adj No. of Lanes	1	1		2	1	1	2
Peak Hour Factor	0.77	0.77		0.77	0.77	0.77	0.77
Percent Heavy Veh, %	2	2		4	2	2	3
Cap, veh/h	710	633		1279	525	398	1869
Arrive On Green	0.40	0.40		0.37	0.37	0.14	0.53
Sat Flow, veh/h	1774	1583		3563	1425	1774	3597
Grp Volume(v), veh/h	888	257		560	731	353	879
Grp Sat Flow(s),veh/h/ln	1774	1583		1736	1425	1774	1752
Q Serve(g_s), s	60.0	17.4		18.2	55.3	17.9	23.4
Cycle Q Clear(g_c), s	60.0	17.4		18.2	55.3	17.9	23.4
Prop In Lane	1.00	1.00			1.00	1.00	
Lane Grp Cap(c), veh/h	710	633		1279	525	398	1869
V/C Ratio(X)	1.25	0.41		0.44	1.39	0.89	0.47
Avail Cap(c_a), veh/h	710	633		1279	525	520	1869
HCM Platoon Ratio	1.00	1.00		1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00		1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.0	32.2		35.7	47.4	27.0	21.8
Incr Delay (d2), s/veh	124.6	0.4		1.1	187.9	13.8	0.9
Initial Q Delay(d3),s/veh	0.0	0.0		0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	97.1	12.3		13.8	88.5	15.4	17.2
LnGrp Delay(d),s/veh	169.6	32.7		36.8	235.3	40.8	22.7
LnGrp LOS	F	C		D	F	D	C
Approach Vol, veh/h	1145			1291			1232
Approach Delay, s/veh	138.8			149.2			27.8
Approach LOS	F			F			C

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	24.7	60.3				85.0		65.0
Change Period (Y+Rc), s	4.0	5.0				5.0		5.0
Max Green Setting (Gmax), s	31.0	45.0				80.0		60.0
Max Q Clear Time (g_c+I1), s	19.9	57.3				25.4		62.0
Green Ext Time (p_c), s	0.8	0.0				23.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	105.2
HCM 2010 LOS	F

Notes

User approved ignoring U-Turning movement.

HCM 2010 Signalized Intersection Summary
8: 117 Ct & Central Blvd-PM Conditions

9/22/2014

Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Volume (veh/h)	519	179	1	389	245	186	393
Number	3	18		2	12	1	6
Initial Q (Qb), veh	0	0		0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00			1.00	1.00	
Parking Bus, Adj	1.00	1.00		1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1759		1827	1792	1810	1827
Adj Flow Rate, veh/h	674	232		505	318	242	510
Adj No. of Lanes	1	1		2	1	1	2
Peak Hour Factor	0.77	0.77		0.77	0.77	0.77	0.77
Percent Heavy Veh, %	4	8		4	6	5	4
Cap, veh/h	692	594		1434	629	415	1859
Arrive On Green	0.40	0.40		0.41	0.41	0.10	0.54
Sat Flow, veh/h	1740	1495		3563	1524	1723	3563
Grp Volume(v), veh/h	674	232		505	318	242	510
Grp Sat Flow(s),veh/h/ln	1740	1495		1736	1524	1723	1736
Q Serve(g_s), s	56.9	16.5		14.9	23.1	11.7	11.9
Cycle Q Clear(g_c), s	56.9	16.5		14.9	23.1	11.7	11.9
Prop In Lane	1.00	1.00			1.00	1.00	
Lane Grp Cap(c), veh/h	692	594		1434	629	415	1859
V/C Ratio(X)	0.97	0.39		0.35	0.51	0.58	0.27
Avail Cap(c_a), veh/h	699	601		1434	629	607	1859
HCM Platoon Ratio	1.00	1.00		1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00		1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.3	32.1		30.1	32.5	21.4	18.9
Incr Delay (d2), s/veh	27.6	0.4		0.7	2.9	1.3	0.4
Initial Q Delay(d3),s/veh	0.0	0.0		0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	42.0	11.2		11.7	15.5	9.6	9.8
LnGrp Delay(d),s/veh	71.9	32.5		30.8	35.4	22.7	19.2
LnGrp LOS	E	C		C	D	C	B
Approach Vol, veh/h	906			823			752
Approach Delay, s/veh	61.8			32.6			20.4
Approach LOS	E			C			C

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	18.3	66.7				85.0		64.4
Change Period (Y+Rc), s	4.0	5.0				5.0		5.0
Max Green Setting (Gmax), s	31.0	45.0				80.0		60.0
Max Q Clear Time (g_c+I1), s	13.7	25.1				13.9		58.9
Green Ext Time (p_c), s	0.6	8.2				11.0		0.5

Intersection Summary	
HCM 2010 Ctrl Delay	39.5
HCM 2010 LOS	D

Notes

User approved ignoring U-Turning movement.

NORTH MILITARY TRAIL

CORRIDOR

From: Donald Ross Road

To: PGA Boulevard

NORTH MILITARY TRAIL

CORRIDOR

Intersection: Kyoto Gardens

HCM Signalized Intersection Capacity Analysis

6: Kyoto Gardens Dr & N Military Trail AM Conditions 9/30/2014

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	300	33	98	71	692	76	134	1521	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				8.0	4.0	4.0	8.0	8.0	8.0	7.5	8.0	
Lane Util. Factor				0.95	0.95	1.00	1.00	0.91	1.00	1.00	0.91	
Frt				1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected				0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)				1681	1701	1583	1770	5085	1568	1770	5085	
Flt Permitted				0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)				1681	1701	1583	1770	5085	1568	1770	5085	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	0	319	35	104	76	736	81	143	1618	0
RTOR Reduction (vph)	0	0	0	0	0	86	0	0	33	0	0	0
Lane Group Flow (vph)	0	0	0	175	179	18	76	736	48	143	1618	0
Heavy Vehicles (%)	2%	3%	2%	2%	2%	2%	2%	2%	3%	2%	2%	2%
Turn Type				Prot	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases				4	8		1	6		5	2	
Permitted Phases						8			6			
Actuated Green, G (s)				26.0	30.0	30.0	11.8	101.5	101.5	19.0	108.2	
Effective Green, g (s)				26.0	30.0	30.0	11.8	101.5	101.5	19.0	108.2	
Actuated g/C Ratio				0.15	0.18	0.18	0.07	0.60	0.60	0.11	0.64	
Clearance Time (s)				8.0	4.0	4.0	8.0	8.0	8.0	7.5	8.0	
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)				257	300	279	122	3036	936	197	3236	
v/s Ratio Prot				0.10	c0.09		0.04	0.14		c0.08	c0.32	
v/s Ratio Perm					0.01	0.01			0.03			
v/c Ratio				0.68	0.60	0.07	0.62	0.24	0.05	0.73	0.50	
Uniform Delay, d1				68.1	64.4	58.3	76.9	16.1	14.2	73.0	16.5	
Progression Factor				1.00	1.00	1.00	0.77	2.44	206.56	1.00	1.00	
Incremental Delay, d2				7.2	3.2	0.1	8.7	0.2	0.1	12.5	0.6	
Delay (s)				75.3	67.6	58.4	67.8	39.6	2941.5	85.5	17.0	
Level of Service				E	E	E	E	D	F	F	B	
Approach Delay (s)		0.0			68.5			305.2			22.6	
Approach LOS		A			E			F			C	

Intersection Summary			
HCM 2000 Control Delay	110.4	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	170.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	59.2%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis

6: Kyoto Gardens Dr PM Condition 9/30/2014

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	526	190	308	228	875	133	47	1200	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				8.5	4.0	4.0	8.0	8.5	8.5	7.5	8.0	
Lane Util. Factor				0.95	0.95	1.00	1.00	0.91	1.00	1.00	0.91	
Frt				1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected				0.95	0.98	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)				1681	1728	1583	1770	5085	1583	1770	5085	
Flt Permitted				0.95	0.98	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)				1681	1728	1583	1770	5085	1583	1770	5085	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	0	0	548	198	321	238	911	139	49	1250	0
RTOR Reduction (vph)	0	0	0	0	0	238	0	0	74	0	0	0
Lane Group Flow (vph)	0	0	0	367	379	83	238	911	65	49	1250	0
Turn Type				Prot	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases				4	8		1	6		5	2	
Permitted Phases						8			6			
Actuated Green, G (s)				21.5	26.0	26.0	18.6	46.9	46.9	7.1	35.4	
Effective Green, g (s)				21.5	26.0	26.0	18.6	46.9	46.9	7.1	35.4	
Actuated g/C Ratio				0.22	0.26	0.26	0.19	0.47	0.47	0.07	0.35	
Clearance Time (s)				8.5	4.0	4.0	8.0	8.5	8.5	7.5	8.0	
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)				361	449	411	329	2384	742	125	1800	
v/s Ratio Prot				0.22	c0.18		c0.13	0.18		0.03	c0.25	
v/s Ratio Perm					0.04	0.05			0.04			
v/c Ratio				1.02	0.84	0.20	0.72	0.38	0.09	0.39	0.69	
Uniform Delay, d1				39.2	35.1	28.9	38.3	17.2	14.7	44.4	27.7	
Progression Factor				1.00	1.00	1.00	0.67	0.93	2.45	1.00	1.00	
Incremental Delay, d2				51.6	13.5	0.2	5.4	0.3	0.2	2.0	2.2	
Delay (s)				90.9	48.6	29.2	31.1	16.4	36.2	46.4	29.9	
Level of Service				F	D	C	C	B	D	D	C	
Approach Delay (s)		0.0			57.3			21.2			30.5	
Approach LOS		A			E			C			C	

Intersection Summary			
HCM 2000 Control Delay	35.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	24.5
Intersection Capacity Utilization	72.0%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

APPENDIX E

2013 EXISTING CONDITIONS

HCS FACILITY ANALYSIS REPORTS

Appendix E -2013 Existing Conditions HCS Facility Analysis Reports

HCS 2010 Freeway Facilities

Project Properties

Analyst	SM	**Freeway Name**	I-95	**Analysis Period**	AM Peak
Analysis Date	8/4/2014 1:29:03 PM	**From**	Northlake Blvd	**Version Date**	10/10/2012
Agency		**To**	Donald Ross Road		
Location	I-95 PGA Boulevard PD&E	**Analysis Direction**	Northbound		
User Notes	Existing Conditions				
File Name	C:\Users\smisztal\AppData\Local\Temp\preview.xml				

Facility-wide Values

Jam Density (pc/h/ln)	190	**Time Period Duration (min)**	15	**Facility Length (mi)**	**10.47600**

Segment Input Data

Time Period 1

Mainline Data

Seg #	From	To	Type	Length	Terrain	Adj. Demand	% Trucks	% RVs	# Lanes	FFS
1	I-95 NB W Blue Heron	Northlake Blvd	Basic Segment	3942	Level	6935	3.52	0.00	5	65
2	I-95 NB	Northlake Blvd	Off Ramp	1500	Level	6935	3.52	0.00	4	65
3	I-95 NB between Ramp	Ramps	Basic Segment	3175	Level	5468	3.52	0.00	4	65
4	Northlake Blvd	I-95 NB	On Ramp	1125	Level	6384	4.62	0.00	4	65
5	Northlake Blvd	PGA Blvd	Basic Segment	5565	Level	6384	4.62	0.00	4	65
6	I-95 NB	PGA Blvd E	Off Ramp	1602	Level	6384	4.62	0.00	4	65
7	I-95 NB between Ramp	Ramp	Basic Segment	1048	Level	3966	5.57	0.00	4	65
8	I-95 NB	PGA Blvd W	Off Ramp	906	Level	3966	5.57	0.00	4	65
9	I-95 NB between Ramp	Ramps	Basic Segment	925	Level	3243	4.60	0.00	4	65
10	PGA Blvd	I-95 NB	On Ramp	1375	Level	3491	4.48	0.00	4	65
11	I-95 NB Between Ramp	Ramp	Basic Segment	1485	Level	3491	4.48	0.00	4	65
12	Military Trail	I-95 NB	On Ramp	1338	Level	3666	4.41	0.00	4	65
13	Military Trail	Donald Ross	Basic Segment	8535	Level	3666	4.41	0.00	4	70
14	I-95 NB	Donald Ross	Off Ramp	1696	Level	3666	4.41	0.00	4	70
15	I-95 NB between Ramp	Ramp	Basic Segment	5184	Level	2537	4.81	0.00	4	70
16	Donald Ross	I-95 NB	On Ramp	503	Level	2915	4.99	0.00	4	70
17	Donald Ross	Indiantown Road	Basic Segment	15411	Level	2915	4.99	0.00	4	70

RampData

Seg #	Type	Adj. Demand	% Trucks	% RVs	Lanes	Accel/Decel Length	FFS
2	Off Ramp	1467	3.52	0.00	2	450	40
4	On Ramp	916	11.20	0.00	1	900	50
6	Off Ramp	2418	3.07	0.00	2	500	40
8	Off Ramp	723	9.90	0.00	1	700	40
10	On Ramp	248	2.88	0.00	1	1200	50
12	On Ramp	175	3.00	0.00	1	1240	50
14	Off Ramp	1129	3.50	0.00	2	1340	40
16	On Ramp	378	6.14	0.00	1	530	50

Weaving Segment Data

Seg #	Ramp to Ramp Prop.	On-Ramp					Off-Ramp				
		Adj. Demand	% Trucks	% RVs	Lanes	FFS	Adj. Demand	% Trucks	% RVs	Lanes	FFS

Time Period Independent Weaving Segment Data

Appendix E -2013 Existing Conditions HCS Facility Analysis Reports

Seg #	Configuration	Short Length	# Weaving Lanes	Min. Lane Changes Freeway-Ramp	Min. Lane Changes Ramp-Freeway	Min. Lane Changes Ramp-Ramp

Time Period Results

Time Period 1

Seg #	From	To	Type	Adj. Demand	Vol. Served	Capacity (pc/h)	Capacity (veh/h)	d/c Ratio	v/c ratio	Queue Length (ft)	Avg. Speed (mi/h)	Density (pc/mi/ln)	Density (veh/mi/ln)	Avg. Travel Time (min/veh)	Free-Flow Travel Time (min/veh)	Mainline Delay (min/veh)	System Delay (min/veh)	VMT Demand (veh-min)	VMT Volume (veh-min)	VHT (veh-hrs)	VHD (veh-hrs)	LOS
1	I-95 NB W Blue Heron	Northlake Blvd	Basic Segment	6935	6935	11750	11547	0.60	0.60	0	65.0	21.7	21.3	0.69	0.69	0.0	0.0	1294.4	1294.4	19.9	0.0	C
2	I-95 NB	Northlake Blvd	Off Ramp	6935	6935	9400	9237	0.75	0.75	0	60.7	29.0	28.5	0.28	0.26	0.0	0.0	492.5	492.5	8.1	0.5	D
3	I-95 NB between Ramp	Ramps	Basic Segment	5468	5468	9400	9237	0.59	0.59	0	64.9	21.4	21.1	0.56	0.56	0.0	0.0	822.0	822.0	12.7	0.0	C
4	Northlake Blvd	I-95 NB	On Ramp	6384	6384	9400	9188	0.69	0.69	0	59.2	27.4	26.8	0.22	0.20	0.0	0.0	340.1	340.1	5.7	0.5	C
5	Northlake Blvd	PGA Blvd	Basic Segment	6384	6384	9400	9188	0.69	0.69	0	64.2	25.4	24.8	0.98	0.97	0.0	0.0	1682.1	1682.1	26.2	0.3	C
6	I-95 NB	PGA Blvd E	Off Ramp	6384	6384	9400	9188	0.69	0.69	0	58.5	27.9	27.3	0.31	0.28	0.0	0.0	484.2	484.2	8.3	0.8	C
7	I-95 NB between Ramp	Ramp	Basic Segment	3966	3966	9400	9145	0.43	0.43	0	64.2	15.9	15.4	0.19	0.18	0.0	0.0	196.8	196.8	3.1	0.0	B
8	I-95 NB	PGA Blvd W	Off Ramp	3966	3966	9400	9145	0.43	0.43	0	61.5	16.6	16.1	0.17	0.16	0.0	0.0	170.1	170.1	2.8	0.1	B
9	I-95 NB between Ramp	Ramps	Basic Segment	3243	3243	9400	9189	0.35	0.35	0	64.2	12.9	12.6	0.16	0.16	0.0	0.0	142.0	142.0	2.2	0.0	B
10	PGA Blvd	I-95 NB	On Ramp	3491	3491	9400	9194	0.38	0.38	0	61.7	14.5	14.1	0.25	0.24	0.0	0.0	227.3	227.3	3.7	0.2	B
11	I-95 NB Between Ramp	Ramp	Basic Segment	3491	3491	9400	9194	0.38	0.38	0	64.7	13.8	13.5	0.26	0.26	0.0	0.0	245.5	245.5	3.8	0.0	B
12	Military Trail	I-95 NB	On Ramp	3666	3666	9400	9197	0.40	0.40	0	61.6	15.2	14.9	0.25	0.23	0.0	0.0	232.2	232.2	3.8	0.2	B
13	Military Trail	Donald Ross	Basic Segment	3666	3666	9600	9393	0.39	0.39	0	70.0	13.4	13.1	1.39	1.39	0.0	0.0	1481.5	1481.5	21.2	0.0	B
14	I-95 NB	Donald Ross	Off Ramp	3666	3666	9600	9393	0.39	0.39	0	65.6	14.3	14.0	0.29	0.28	0.0	0.0	294.4	294.4	4.5	0.3	B
15	I-95 NB between Ramp	Ramp	Basic Segment	2537	2537	9600	9374	0.27	0.27	0	70.0	9.3	9.1	0.84	0.84	0.0	0.0	622.7	622.7	8.9	0.0	A
16	Donald Ross	I-95 NB	On Ramp	2915	2915	9600	9366	0.31	0.31	0	65.5	11.4	11.1	0.09	0.08	0.0	0.0	69.4	69.4	1.1	0.1	B
17	Donald Ross	Indiantown Road	Basic Segment	2915	2915	9600	9366	0.31	0.31	0	70.0	10.7	10.4	2.50	2.50	0.0	0.0	2127.0	2127.0	30.4	0.0	A

Overall Results

Segment	Segment Type	Maximum d/c Ratio	Avg. Speed (mi/h)	Density (pc/mi/ln)	Density (veh/mi/ln)	Avg. Travel Time (min/veh)	Free-Flow Travel Time (min/veh)	VMT Demand (veh-min)	VMT Volume (veh-min)	VHT (veh-hrs)	VHD (veh-hrs)
I-95 NB W Blue Heron-Northlake Blvd	Basic	0.60	65.0	21.7	21.3	0.69	0.69	1,294.4	1,294.4	19.91	0.00
I-95 NB-Northlake Blvd	OffRamp	0.75	60.7	29.0	28.5	0.28	0.26	0,492.5	0,492.5	8.11	0.53
I-95 NB between Ramp-Ramps	Basic	0.59	64.9	21.4	21.1	0.56	0.56	0,822.0	0,822.0	12.67	0.02
Northlake Blvd-I-95 NB	OnRamp	0.69	59.2	27.4	26.8	0.22	0.20	0,340.1	0,340.1	5.75	0.51
Northlake Blvd-PGA	Basic	0.69	64.2	25.4	24.8	0.98	0.97	1,682.1	1,682.1	26.19	0.31

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Blvd											
I-95 NB-PGA Blvd E	OffRamp	0.69	58.5	27.9	27.3	0.31	0.28	0,484.2	0,484.2	8.28	0.83
I-95 NB between Ramp-Ramp	Basic	0.43	64.2	15.9	15.4	0.19	0.18	0,196.8	0,196.8	3.06	0.04
I-95 NB-PGA Blvd W	OffRamp	0.43	61.5	16.6	16.1	0.17	0.16	0,170.1	0,170.1	2.77	0.15
I-95 NB between Ramp-Ramps	Basic	0.35	64.2	12.9	12.6	0.16	0.16	0,142.0	0,142.0	2.21	0.03
PGA Blvd-I-95 NB	OnRamp	0.38	61.7	14.5	14.1	0.25	0.24	0,227.3	0,227.3	3.69	0.19
I-95 NB Between Ramp-Ramp	Basic	0.38	64.7	13.8	13.5	0.26	0.26	0,245.5	0,245.5	3.80	0.02
Military Trail-I-95 NB	OnRamp	0.40	61.6	15.2	14.9	0.25	0.23	0,232.2	0,232.2	3.77	0.20
Military Trail-Donald Ross	Basic	0.39	70.0	13.4	13.1	1.39	1.39	1,481.5	1,481.5	21.17	0.00
I-95 NB-Donald Ross	OffRamp	0.39	65.6	14.3	14.0	0.29	0.28	0,294.4	0,294.4	4.48	0.28
I-95 NB between Ramp-Ramp	Basic	0.27	70.0	9.3	9.1	0.84	0.84	0,622.7	0,622.7	8.90	0.00
Donald Ross-I-95 NB	OnRamp	0.31	65.5	11.4	11.1	0.09	0.08	0,069.4	0,069.4	1.06	0.07
Donald Ross-Indiantown Road	Basic	0.31	70.0	10.7	10.4	2.50	2.50	2,127.0	2,127.0	30.39	0.00
Freeway			65.7	15.9	15.6	9.43	9.28	10,924.4	10,924.4	0,166.2	0,003.2

Appendix E -2013 Existing Conditions HCS Facility Analysis Reports

	Density-Based LOS by Segment														
Segment	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Time Step	Basic	Off Ramp	Basic	On Ramp	Basic	Off Ramp	Basic	Off Ramp	Basic	On Ramp	Basic	On Ramp	Basic	Off Ramp	Basic
1	C	D	C	C	C	C	B	B	B	B	B	B	B	B	A

	Density-Based LOS by Segment	
Segment	16	17
Time Step	On Ramp	Basic
1	B	A

	Demand-Based LOS by Segment														
Time Step	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

	Demand-Based LOS by Segment	
Time Step	16	17
1	.	.

Appendix E -2013 Existing Conditions HCS Facility Analysis Reports

HCS 2010 Freeway Facilities

Project Properties

Analyst	SM	**Freeway Name**	I-95	**Analysis Period**	AM Peak
Analysis Date	8/5/2014 10:50:20 AM	**From**	Donald Ross Road	**Version Date**	10/10/2012
Agency	FDOT	**To**	Northlake Blvd		
Location	I-95 PGA Boulevard PD&E	**Analysis Direction**	Southbound		
User Notes	Existing Conditions				
File Name	C:\Users\smisztal\AppData\Local\Temp\preview.xml				

Facility-wide Values

Jam Density (pc/h/ln)	190	**Time Period Duration (min)**	15	**Facility Length (mi)**	**10.48800**

Segment Input Data

Time Period 1

Mainline Data

Seg #	From	To	Type	Length	Terrain	Adj. Demand	% Trucks	% RVs	# Lanes	FFS
1	Indiantown Road	Donald Ross	Basic Segment	13256	Level	5969	3.70	0.00	4	70
2	I-95 SB	Donald Ross	Off Ramp	2000	Level	5969	3.70	0.00	4	70
3	I-95 SB between Ramp	Ramp	Basic Segment	5359	Level	5085	3.39	0.00	4	70
4	Donald Ross	I-95 SB	On Ramp	1960	Level	6574	3.67	0.00	4	70
5	Donald Ross	Military Trail	Basic Segment	8023	Level	6574	3.67	0.00	4	70
6	I-95 SB	Military Trail	Off Ramp	943	Level	6574	3.67	0.00	4	65
7	Military Trail	PGA Blvd	Basic Segment	1162	Level	5298	3.98	0.00	4	65
8	I-95 SB	PGA Ramp	Off Ramp	1664	Level	5298	3.98	0.00	4	65
9	I-95 SB between Ramp	Ramp	Basic Segment	2308	Level	4896	4.06	0.00	4	65
10	PGA WB	I-95 SB	On Ramp	765	Level	7803	4.00	0.00	4	65
11	PGA EB	I-95 SB	On Ramp	342	Level	8895	3.90	0.00	4	65
12	PGA Blvd	Northlake Blvd	Basic Segment	8101	Level	8895	3.90	0.00	5	65
		Northlake								

RampData

Seg #	Type	Adj. Demand	% Trucks	% RVs	Lanes	Accel/Decel Length	FFS
2	Off Ramp	884	5.50	0.00	2	450	40
4	On Ramp	1489	4.65	0.00	1	1500	50
6	Off Ramp	1276	2.40	0.00	1	220	40
8	Off Ramp	402	3.00	0.00	2	625	40
10	On Ramp	2907	3.89	0.00	2	215	50
11	On Ramp	1092	3.24	0.00	1	350	50
13	Off Ramp	1588	5.49	0.00	2	530	40
15	On Ramp	1691	3.72	0.00	2	1275	50

Weaving Segment Data

	Ramp	On-Ramp	Off-Ramp

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13	I-95 SB	Blvd	Off Ramp	524	Level	8895	3.90	0.00	4	65
14	I-95 SB between Ramp	Ramp	Basic Segment	2989	Level	7307	3.56	0.00	4	65
15	Northlake Blvd	I-95 SB	On Ramp	1651	Level	8998	3.59	0.00	4	65
16	Northlake Blvd	W Blue Heron	Basic Segment	4330	Level	8998	3.59	0.00	5	65

Seg #	to Ramp Prop.	Adj. Demand	% Trucks	% RVs	Lanes	FFS	Adj. Demand	% Trucks	% RVs	Lanes	FFS

Time Period Independent Weaving Segment Data

Seg #	Configuration	Short Length	# Weaving Lanes	Min. Lane Changes Freeway-Ramp	Min. Lane Changes Ramp-Freeway	Min. Lane Changes Ramp-Ramp

Time Period Results

Time Period 1

Seg #	From	To	Type	Adj. Demand	Vol. Served	Capacity (pc/h)	Capacity (veh/h)	d/c Ratio	v/c ratio	Queue Length (ft)	Avg. Speed (mi/h)	Density (pc/mi/ln)	Density (veh/mi/ln)	Avg. Travel Time (min/veh)	Free-Flow Travel Time (min/veh)	Mainline Delay (min/veh)	System Delay (min/veh)	VMT Demand (veh-min)	VMT Volume (veh-min)	VHT (veh-hrs)	VHD (veh-hrs)	LOS
1	Indiantown Road	Donald Ross	Basic Segment	5969	5969	9600	9426	0.63	0.63	0	68.8	22.1	21.7	2.19	2.15	0.0	0.0	3746.5	3746.5	54.4	0.9	C
2	I-95 SB	Donald Ross	Off Ramp	5969	5969	9600	9426	0.63	0.63	0	66.2	23.0	22.5	0.34	0.32	0.0	0.0	565.2	565.2	8.5	0.5	C
3	I-95 SB between Ramp	Ramp	Basic Segment	5085	5085	9600	9440	0.54	0.54	0	69.9	18.5	18.2	0.87	0.87	0.0	0.0	1290.3	1290.3	18.5	0.0	C
4	Donald Ross	I-95 SB	On Ramp	6574	6574	9600	9427	0.70	0.70	0	63.5	26.2	25.7	0.35	0.32	0.0	0.0	610.1	610.1	9.6	0.9	C
5	Donald Ross	Military Trail	Basic Segment	6574	6574	9600	9427	0.70	0.70	0	67.4	24.8	24.4	1.35	1.30	0.1	0.1	2497.3	2497.3	37.1	1.4	C
6	I-95 SB	Military Trail	Off Ramp	6574	6574	9400	9230	0.71	0.71	0	60.0	27.9	27.4	0.18	0.16	0.0	0.0	293.5	293.5	4.9	0.4	C
7	Military Trail	PGA Blvd	Basic Segment	5298	5298	9400	9217	0.57	0.57	0	64.1	21.1	20.7	0.21	0.20	0.0	0.0	291.5	291.5	4.5	0.1	C
8	I-95 SB	PGA Ramp	Off Ramp	5298	5298	9400	9217	0.57	0.57	0	63.0	21.4	21.0	0.30	0.29	0.0	0.0	417.4	417.4	6.6	0.2	C
9	I-95 SB between Ramp	Ramp	Basic Segment	4896	4896	9400	9213	0.53	0.53	0	64.9	19.2	18.9	0.40	0.40	0.0	0.0	535.0	535.0	8.2	0.0	C
10	PGA WB	I-95 SB	On Ramp	7803	7803	9400	9216	0.85	0.85	0	50.5	39.1	38.4	0.17	0.13	0.0	0.0	282.6	282.6	5.6	1.3	E
11	PGA EB	I-95 SB	On Ramp	8895	8895	9400	9220	0.96	0.96	0	55.6	40.7	39.9	0.07	0.06	0.0	0.0	144.0	144.0	2.6	0.4	E
12	PGA Blvd	Northlake Blvd	Basic Segment	8895	8895	11750	11525	0.77	0.77	0	62.6	29.0	28.4	1.47	1.42	0.1	0.1	3411.9	3411.9	54.5	2.0	D
13	I-95 SB	Northlake Blvd	Off Ramp	8895	8895	9400	9220	0.96	0.96	0	59.5	38.1	37.4	0.10	0.09	0.0	0.0	220.7	220.7	3.7	0.3	E
	I-95 SB		Basic																			

Appendix E -2013 Existing Conditions HCS Facility Analysis Reports

14	between Ramp	Ramp	Segment	7307	7307	9400	9236	0.79	0.79	0	62.0	30.0	29.5	0.55	0.52	0.0	0.0	1034.1	1034.1	16.7	0.8	D
15	Northlake Blvd	I-95 SB	On Ramp	8998	8998	9400	9234	0.97	0.97	0	56.4	40.5	39.8	0.33	0.29	0.0	0.0	703.4	703.4	12.5	1.7	E
16	Northlake Blvd	W Blue Heron	Basic Segment	8998	8998	11750	11543	0.78	0.78	0	62.4	29.4	28.9	0.79	0.76	0.0	0.0	1844.8	1844.8	29.6	1.2	D

Overall Results

Segment	Segment Type	Maximum d/c Ratio	Avg. Speed (mi/h)	Density (pc/mi/ln)	Density (veh/mi/ln)	Avg. Travel Time (min/veh)	Free-Flow Travel Time (min/veh)	VMT Demand (veh-min)	VMT Volume (veh-min)	VHT (veh-hrs)	VHD (veh-hrs)
Indiantown Road-Donald Ross	Basic	0.63	68.8	22.1	21.7	2.19	2.15	3,746.5	3,746.5	54.44	0.92
I-95 SB-Donald Ross	OffRamp	0.63	66.2	23.0	22.5	0.34	0.32	0,565.2	0,565.2	8.54	0.46
I-95 SB between Ramp-Ramp	Basic	0.54	69.9	18.5	18.2	0.87	0.87	1,290.3	1,290.3	18.46	0.03
Donald Ross-I-95 SB	OnRamp	0.70	63.5	26.2	25.7	0.35	0.32	0,610.1	0,610.1	9.61	0.89
Donald Ross-Military Trail	Basic	0.70	67.4	24.8	24.4	1.35	1.30	2,497.3	2,497.3	37.05	1.38
I-95 SB-Military Trail	OffRamp	0.71	60.0	27.9	27.4	0.18	0.16	0,293.5	0,293.5	4.89	0.38
Military Trail-PGA Blvd	Basic	0.57	64.1	21.1	20.7	0.21	0.20	0,291.5	0,291.5	4.55	0.06
I-95 SB-PGA Ramp	OffRamp	0.57	63.0	21.4	21.0	0.30	0.29	0,417.4	0,417.4	6.63	0.21
I-95 SB between Ramp-Ramp	Basic	0.53	64.9	19.2	18.9	0.40	0.40	0,535.0	0,535.0	8.24	0.01
PGA WB-I-95 SB	OnRamp	0.85	50.5	39.1	38.4	0.17	0.13	0,282.6	0,282.6	5.60	1.25
PGA EB-I-95 SB	OnRamp	0.96	55.6	40.7	39.9	0.07	0.06	0,144.0	0,144.0	2.59	0.37
PGA Blvd-Northlake Blvd	Basic	0.77	62.6	29.0	28.4	1.47	1.42	3,411.9	3,411.9	54.53	2.04
I-95 SB-Northlake Blvd	OffRamp	0.96	59.5	38.1	37.4	0.10	0.09	0,220.7	0,220.7	3.71	0.31
I-95 SB between Ramp-Ramp	Basic	0.79	62.0	30.0	29.5	0.55	0.52	1,034.1	1,034.1	16.68	0.77
Northlake Blvd-I-95 SB	OnRamp	0.97	56.4	40.5	39.8	0.33	0.29	0,703.4	0,703.4	12.48	1.66

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Northlake Blvd-W Blue Heron	Basic	0.78	62.4	29.4	28.9	0.79	0.76	1,844.8	1,844.8	29.58	1.20
Freeway			64.4	25.5	25.0	9.68	9.30	17,888.3	17,888.3	0,277.6	0,011.9

Appendix E -2013 Existing Conditions HCS Facility Analysis Reports

	Density-Based LOS by Segment														
Segment	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Time Step	Basic	Off Ramp	Basic	On Ramp	Basic	Off Ramp	Basic	Off Ramp	Basic	On Ramp	On Ramp	Basic	Off Ramp	Basic	On Ramp
1	C	C	C	C	C	C	C	C	C	E	E	D	E	D	E

	Density-Based LOS by Segment
Segment	16
Time Step	Basic
1	D

	Demand-Based LOS by Segment														
Time Step	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

	Demand-Based LOS by Segment
Time Step	16
1	.

Appendix E -2013 Existing Conditions HCS Facility Analysis Reports

HCS 2010 Freeway Facilities

Project Properties

Analyst	SM	**Freeway Name**	I-95	**Analysis Period**	PM Peak
Analysis Date	8/4/2014 1:29:03 PM	**From**	Northlake Blvd	**Version Date**	10/10/2012
Agency		**To**	Donald Ross Road		
Location	I-95 PGA Boulevard PD&E	**Analysis Direction**	Northbound		
User Notes	Existing Conditions				
File Name	C:\Users\smisztal\AppData\Local\Temp\preview.xml				

Facility-wide Values

Jam Density (pc/h/ln)	190	**Time Period Duration (min)**	15	**Facility Length (mi)**	**10.47600**

Segment Input Data

Time Period 1

Mainline Data

Seg #	From	To	Type	Length	Terrain	Adj. Demand	% Trucks	% RVs	# Lanes	FFS
1	I-95 NB W Blue Heron	Northlake Blvd	Basic Segment	3942	Level	9361	3.52	0.00	5	65
2	I-95 NB	Northlake Blvd	Off Ramp	1500	Level	9361	3.52	0.00	4	65
3	I-95 NB between Ramp	Ramps	Basic Segment	3175	Level	7643	3.52	0.00	4	65
4	Northlake Blvd	I-95 NB	On Ramp	1125	Level	8441	4.25	0.00	4	65
5	Northlake Blvd	PGA Blvd	Basic Segment	5565	Level	8441	4.25	0.00	4	65
6	I-95 NB	PGA Blvd E	Off Ramp	1602	Level	8441	4.25	0.00	4	65
7	I-95 NB between Ramp	Ramp	Basic Segment	1048	Level	6716	4.55	0.00	4	65
8	I-95 NB	PGA Blvd W	Off Ramp	906	Level	6716	4.55	0.00	4	65
9	I-95 NB between Ramp	Ramps	Basic Segment	925	Level	5867	3.77	0.00	4	65
10	PGA Blvd	I-95 NB	On Ramp	1375	Level	6465	3.69	0.00	4	65
11	I-95 NB Between Ramp	Ramp	Basic Segment	1485	Level	6465	3.69	0.00	4	65

RampData

Seg #	Type	Adj. Demand	% Trucks	% RVs	Lanes	Accel/Decel Length	FFS
2	Off Ramp	1718	3.52	0.00	2	450	40
4	On Ramp	798	11.20	0.00	1	900	50
6	Off Ramp	1725	3.07	0.00	2	500	40
8	Off Ramp	849	9.90	0.00	1	700	40
10	On Ramp	598	2.88	0.00	1	1200	50
12	On Ramp	511	3.00	0.00	1	1240	50
14	Off Ramp	1605	3.50	0.00	2	1340	40
16	On Ramp	798	6.14	0.00	1	530	50

Appendix E -2013 Existing Conditions HCS Facility Analysis Reports

12	Military Trail	I-95 NB	On Ramp	1338	Level	6976	3.64	0.00	4	65
13	Military Trail	Donald Ross	Basic Segment	8535	Level	6976	3.64	0.00	4	70
14	I-95 NB	Donald Ross	Off Ramp	1696	Level	6976	3.64	0.00	4	70
15	I-95 NB between Ramp	Ramp	Basic Segment	5184	Level	5371	3.68	0.00	4	70
16	Donald Ross	I-95 NB	On Ramp	503	Level	6169	4.00	0.00	4	70
17	Donald Ross	Indiantown Road	Basic Segment	15411	Level	6169	4.00	0.00	4	70

Weaving Segment Data											
Seg #	Ramp to Ramp Prop.	On-Ramp					Off-Ramp				
		Adj. Demand	% Trucks	% RVs	Lanes	FFS	Adj. Demand	% Trucks	% RVs	Lanes	FFS

Time Period Independent Weaving Segment Data

Seg #	Configuration	Short Length	# Weaving Lanes	Min. Lane Changes Freeway-Ramp	Min. Lane Changes Ramp-Freeway	Min. Lane Changes Ramp-Ramp

Time Period Results

Time Period 1

Seg #	From	To	Type	Adj. Demand	Vol. Served	Capacity (pc/h)	Capacity (veh/h)	d/c Ratio	v/c ratio	Queue Length (ft)	Avg. Speed (mi/h)	Density (pc/mi/ln)	Density (veh/mi/ln)	Avg. Travel Time (min/veh)	Free-Flow Travel Time (min/veh)	Mainline Delay (min/veh)	System Delay (min/veh)	VMT Demand (veh-min)	VMT Volume (veh-min)	VHT (veh-hrs)	VHD (veh-hrs)	LOS
1	I-95 NB W Blue Heron	Northlake Blvd	Basic Segment	9361	9240	11750	11547	0.81	0.80	750	53.2	34.7	34.1	0.84	0.69	0.2	0.2	1747.2	1724.6	32.4	5.9	D
2	I-95 NB	Northlake Blvd	Off Ramp	9361	9240	9400	9237	1.01	1.00	0	59.1	39.7	39.1	0.29	0.26	0.0	0.0	664.8	656.3	11.1	1.0	F
3	I-95 NB between Ramp	Ramps	Basic Segment	7643	7560	9400	9237	0.83	0.82	0	61.1	31.5	30.9	0.59	0.56	0.0	0.0	1149.0	1136.5	18.6	1.1	D
4	Northlake Blvd	I-95 NB	On Ramp	8441	8340	9400	9205	0.92	0.91	0	56.7	37.5	36.7	0.23	0.20	0.0	0.0	449.6	444.2	7.8	1.0	E
5	Northlake Blvd	PGA Blvd	Basic Segment	8441	8340	9400	9205	0.92	0.91	0	57.5	37.1	36.3	1.10	0.97	0.1	0.1	2224.2	2197.5	38.2	4.4	E
6	I-95 NB	PGA Blvd E	Off Ramp	8441	8340	9400	9205	0.92	0.91	0	59.7	35.7	34.9	0.31	0.28	0.0	0.0	640.3	632.6	10.6	0.9	E
7	I-95 NB between Ramp	Ramp	Basic Segment	6716	6660	9400	9191	0.73	0.72	0	63.7	26.7	26.1	0.19	0.18	0.0	0.0	333.3	330.5	5.2	0.1	D
8	I-95 NB	PGA Blvd W	Off Ramp	6716	6660	9400	9191	0.73	0.72	0	60.8	28.0	27.4	0.17	0.16	0.0	0.0	288.1	285.7	4.7	0.3	C
9	I-95 NB between Ramp	Ramps	Basic Segment	5867	5820	9400	9226	0.64	0.63	0	64.1	23.1	22.7	0.16	0.16	0.0	0.0	257.0	254.9	4.0	0.1	C
10	PGA Blvd	I-95 NB	On Ramp	6465	6420	9400	9230	0.70	0.70	0	59.6	27.4	26.9	0.26	0.24	0.0	0.0	420.9	418.0	7.0	0.6	C
	I-95 NB																					

Appendix E -2013 Existing Conditions HCS Facility Analysis Reports

11	Between Ramp	Ramp	Basic Segment	6465	6420	9400	9230	0.70	0.70	0	64.2	25.5	25.0	0.26	0.26	0.0	0.0	454.6	451.4	7.0	0.1	C
12	Military Trail	I-95 NB	On Ramp	6976	6900	9400	9232	0.76	0.75	0	56.9	30.8	30.3	0.27	0.23	0.0	0.0	441.9	437.1	7.7	1.0	D
13	Military Trail	Donald Ross	Basic Segment	6976	6900	9600	9428	0.74	0.73	0	66.4	26.4	26.0	1.46	1.39	0.1	0.1	2819.1	2788.4	42.0	2.2	D
14	I-95 NB	Donald Ross	Off Ramp	6976	6900	9600	9428	0.74	0.73	0	64.3	27.3	26.8	0.30	0.28	0.0	0.0	560.2	554.1	8.6	0.7	C
15	I-95 NB between Ramp	Ramp	Basic Segment	5371	5340	9600	9426	0.57	0.57	0	69.7	19.5	19.2	0.85	0.84	0.0	0.0	1318.3	1310.7	18.8	0.1	C
16	Donald Ross	I-95 NB	On Ramp	6169	6120	9600	9412	0.66	0.65	0	63.1	24.7	24.2	0.09	0.08	0.0	0.0	146.9	145.8	2.3	0.2	C
17	Donald Ross	Indiantown Road	Basic Segment	6169	6120	9600	9412	0.66	0.65	0	68.5	22.8	22.3	2.56	2.50	0.1	0.1	4501.4	4465.7	65.2	1.4	C

Overall Results

Segment	Segment Type	Maximum d/c Ratio	Avg. Speed (mi/h)	Density (pc/mi/ln)	Density (veh/mi/ln)	Avg. Travel Time (min/veh)	Free-Flow Travel Time (min/veh)	VMT Demand (veh-min)	VMT Volume (veh-min)	VHT (veh-hrs)	VHD (veh-hrs)
I-95 NB W Blue Heron-Northlake Blvd	Basic	0.81	53.2	34.7	34.1	0.84	0.69	1,747.2	1,724.6	32.39	5.86
I-95 NB-Northlake Blvd	OffRamp	1.01	59.1	39.7	39.1	0.29	0.26	0,664.8	0,656.3	11.10	1.00
I-95 NB between Ramp-Ramps	Basic	0.83	61.1	31.5	30.9	0.59	0.56	1,149.0	1,136.5	18.60	1.11
Northlake Blvd-I-95 NB	OnRamp	0.92	56.7	37.5	36.7	0.23	0.20	0,449.6	0,444.2	7.84	1.01
Northlake Blvd-PGA Blvd	Basic	0.92	57.5	37.1	36.3	1.10	0.97	2,224.2	2,197.5	38.25	4.44
I-95 NB-PGA Blvd E	OffRamp	0.92	59.7	35.7	34.9	0.31	0.28	0,640.3	0,632.6	10.60	0.87
I-95 NB between Ramp-Ramp	Basic	0.73	63.7	26.7	26.1	0.19	0.18	0,333.3	0,330.5	5.19	0.10
I-95 NB-PGA Blvd W	OffRamp	0.73	60.8	28.0	27.4	0.17	0.16	0,288.1	0,285.7	4.70	0.30
I-95 NB between Ramp-Ramps	Basic	0.64	64.1	23.1	22.7	0.16	0.16	0,257.0	0,254.9	3.98	0.06
PGA Blvd-I-95 NB	OnRamp	0.70	59.6	27.4	26.9	0.26	0.24	0,420.9	0,418.0	7.02	0.59
I-95 NB Between Ramp-Ramp	Basic	0.70	64.2	25.5	25.0	0.26	0.26	0,454.6	0,451.4	7.03	0.08
Military											

Appendix E -2013 Existing Conditions HCS Facility Analysis Reports

Trail-I-95 NB	OnRamp	0.76	56.9	30.8	30.3	0.27	0.23	0,441.9	0,437.1	7.68	0.95
Military Trail-Donald Ross	Basic	0.74	66.4	26.4	26.0	1.46	1.39	2,819.1	2,788.4	41.99	2.15
I-95 NB-Donald Ross	OffRamp	0.74	64.3	27.3	26.8	0.30	0.28	0,560.2	0,554.1	8.61	0.70
I-95 NB between Ramp-Ramp	Basic	0.57	69.7	19.5	19.2	0.85	0.84	1,318.3	1,310.7	18.80	0.08
Donald Ross-I-95 NB	OnRamp	0.66	63.1	24.7	24.2	0.09	0.08	0,146.9	0,145.8	2.31	0.23
Donald Ross-Indiantown Road	Basic	0.66	68.5	22.8	22.3	2.56	2.50	4,501.4	4,465.7	65.20	1.40
Freeway			62.6	27.8	27.3	9.92	9.28	18,416.9	18,234.0	0,291.3	0,020.9

Appendix E -2013 Existing Conditions HCS Facility Analysis Reports

	Density-Based LOS by Segment														
Segment	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Time Step	Basic	Off Ramp	Basic	On Ramp	Basic	Off Ramp	Basic	Off Ramp	Basic	On Ramp	Basic	On Ramp	Basic	Off Ramp	Basic
1	D	E	D	E	E	E	D	C	C	C	C	D	D	C	C

	Density-Based LOS by Segment	
Segment	16	17
Time Step	On Ramp	Basic
1	C	C

	Demand-Based LOS by Segment														
Time Step	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	.	F	.	.	.	.	.	.	.	.	.	.	.	.	.

	Demand-Based LOS by Segment	
Time Step	16	17
1	.	.

HCS 2010 Freeway Facilities

Project Properties

Analyst	SM	**Freeway Name**	I-95	**Analysis Period**	PM Peak
Analysis Date	8/5/2014 10:50:20 AM	**From**	Donald Ross Road	**Version Date**	10/10/2012
Agency	FDOT	**To**	Northlake Blvd		
Location	I-95 PGA Boulevard PD&E	**Analysis Direction**	Southbound		
User Notes	Existing Conditions				
File Name	C:\Users\smisztal\AppData\Local\Temp\preview.xml				

Facility-wide Values

Jam Density (pc/h/ln)	190	**Time Period Duration (min)**	15	**Facility Length (mi)**	**10.48800**

Segment Input Data

Time Period 1

Mainline Data

Seg #	From	To	Type	Length	Terrain	Adj. Demand	% Trucks	% RVs	# Lanes	FFS
1	Indiantown Road	Donald Ross	Basic Segment	13256	Level	3056	3.70	0.00	4	70
2	I-95 SB	Donald Ross	Off Ramp	2000	Level	3056	3.70	0.00	4	70
3	I-95 SB between Ramp	Ramp	Basic Segment	5359	Level	2626	3.41	0.00	4	70
4	Donald Ross	I-95 SB	On Ramp	1960	Level	3652	3.75	0.00	4	70
5	Donald Ross	Military Trail	Basic Segment	8023	Level	3652	3.75	0.00	4	70
6	I-95 SB	Military Trail	Off Ramp	943	Level	3652	3.75	0.00	4	65
7	Military Trail	PGA Blvd	Basic Segment	1162	Level	3227	3.93	0.00	4	65
8	I-95 SB	PGA Ramp	Off Ramp	1664	Level	3227	3.93	0.00	4	65
9	I-95 SB between Ramp	Ramp	Basic Segment	2308	Level	2931	4.03	0.00	4	65
10	PGA WB	I-95 SB	On Ramp	765	Level	5396	3.96	0.00	4	65
11	PGA EB	I-95 SB	On Ramp	342	Level	6245	3.87	0.00	4	65
12	PGA Blvd	Northlake Blvd	Basic Segment	8101	Level	6245	3.87	0.00	5	65
		Northlake								

RampData

Seg #	Type	Adj. Demand	% Trucks	% RVs	Lanes	Accel/Decel Length	FFS
2	Off Ramp	430	5.50	0.00	2	450	40
4	On Ramp	1026	4.65	0.00	1	1500	50
6	Off Ramp	425	2.40	0.00	1	220	40
8	Off Ramp	296	3.00	0.00	2	625	40
10	On Ramp	2465	3.89	0.00	2	215	50
11	On Ramp	849	3.24	0.00	1	350	50
13	Off Ramp	1174	5.49	0.00	2	530	40
15	On Ramp	1419	3.72	0.00	2	1275	50

Weaving Segment Data

	Ramp	On-Ramp	Off-Ramp

Appendix E -2013 Existing Conditions HCS Facility Analysis Reports

13	I-95 SB	Blvd	Off Ramp	524	Level	6245	3.87	0.00	4	65
14	I-95 SB between Ramp	Ramp	Basic Segment	2989	Level	5071	3.49	0.00	4	65
15	Northlake Blvd	I-95 SB	On Ramp	1651	Level	6490	3.54	0.00	4	65
16	Northlake Blvd	W Blue Heron	Basic Segment	4330	Level	6490	3.54	0.00	5	65

Seg #	to Ramp Prop.	Adj. Demand	% Trucks	% RVs	Lanes	FFS	Adj. Demand	% Trucks	% RVs	Lanes	FFS

Time Period Independent Weaving Segment Data

Seg #	Configuration	Short Length	# Weaving Lanes	Min. Lane Changes Freeway-Ramp	Min. Lane Changes Ramp-Freeway	Min. Lane Changes Ramp-Ramp

Time Period Results

Time Period 1

Seg #	From	To	Type	Adj. Demand	Vol. Served	Capacity (pc/h)	Capacity (veh/h)	d/c Ratio	v/c ratio	Queue Length (ft)	Avg. Speed (mi/h)	Density (pc/mi/ln)	Density (veh/mi/ln)	Avg. Travel Time (min/veh)	Free-Flow Travel Time (min/veh)	Mainline Delay (min/veh)	System Delay (min/veh)	VMT Demand (veh-min)	VMT Volume (veh-min)	VHT (veh-hrs)	VHD (veh-hrs)	LOS
1	Indiantown Road	Donald Ross	Basic Segment	3056	3056	9600	9426	0.32	0.32	0	70.0	11.1	10.9	2.15	2.15	0.0	0.0	1918.1	1918.1	27.4	0.0	B
2	I-95 SB	Donald Ross	Off Ramp	3056	3056	9600	9426	0.32	0.32	0	68.4	11.4	11.2	0.33	0.32	0.0	0.0	289.4	289.4	4.2	0.1	B
3	I-95 SB between Ramp	Ramp	Basic Segment	2626	2626	9600	9439	0.28	0.28	0	70.0	9.5	9.4	0.87	0.87	0.0	0.0	666.3	666.3	9.5	0.0	A
4	Donald Ross	I-95 SB	On Ramp	3652	3652	9600	9423	0.39	0.39	0	66.2	14.0	13.7	0.34	0.32	0.0	0.0	338.9	338.9	5.1	0.3	B
5	Donald Ross	Military Trail	Basic Segment	3652	3652	9600	9423	0.39	0.39	0	70.0	13.3	13.0	1.30	1.30	0.0	0.0	1387.3	1387.3	19.8	0.0	B
6	I-95 SB	Military Trail	Off Ramp	3652	3652	9400	9227	0.40	0.40	0	62.6	14.9	14.6	0.17	0.16	0.0	0.0	163.1	163.1	2.6	0.1	B
7	Military Trail	PGA Blvd	Basic Segment	3227	3227	9400	9219	0.35	0.35	0	64.6	12.7	12.5	0.20	0.20	0.0	0.0	177.5	177.5	2.8	0.0	B
8	I-95 SB	PGA Ramp	Off Ramp	3227	3227	9400	9219	0.35	0.35	0	64.3	12.8	12.5	0.29	0.29	0.0	0.0	254.2	254.2	4.0	0.0	B
9	I-95 SB between Ramp	Ramp	Basic Segment	2931	2931	9400	9214	0.32	0.32	0	65.0	11.5	11.3	0.40	0.40	0.0	0.0	320.3	320.3	4.9	0.0	B
10	PGA WB	I-95 SB	On Ramp	5396	5396	9400	9217	0.59	0.59	0	57.2	23.9	23.4	0.15	0.13	0.0	0.0	195.5	195.5	3.4	0.4	C
11	PGA EB	I-95 SB	On Ramp	6245	6245	9400	9222	0.68	0.68	0	58.7	27.1	26.5	0.07	0.06	0.0	0.0	101.1	101.1	1.7	0.2	C
12	PGA Blvd	Northlake Blvd	Basic Segment	6245	6245	11750	11527	0.54	0.54	0	65.0	19.6	19.2	1.42	1.42	0.0	0.0	2395.4	2395.4	36.9	0.0	C
13	I-95 SB	Northlake Blvd	Off Ramp	6245	6245	9400	9222	0.68	0.68	0	61.6	25.8	25.4	0.10	0.09	0.0	0.0	154.9	154.9	2.5	0.1	C
	I-95 SB		Basic																			

Appendix E -2013 Existing Conditions HCS Facility Analysis Reports

14	between Ramp	Ramp	Segment	5071	5071	9400	9239	0.55	0.55	0	64.8	19.9	19.6	0.52	0.52	0.0	0.0	717.7	717.7	11.1	0.0	C
15	Northlake Blvd	I-95 SB	On Ramp	6490	6490	9400	9236	0.70	0.70	0	59.2	27.8	27.3	0.32	0.29	0.0	0.0	507.3	507.3	8.6	0.8	C
16	Northlake Blvd	W Blue Heron	Basic Segment	6490	6490	11750	11546	0.56	0.56	0	65.0	20.3	20.0	0.76	0.76	0.0	0.0	1330.6	1330.6	20.5	0.0	C

Overall Results

Segment	Segment Type	Maximum d/c Ratio	Avg. Speed (mi/h)	Density (pc/mi/ln)	Density (veh/mi/ln)	Avg. Travel Time (min/veh)	Free-Flow Travel Time (min/veh)	VMT Demand (veh-min)	VMT Volume (veh-min)	VHT (veh-hrs)	VHD (veh-hrs)
Indiantown Road-Donald Ross	Basic	0.32	70.0	11.1	10.9	2.15	2.15	1,918.1	1,918.1	27.40	0.00
I-95 SB-Donald Ross	OffRamp	0.32	68.4	11.4	11.2	0.33	0.32	0,289.4	0,289.4	4.23	0.10
I-95 SB between Ramp-Ramp	Basic	0.28	70.0	9.5	9.4	0.87	0.87	0,666.3	0,666.3	9.52	0.00
Donald Ross-I-95 SB	OnRamp	0.39	66.2	14.0	13.7	0.34	0.32	0,338.9	0,338.9	5.12	0.28
Donald Ross-Military Trail	Basic	0.39	70.0	13.3	13.0	1.30	1.30	1,387.3	1,387.3	19.82	0.00
I-95 SB-Military Trail	OffRamp	0.40	62.6	14.9	14.6	0.17	0.16	0,163.1	0,163.1	2.61	0.10
Military Trail-PGA Blvd	Basic	0.35	64.6	12.7	12.5	0.20	0.20	0,177.5	0,177.5	2.75	0.02
I-95 SB-PGA Ramp	OffRamp	0.35	64.3	12.8	12.5	0.29	0.29	0,254.2	0,254.2	3.95	0.04
I-95 SB between Ramp-Ramp	Basic	0.32	65.0	11.5	11.3	0.40	0.40	0,320.3	0,320.3	4.93	0.00
PGA WB-I-95 SB	OnRamp	0.59	57.2	23.9	23.4	0.15	0.13	0,195.5	0,195.5	3.42	0.41
PGA EB-I-95 SB	OnRamp	0.68	58.7	27.1	26.5	0.07	0.06	0,101.1	0,101.1	1.72	0.17
PGA Blvd-Northlake Blvd	Basic	0.54	65.0	19.6	19.2	1.42	1.42	2,395.4	2,395.4	36.86	0.00
I-95 SB-Northlake Blvd	OffRamp	0.68	61.6	25.8	25.4	0.10	0.09	0,154.9	0,154.9	2.52	0.13
I-95 SB between Ramp-Ramp	Basic	0.55	64.8	19.9	19.6	0.52	0.52	0,717.7	0,717.7	11.08	0.03
Northlake Blvd-I-95 SB	OnRamp	0.70	59.2	27.8	27.3	0.32	0.29	0,507.3	0,507.3	8.56	0.76

Northlake Blvd-W Blue Heron	Basic	0.56	65.0	20.3	20.0	0.76	0.76	1,330.6	1,330.6	20.48	0.01
Freeway			66.2	15.2	14.9	9.40	9.30	10,917.7	10,917.7	0,165.0	0,002.1

Appendix E -2013 Existing Conditions HCS Facility Analysis Reports

	Density-Based LOS by Segment														
Segment	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Time Step	Basic	Off Ramp	Basic	On Ramp	Basic	Off Ramp	Basic	Off Ramp	Basic	On Ramp	On Ramp	Basic	Off Ramp	Basic	On Ramp
1	B	B	A	B	B	B	B	B	B	C	C	C	C	C	C

	Density-Based LOS by Segment
Segment	16
Time Step	Basic
1	C

	Demand-Based LOS by Segment														
Time Step	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

	Demand-Based LOS by Segment
Time Step	16
1	.

APPENDIX F

2013 CRASH ANALYSIS

NORTH MILITARY TRAIL

CORRIDOR

FROM: PGA BOULEVARD

TO: DONALD ROSS RD

CRASH STATISTICS

SR 809/Military Trail Segment/Spot with No Expected Values Available		Number of Crashes by Year					5 Year Total Crashes	Mean Crashes Per Year	%
		2009	2010	2011	2012	2013			
CRASH TYPE	Rear End	9	8	1	4	19	41	8.20	63.1%
	Head On	1	0	0	0	0	1	0.20	1.5%
	Angle	3	0	1	3	3	10	2.00	15.4%
	Left Turn	1	1	1	0	0	3	0.60	4.6%
	Right Turn	0	0	0	0	0	0	0.00	0.0%
	Sideswipe	0	0	0	0	0	0	0.00	0.0%
	Backed Into	1	0	0	0	0	1	0.20	1.5%
	Coll. w/ Parked Car	0	0	0	0	0	0	0.00	0.0%
	Coll. w/ Pedestrian	0	0	1	0	1	2	0.40	3.1%
	Coll. w/ Bicycle	0	0	0	0	0	0	0.00	0.0%
	Fixed Object	1	2	0	1	2	6	1.20	9.2%
	Ran Off Road	0	0	0	0	0	0	0.00	0.0%
	Overturned	0	0	0	0	0	0	0.00	0.0%
	Other	0	0	0	1	0	1	0.20	1.5%
	Total Crashes	**16**	**11**	**4**	**9**	**25**	**65**	**13.00**	**100.0%**
SEVERITY	PDO Crashes	6	3	1	3	5	18	3.60	27.7%
	Fatal Crashes	0	0	0	0	0	0	0.00	0.0%
	Injury Crashes	10	8	3	6	20	47	9.40	72.3%
LIGHTING CONDITIONS	Daylight	8	7	0	7	14	36	7.20	55.4%
	Dusk	1	0	0	0	0	1	0.20	1.5%
	Dawn	0	0	0	0	1	1	0.20	1.5%
	Dark	7	4	4	2	10	27	5.40	41.5%
	Unknown	0	0	0	0	0	0	0.00	0.0%
SURFACE CONDITIONS	Dry	15	9	4	8	20	56	11.20	86.2%
	Wet	1	2	0	1	5	9	1.80	13.8%
	Others	0	0	0	0	0	0	0.00	0.0%
MONTH OF YEAR	January	1	1	1	0	4	7	1.40	10.8%
	February	3	1	0	0	1	5	1.00	7.7%
	March	1	1	0	1	2	5	1.00	7.7%
	April	1	0	0	1	2	4	0.80	6.2%
	May	0	2	1	3	4	10	2.00	15.4%
	June	0	1	0	0	3	4	0.80	6.2%
	July	1	0	0	2	3	6	1.20	9.2%
	August	1	0	0	0	1	2	0.40	3.1%
	September	2	2	0	0	0	4	0.80	6.2%
	October	3	3	0	2	2	10	2.00	15.4%
	November	1	0	2	0	2	5	1.00	7.7%
	December	2	0	0	0	1	3	0.60	4.6%
DAY OF WEEK	Sunday	2	1	0	1	3	7	1.40	10.8%
	Monday	2	1	0	1	6	10	2.00	15.4%
	Tuesday	0	2	0	3	1	6	1.20	9.2%
	Wednesday	2	3	2	1	4	12	2.40	18.5%
	Thursday	4	1	0	1	1	7	1.40	10.8%
	Friday	4	1	2	1	7	15	3.00	23.1%
	Saturday	2	2	0	1	3	8	1.60	12.3%
HOUR OF DAY	00:00-06:00	4	3	0	0	4	11	2.20	16.9%
	06:00-09:00	1	1	0	0	1	3	0.60	4.6%
	09:00-11:00	3	0	0	0	1	4	0.80	6.2%
	11:00-13:00	1	0	0	0	5	6	1.20	9.2%
	13:00-15:00	0	3	0	1	1	5	1.00	7.7%
	15:00-18:00	3	2	0	5	6	16	3.20	24.6%
	18:00-24:00	4	2	4	3	7	20	4.00	30.8%

Notes:

1) Collision with Bicycle Crashes include Collision with Bicycle/Collision with Bicycle in Bike Lane (Codes 11 and 12).

2) Fixed Object Crashes include collisions with sign/sign post, utility/light pole, guardrail, fence, concrete barrier wall, bridge, pier, abutment, rail, tree, shrubbery, construction barricade/sign, traffic gate, crash attenuators, other fixed objects (incl. above road).

3) Ran-off-Road Crashes include Ran in Ditch/Culvert and Ran off road into water (Codes 29 and 30).

4) Other crashes include crashes not categorized as the crash types shown in the table.

5) Dark Crashes include both scenarios - with and without street lighting.

Appendix F - 2013 Crash Analysis

FLORIDA DEPARTMENT OF TRANSPORTATION
CRASH SUMMARY

SECTION: **93150000** STATE ROUTE: **809**
ROADWAY LIMITS: **PGA Boulevard to Donald Ross Road** M.P. **11.068** TO **14.147** ENGINEER: **FDOT D4**
STUDY PERIOD: FROM **1/ 09** TO **12/ 09** COUNTY: **Palm Beach**

No.	MILE POST	DATE	DAY	TIME	CRASH TYPE	FATAL	INJURY	PROP DAM	DAY / NIGHT	WET / DRY	CONTRIBUTING CAUSE
1	5.765	09/10/09	Thu	0900	Rear-End	0	1	0	Day	Dry	Careless Driving
2	5.769	03/13/09	Fri	1700	Rear-End	0	0	1	Day	Dry	Careless Driving
3	5.778	02/23/09	Mon	2100	Angle	0	3	0	Night	Dry	Failed To Yield Right-Of-Way
4	5.778	02/23/09	Mon	1600	Rear-End	0	1	0	Day	Dry	Alchol-Under Influence
5	5.778	02/26/09	Thu	1800	Rear-End	0	1	0	Night	Dry	Alchol-Under Influence
6	5.778	04/30/09	Thu	1700	Rear-End	0	1	0	Day	Dry	Careless Driving
7	5.778	07/04/09	Sat	0100	Angle	0	0	1	Night	Dry	Disregarded Traffic Signal
8	5.778	12/17/09	Thu	0200	Angle	0	0	1	Night	Dry	Disregarded Traffic Signal
9	5.778	12/27/09	Sun	2100	Left-Turn	0	2	0	Night	Dry	Disregarded Traffic Signal
10	5.780	10/23/09	Fri	0900	Rear-End	0	2	0	Day	Dry	Careless Driving
11	5.784	10/21/09	Wed	1200	Rear-End	0	2	0	Day	Dry	Careless Driving
12	5.787	01/30/09	Fri	2100	Rear-End	0	0	1	Night	Dry	Improper Backing
13	5.825	11/06/09	Fri	0200	Hit Sign/Sign Post	0	0	1	Night	Dry	Careless Driving
14	11.070	08/26/09	Wed	0600	Backed Into	0	0	1	Day	Dry	Improper Backing
15	11.070	09/26/09	Sat	0100	Head-On	0	2	0	Night	Wet	Disregarded Traffic Signal
16	11.070	10/11/09	Sun	0900	Rear-End	0	1	0	Day	Dry	Disregarded Traffic Signal

Total No.		Fatal	Injury	PDO	Angle	Left Turn	Right Turn	Rear End	Side swipe	Ped/ Bike	
16		**0**	**10**	**6**	**3**	**1**	**0**	**9**	**0**	**0**	
		0.00%	*62.50%*	*37.50%*	*18.75%*	*6.25%*	*0.00%*	*56.25%*	*0.00%*	*0.00%*	
One Vehicle		Day	Night	Wet	Dry	Excess Speed	FTYRW	DUI			
1		**8**	**8**	**1**	**15**	**0**	**1**	**5**			
6.25%		*50.00%*	*50.00%*	*6.25%*	*93.75%*	*0.00%*	*6.25%*	*31.25%*			

TOTAL ENTERING VEHICLES/ADT: **36,438**

SEGMENT CRASH RATE: **0.391**

Appendix F - 2013 Crash Analysis

FLORIDA DEPARTMENT OF TRANSPORTATION
CRASH SUMMARY

SECTION: **93150000** STATE ROUTE: **809**
ROADWAY LIMITS: **PGA Boulevard to Donald Ross Road** M.P. **11.068** TO **14.147** ENGINEER: **FDOT D4**
STUDY PERIOD: FROM **1/ 10** TO **12/ 10** COUNTY: **Palm Beach**

No.	MILE POST	DATE	DAY	TIME	CRASH TYPE	FATAL	INJURY	PROP DAM	DAY / NIGHT	WET / DRY	CONTRIBUTING CAUSE
1	5.778	03/02/10	Tue	0100	Rear-End	0	2	0	Night	Dry	Alchol-Under Influence
2	5.778	06/04/10	Fri	1800	Left-Turn	0	1	0	Day	Wet	Failed To Yield Right-Of-Way
3	5.778	10/04/10	Mon	0700	Rear-End	0	1	0	Day	Dry	Unknown/Not Coded
4	5.783	05/29/10	Sat	0200	Hit Sign/Sign Post	0	0	1	Night	Dry	Careless Driving
5	5.786	02/21/10	Sun	0200	Hit Sign/Sign Post	0	0	1	Night	Dry	Alchol-Under Influence
6	5.787	10/13/10	Wed	1300	Rear-End	0	2	0	Day	Dry	Careless Driving
7	5.825	01/27/10	Wed	1400	Rear-End	0	1	0	Day	Dry	Followed Too Closely
8	11.069	09/21/10	Tue	2000	Rear-End	0	1	0	Night	Dry	Careless Driving
9	11.070	05/19/10	Wed	1600	Rear-End	0	1	0	Day	Wet	Careless Driving
10	11.070	09/23/10	Thu	1500	Rear-End	0	1	0	Day	Dry	Careless Driving
11	11.070	10/30/10	Sat	1400	Rear-End	0	0	1	Day	Dry	Careless Driving

Total No.		Fatal	Injury	PDO	Angle	Left Turn	Right Turn	Rear End	Side swipe	Ped/ Bike	
11		**0**	**8**	**3**	**0**	**1**	**0**	**8**	**0**	**0**	
		0.00%	*72.73%*	*27.27%*	*0.00%*	*9.09%*	*0.00%*	*72.73%*	*0.00%*	*0.00%*	
One Vehicle		Day	Night	Wet	Dry	Excess Speed	FTYRW	DUI			
2		**7**	**4**	**2**	**9**	**0**	**1**	**3**			
18.18%		*63.64%*	*36.36%*	*18.18%*	*81.82%*	*0.00%*	*9.09%*	*27.27%*			

TOTAL ENTERING VEHICLES/ADT: **32,500** SEGMENT CRASH RATE: **0.301**

Appendix F - 2013 Crash Analysis

FLORIDA DEPARTMENT OF TRANSPORTATION
CRASH SUMMARY

SECTION: **93150000** STATE ROUTE: **809**

ROADWAY LIMITS: **PGA Boulevard to Donald Ross Road** M.P. **11.068** TO **14.147** ENGINEER: **FDOT D4**

STUDY PERIOD: FROM **1/ 11** TO **12/ 11** COUNTY: **Palm Beach**

No.	MILE POST	DATE	DAY	TIME	CRASH TYPE	FATAL	INJURY	PROP DAM	DAY / NIGHT	WET / DRY	CONTRIBUTING CAUSE
1	5.740	11/02/11	Wed	2300	Rear-End	0	1	0	Night	Dry	Careless Driving
2	5.769	11/25/11	Fri	2200	Coll. W/ Pedestrian	0	1	0	Night	Dry	No Improper Driving/Act
3	5.778	01/26/11	Wed	1800	Left-Turn	0	2	0	Night	Dry	Unknown/Not Coded
4	5.778	05/13/11	Fri	2200	Angle	0	0	1	Night	Dry	Disregarded Traffic Signal

Total No.		Fatal	Injury	PDO	Angle	Left Turn	Right Turn	Rear End	Side swipe	Ped/ Bike	
4		**0**	**3**	**1**	**1**	**1**	**0**	**1**	**0**	**1**	
		0.00%	*75.00%*	*25.00%*	*25.00%*	*25.00%*	*0.00%*	*25.00%*	*0.00%*	*25.00%*	
One Vehicle		Day	Night	Wet	Dry	Excess Speed	FTYRW	DUI			
1		**0**	**4**	**0**	**4**	**0**	**0**	**1**			
25.00%		*0.00%*	*100.00%*	*0.00%*	*100.00%*	*0.00%*	*0.00%*	*25.00%*			

TOTAL ENTERING VEHICLES/ADT: **42,000** SEGMENT CRASH RATE: **0.085**

Appendix F - 2013 Crash Analysis

FLORIDA DEPARTMENT OF TRANSPORTATION
CRASH SUMMARY

SECTION: **93150000** STATE ROUTE: **809**
ROADWAY LIMITS: **PGA Boulevard to Donald Ross Road** M.P. **11.068** TO **14.147** ENGINEER: **FDOT D4**
STUDY PERIOD: FROM **1/ 12** TO **12/ 12** COUNTY: **Palm Beach**

No.	MILE POST	DATE	DAY	TIME	CRASH TYPE	FATAL	INJURY	PROP DAM	DAY / NIGHT	WET / DRY	CONTRIBUTING CAUSE
1	5.773	05/10/12	Thu	2100	Rear-End	0	0	1	Night	Wet	Unknown/Not Coded
2	5.778	04/21/12	Sat	1700	Angle	0	3	0	Day	Dry	Disregarded Traffic Signal
3	5.778	10/16/12	Tue	1400	Angle	0	1	0	Day	Dry	Disregarded Traffic Signal
4	11.068	03/02/12	Fri	1900	All Other	0	0	1	Day	Dry	Unknown/Not Coded
5	11.070	05/06/12	Sun	2200	Hit Other Fixed Object	0	1	0	Night	Dry	Unknown/Not Coded
6	11.070	05/09/12	Wed	1700	Angle	0	1	0	Day	Dry	Disregarded Traffic Signal
7	11.070	07/03/12	Tue	1600	Rear-End	0	2	0	Day	Dry	Careless Driving
8	11.070	07/23/12	Mon	1600	Rear-End	0	1	0	Day	Dry	Careless Driving
9	11.070	10/09/12	Tue	1600	Rear-End	0	0	1	Day	Dry	Careless Driving

Total No.		Fatal	Injury	PDO	Angle	Left Turn	Right Turn	Rear End	Side swipe	Ped/ Bike	
9		**0**	**6**	**3**	**3**	**0**	**0**	**4**	**0**	**0**	
		0.00%	*66.67%*	*33.33%*	*33.33%*	*0.00%*	*0.00%*	*44.44%*	*0.00%*	*0.00%*	
One Vehicle		Day	Night	Wet	Dry	Excess Speed	FTYRW	DUI			
1		**7**	**2**	**1**	**8**	**0**	**0**	**0**			
11.11%		*77.78%*	*22.22%*	*11.11%*	*88.89%*	*0.00%*	*0.00%*	*0.00%*			

TOTAL ENTERING VEHICLES/ADT: **42,000**

SEGMENT CRASH RATE: **0.085**

Appendix F - 2013 Crash Analysis

FLORIDA DEPARTMENT OF TRANSPORTATION
CRASH SUMMARY

SECTION: **93150000** STATE ROUTE: **809**
ROADWAY LIMITS: **PGA Boulevard to Donald Ross Road** M.P. **11.068** TO **14.147** ENGINEER: **FDOT D4**
STUDY PERIOD: FROM **1/ 13** TO **12/ 13** COUNTY: **Palm Beach**

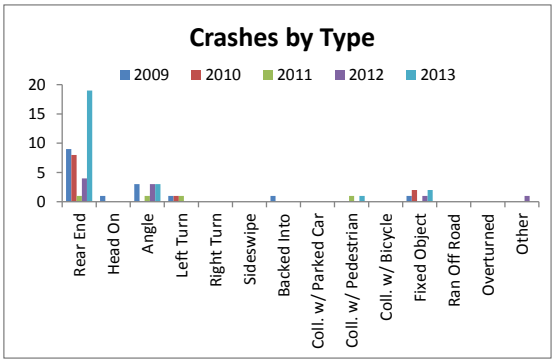
No.	MILE POST	DATE	DAY	TIME	CRASH TYPE	FATAL	INJURY	PROP DAM	DAY / NIGHT	WET / DRY	CONTRIBUTING CAUSE
1	5.740	06/28/13	Fri	1600	Coll. W/ Pedestrian	0	1	0	Day	Dry	No Improper Driving/Act
2	5.750	01/12/13	Sat	1200	Rear-End	0	1	0	Day	Dry	Careless Driving
3	5.755	11/11/13	Mon	1800	Rear-End	0	2	0	Night	Dry	Careless Driving
4	5.759	01/04/13	Fri	1700	Rear-End	0	1	0	Day	Dry	Followed Too Closely
5	5.772	01/07/13	Mon	1900	Hit Other Fixed Object	0	1	0	Night	Wet	Careless Driving
6	5.774	04/03/13	Wed	1600	Rear-End	0	1	0	Day	Dry	Followed Too Closely
7	5.776	05/24/13	Fri	1700	Rear-End	0	1	0	Day	Dry	Careless Driving
8	5.778	02/27/13	Wed	0900	Rear-End	0	1	0	Day	Dry	Careless Driving
9	5.778	03/08/13	Fri	1100	Rear-End	0	0	1	Night	Dry	No Improper Driving/Act
10	5.778	04/08/13	Mon	1400	Angle	0	1	0	Day	Dry	Unknown/Not Coded
11	5.778	05/03/13	Fri	0500	Angle	0	2	0	Night	Wet	Disregarded Traffic Signal
12	5.778	06/15/13	Sat	1800	Rear-End	0	0	1	Day	Dry	Careless Driving
13	5.778	08/12/13	Mon	1100	Rear-End	0	0	1	Day	Dry	Careless Driving
14	5.781	10/31/13	Thu	1900	Rear-End	0	2	0	Night	Wet	Careless Driving
15	5.782	05/11/13	Sat	0000	Rear-End	0	1	0	Night	Dry	Unknown/Not Coded
16	5.783	01/23/13	Wed	1700	Rear-End	0	1	0	Day	Dry	Followed Too Closely
17	5.783	05/12/13	Sun	0000	Hit Other Fixed Object	0	1	0	Night	Wet	Careless Driving
18	5.797	06/26/13	Wed	1200	Rear-End	0	1	0	Day	Dry	Careless Driving
19	11.068	07/08/13	Mon	0800	Rear-End	0	1	0	Day	Dry	No Improper Driving/Act
20	11.070	03/03/13	Sun	1200	Rear-End	0	1	0	Day	Dry	Careless Driving
21	11.070	07/05/13	Fri	1700	Rear-End	0	0	1	Day	Dry	Careless Driving
22	11.070	07/09/13	Tue	0000	Rear-End	0	0	1	Night	Dry	Careless Driving
23	11.070	10/21/13	Mon	2200	Rear-End	0	1	0	Night	Dry	Careless Driving
24	11.070	11/08/13	Fri	1800	Rear-End	0	1	0	Night	Wet	Followed Too Closely
25	11.070	12/22/13	Sun	2200	Angle	0	1	0	Night	Dry	Failed To Yield Right-Of-Way

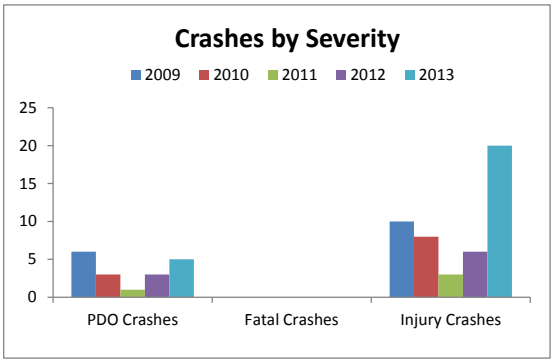
Total No.		Fatal	Injury	PDO	Angle	Left Turn	Right Turn	Rear End	Side swipe	Ped/ Bike	
25		**0**	**20**	**5**	**3**	**0**	**0**	**19**	**0**	**1**	
		0.00%	*80.00%*	*20.00%*	*12.00%*	*0.00%*	*0.00%*	*76.00%*	*0.00%*	*4.00%*	
One Vehicle		Day	Night	Wet	Dry	Excess Speed	FTYRW	DUI			
3		**14**	**11**	**5**	**20**	**0**	**1**	**0**			
12.00%		*56.00%*	*44.00%*	*20.00%*	*80.00%*	*0.00%*	*4.00%*	*0.00%*			

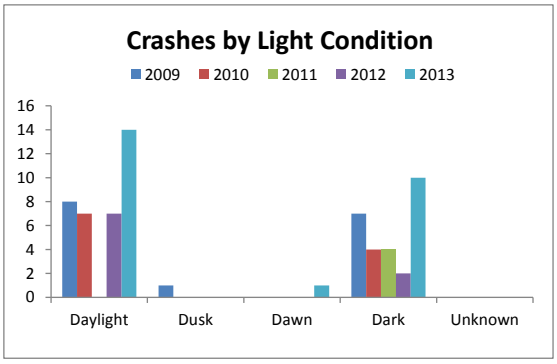
TOTAL ENTERING VEHICLES/ADT: **42,000** SEGMENT CRASH RATE: **0.085**

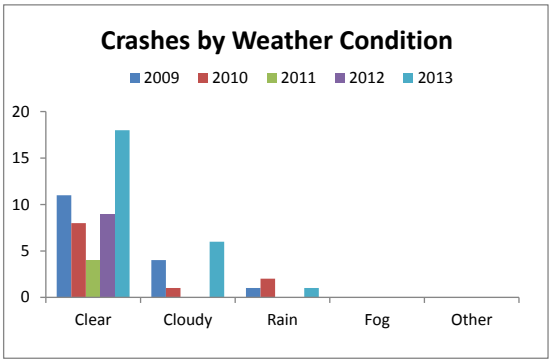
CRASH HISTOGRAMS

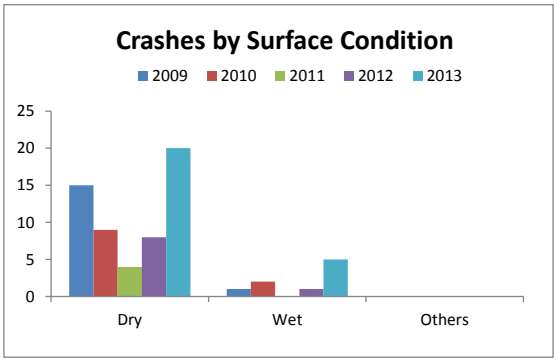
SR 809/Military Trail

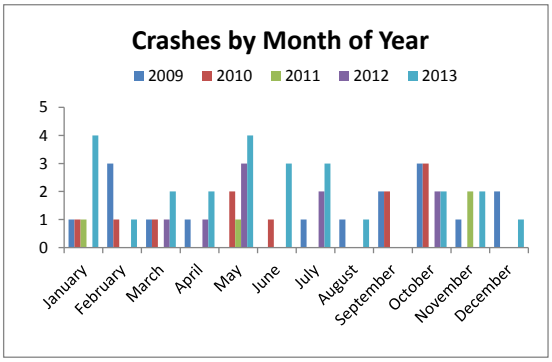


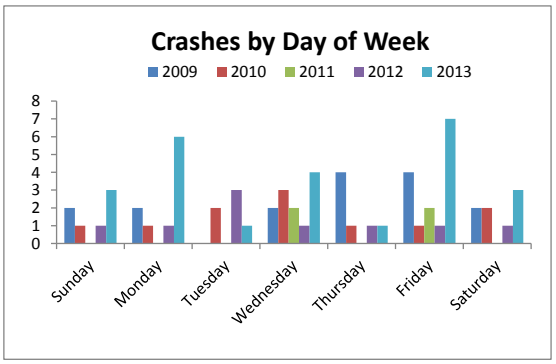


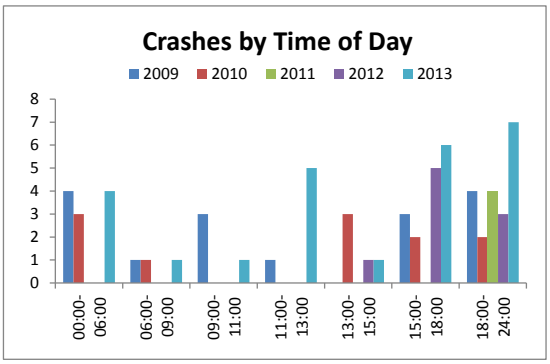












PGA BOULEVARD

CORRIDOR

FROM: FLORIDA TURNPIKE

TO: LAKE VICTORIA GARDENS

CRASH STATISTICS

SR 786/PGABlvd Segment/Spot with No Expected Values Available		Number of Crashes Year 2009	2010	2011	2012	2013	5 Year Total Crashes	Mean Crashes Per Year	%
CRASH TYPE	Rear End	60	78	38	66	80	322	64.40	67.8%
	Head On	1	2	3	1	0	7	1.40	1.5%
	Angle	13	5	3	18	19	58	11.60	12.2%
	Left Turn	6	2	1	0	1	10	2.00	2.1%
	Right Turn	1	0	0	0	1	2	0.40	0.4%
	Sideswipe	2	2	0	0	0	4	0.80	0.8%
	Backed Into	1	2	0	0	0	3	0.60	0.6%
	Coll. w/ Parked Car	0	0	0	1	1	2	0.40	0.4%
	Coll. w/ Pedestrian	0	0	1	1	1	3	0.60	0.6%
	Coll. w/ Bicycle	1	0	1	1	1	4	0.80	0.8%
	Fixed Object	7	4	2	6	10	29	5.80	6.1%
	Ran Off Road	0	0	0	0	0	0	0.00	0.0%
	Overturned	0	0	0	0	1	1	0.20	0.2%
	Other	3	2	11	9	5	30	6.00	6.3%
	Total Crashes	**95**	**97**	**60**	**103**	**120**	**475**	**95.00**	**100.0%**
SEVERITY	PDO Crashes	35	47	20	34	44	180	36.00	37.9%
	Fatal Crashes	0	0	0	1	1	2	0.40	0.4%
	Injury Crashes	60	50	40	68	75	293	58.60	61.7%
LIGHTING CONDITIONS	Daylight	75	72	42	76	82	347	69.40	73.1%
	Dusk	1	5	1	1	3	11	2.20	2.3%
	Dawn	1	0	0	0	1	2	0.40	0.4%
	Dark	18	20	17	26	33	114	22.80	24.0%
	Unknown	0	0	0	0	1	1	0.20	0.2%
SURFACE CONDITIONS	Dry	81	80	48	86	81	376	75.20	79.2%
	Wet	14	17	12	17	38	98	19.60	20.6%
	Others	0	0	0	0	1	1	0.20	0.2%
MONTH OF YEAR	January	9	7	6	8	17	47	9.40	9.9%
	February	16	7	6	6	8	43	8.60	9.1%
	March	2	13	7	6	10	38	7.60	8.0%
	April	8	15	4	4	12	43	8.60	9.1%
	May	6	7	2	9	6	30	6.00	6.3%
	June	5	7	5	5	8	30	6.00	6.3%
	July	5	7	4	11	16	43	8.60	9.1%
	August	8	4	3	6	7	28	5.60	5.9%
	September	7	9	7	10	9	42	8.40	8.8%
	October	9	6	3	16	7	41	8.20	8.6%
	November	8	7	9	6	13	43	8.60	9.1%
	December	12	8	4	16	7	47	9.40	9.9%
DAY OF WEEK	Sunday	10	4	4	5	7	30	6.00	6.3%
	Monday	21	16	7	19	18	81	16.20	17.1%
	Tuesday	8	13	12	13	23	69	13.80	14.5%
	Wednesday	12	16	12	19	20	79	15.80	16.6%
	Thursday	19	26	9	16	14	84	16.80	17.7%
	Friday	17	15	15	21	24	92	18.40	19.4%
	Saturday	8	7	1	10	14	40	8.00	8.4%
HOUR OF DAY	00:00-06:00	7	6	5	6	8	32	6.40	6.7%
	06:00-09:00	8	10	3	13	11	45	9.00	9.5%
	09:00-11:00	14	5	6	11	14	50	10.00	10.5%
	11:00-13:00	9	8	6	12	13	48	9.60	10.1%
	13:00-15:00	16	17	5	12	12	62	12.40	13.1%
	15:00-18:00	23	29	21	27	31	131	26.20	27.6%
	18:00-24:00	18	22	14	22	31	107	21.40	22.5%

Notes:

1) Collision with Bicycle Crashes include Collision with Bicycle/Collision with Bicycle in Bike Lane (Codes 11 and 12).

2) Fixed Object Crashes include collisions with sign/sign post, utility/light pole, guardrail, fence, concrete barrier wall, bridge, pier, abutment, rail, tree, shrubbery, construction barricade/sign, traffic gate, crash attenuators, other fixed objects (incl. above road).

3) Ran-off-Road Crashes include Ran in Ditch/Culvert and Ran off road into water (Codes 29 and 30).

4) Other crashes include crashes not categorized as the crash types shown in the table.

5) Dark Crashes include both scenarios - with and without street lighting.

FLORIDA DEPARTMENT OF TRANSPORTATION
CRASH SUMMARY

SECTION: 93001000 STATE ROUTE: 786
ROADWAY LIMITS: Florida's Turnpike to Lake Victoria Gardens Dr. M.P. 4.129 TO 6.789 ENGINEER: FDOT D4
STUDY PERIOD: FROM 1/ 09 TO 12/ 09 COUNTY: Palm Beach

No.	MILE POST	DATE	DAY	TIME	CRASH TYPE	FATAL	INJURY	PROP DAM	DAY / NIGHT	WET / DRY	CONTRIBUTING CAUSE
1	4.152	09/21/09	Mon	0700	Angle	0	0	1	Day	Wet	Improper Lane Change
2	4.156	06/23/09	Tue	0900	Rear-End	0	1	0	Day	Wet	Careless Driving
3	4.166	11/25/09	Wed	1100	Rear-End	0	1	0	Day	Wet	Careless Driving
4	4.310	01/08/09	Thu	1900	Coll. W/ Mv On Roadway	0	0	1	Night	Dry	Alchol-Under Influence
5	4.765	07/13/09	Mon	1200	Coll. W/ Bicycle	0	1	0	Day	Dry	Failed To Yield Right-Of-Way
6	4.765	11/01/09	Sun	1000	Left-Turn	0	2	0	Day	Dry	Disregarded Traffic Signal
7	4.767	09/02/09	Wed	1300	Rear-End	0	0	1	Day	Dry	Followed Too Closely
8	4.784	02/12/09	Thu	2000	Rear-End	0	0	1	Night	Dry	Drugs-Under Influence
9	5.290	02/09/09	Mon	0800	Left-Turn	0	1	0	Day	Dry	Failed To Yield Right-Of-Way
10	5.525	12/17/09	Thu	1000	Angle	0	1	0	Day	Wet	Failed To Yield Right-Of-Way
11	5.620	01/16/09	Fri	1700	Rear-End	0	1	0	Day	Dry	Driver Distraction
12	5.662	10/07/09	Wed	1300	Angle	0	1	0	Day	Dry	Disregarded Stop Sign
13	5.667	06/19/09	Fri	1800	All Other	0	1	0	Day	Dry	Obstructing Traffic
14	5.667	10/19/09	Mon	1600	Rear-End	0	1	0	Day	Dry	Careless Driving
15	5.765	09/10/09	Thu	0900	Rear-End	0	1	0	Day	Dry	Careless Driving
16	5.769	03/13/09	Fri	1700	Rear-End	0	0	1	Day	Dry	Careless Driving
17	5.778	02/23/09	Mon	2100	Angle	0	3	0	Night	Dry	Failed To Yield Right-Of-Way
18	5.778	02/23/09	Mon	1600	Rear-End	0	1	0	Day	Dry	Alchol-Under Influence
19	5.778	02/26/09	Thu	1800	Rear-End	0	1	0	Night	Dry	Alchol-Under Influence
20	5.778	04/30/09	Thu	1700	Rear-End	0	1	0	Day	Dry	Careless Driving
21	5.778	07/04/09	Sat	0100	Angle	0	0	1	Night	Dry	Disregarded Traffic Signal
22	5.778	12/17/09	Thu	0200	Angle	0	0	1	Night	Dry	Disregarded Traffic Signal
23	5.778	12/27/09	Sun	2100	Left-Turn	0	2	0	Night	Dry	Disregarded Traffic Signal
24	5.780	10/23/09	Fri	0900	Rear-End	0	2	0	Day	Dry	Careless Driving
25	5.784	10/21/09	Wed	1200	Rear-End	0	2	0	Day	Dry	Careless Driving
26	5.787	01/30/09	Fri	2100	Rear-End	0	0	1	Night	Dry	Improper Backing
27	5.825	11/06/09	Fri	0200	Hit Sign/Sign Post	0	0	1	Night	Dry	Careless Driving
28	5.835	02/04/09	Wed	1700	Sideswipe	0	1	0	Day	Dry	Improper Lane Change
29	5.996	01/19/09	Mon	1500	Rear-End	0	2	0	Day	Dry	Careless Driving
30	6.018	09/19/09	Sat	1400	Angle	0	1	0	Day	Wet	Improper Lane Change
31	6.048	04/23/09	Thu	1000	Rear-End	0	2	0	Day	Dry	Careless Driving
32	6.129	04/04/09	Sat	0200	Coll. W/Mvble Obj On Road	0	1	0	Night	Dry	Careless Driving
33	6.224	04/09/09	Thu	0900	Right-Turn	0	0	1	Day	Dry	Failed To Yield Right-Of-Way
34	6.252	02/18/09	Wed	1400	Rear-End	0	0	1	Day	Dry	Obstructing Traffic
35	6.252	02/20/09	Fri	1900	Left-Turn	0	1	0	Night	Dry	Failed To Yield Right-Of-Way
36	6.252	04/24/09	Fri	0200	Hit Other Fixed Object	0	0	1	Night	Dry	Alchol-Under Influence
37	6.252	05/18/09	Mon	1300	Angle	0	0	1	Day	Dry	Failed To Yield Right-Of-Way
38	6.252	06/19/09	Fri	1800	Left-Turn	0	4	0	Day	Dry	Failed To Yield Right-Of-Way
39	6.470	11/14/09	Sat	2200	Rear-End	0	2	0	Night	Dry	Careless Driving
40	6.606	02/17/09	Tue	1700	Rear-End	0	2	0	Day	Dry	Careless Driving
41	6.758	01/25/09	Sun	1700	Angle	0	3	0	Day	Dry	Disregarded Traffic Signal
42	6.758	02/15/09	Sun	1300	Left-Turn	0	2	0	Day	Dry	Disregarded Traffic Signal
43	6.758	03/30/09	Mon	1300	Rear-End	0	2	0	Day	Dry	Careless Driving
44	6.758	05/04/09	Mon	1600	Angle	0	1	0	Day	Dry	Unknown/Not Coded
45	6.758	05/09/09	Sat	1000	Angle	0	2	0	Day	Dry	Improper Turn
46	6.758	08/03/09	Mon	1200	Angle	0	2	0	Day	Dry	Disregarded Traffic Signal
47	6.758	12/08/09	Tue	1400	Hit Tree/Shrubbery	0	1	0	Day	Dry	Unknown/Not Coded
48	6.761	12/01/09	Tue	1200	Rear-End	0	2	0	Day	Dry	Careless Driving
49	6.777	01/08/09	Thu	1800	Rear-End	0	1	0	Night	Dry	Careless Driving
50	11.037	02/07/09	Sat	1600	Rear-End	0	0	1	Day	Dry	Careless Driving
51	11.047	05/29/09	Fri	1100	Rear-End	0	1	0	Day	Dry	Careless Driving
52	11.047	06/15/09	Mon	1500	Rear-End	0	1	0	Day	Dry	Careless Driving
53	11.056	02/02/09	Mon	0700	Rear-End	0	1	0	Day	Wet	Careless Driving
54	11.070	08/26/09	Wed	0600	Backed Into	0	0	1	Day	Dry	Improper Backing
55	11.070	09/26/09	Sat	0100	Head-On	0	2	0	Night	Wet	Disregarded Traffic Signal
56	11.070	10/11/09	Sun	0900	Rear-End	0	1	0	Day	Dry	Disregarded Traffic Signal
57	0.014	04/21/09	Tue	1000	Utility/Light Pole	0	2	0	Day	Wet	Careless Driving
58	0.185	11/04/09	Wed	1600	Rear-End	0	1	0	Day	Dry	Unknown/Not Coded
59	0.194	05/19/09	Tue	2000	Rear-End	0	0	1	Day	Dry	Careless Driving
60	0.213	08/27/09	Thu	1400	Rear-End	0	0	1	Day	Dry	Careless Driving
61	0.213	10/23/09	Fri	1200	Rear-End	0	0	1	Day	Dry	Careless Driving
62	0.213	10/23/09	Fri	1300	Rear-End	0	0	1	Day	Dry	Unknown/Not Coded
63	0.218	01/08/09	Thu	0900	Rear-End	0	1	0	Day	Dry	Careless Driving
64	0.223	01/15/09	Thu	1200	Rear-End	0	1	0	Day	Dry	Careless Driving
65	0.226	07/23/09	Thu	1300	Rear-End	0	1	0	Day	Dry	Unknown/Not Coded
66	0.227	09/14/09	Mon	0000	Rear-End	0	1	0	Day	Dry	Careless Driving
67	0.227	12/04/09	Fri	2100	Sideswipe	0	0	1	Night	Wet	Alchol-Under Influence
68	0.228	08/09/09	Sun	1500	Rear-End	0	0	1	Day	Dry	Unknown/Not Coded
69	0.228	12/28/09	Mon	0800	Rear-End	0	1	0	Day	Dry	Careless Driving
70	0.229	12/23/09	Wed	0700	Rear-End	0	2	0	Day	Dry	Careless Driving
71	0.230	08/03/09	Mon	1500	Rear-End	0	0	1	Day	Dry	Unknown/Not Coded
72	0.230	08/25/09	Tue	0800	Rear-End	0	1	0	Day	Dry	Careless Driving
73	0.232	02/09/09	Mon	1400	Rear-End	0	1	0	Day	Dry	Followed Too Closely
74	0.232	02/15/09	Sun	0800	Rear-End	0	0	1	Day	Dry	Driver Distraction

FLORIDA DEPARTMENT OF TRANSPORTATION
CRASH SUMMARY

SECTION: **93001000** STATE ROUTE: **786**
ROADWAY LIMITS: **Florida's Turnpike to Lake Victoria Gardens Dr.** M.P. **4.129** TO **6.789** ENGINEER: **FDOT D4**
STUDY PERIOD: FROM **1/ 09** TO **12/ 09** COUNTY: **Palm Beach**

No.	MILE POST	DATE	DAY	TIME	CRASH TYPE	FATAL	INJURY	PROP DAM	DAY / NIGHT	WET / DRY	CONTRIBUTING CAUSE
75	0.232	08/12/09	Wed	1600	Rear-End	0	1	0	Day	Dry	Careless Driving
76	0.232	11/20/09	Fri	1800	Rear-End	0	1	0	Night	Dry	Careless Driving
77	0.098	01/16/09	Fri	1600	Rear-End	0	1	0	Day	Wet	Followed Too Closely
78	0.114	02/25/09	Wed	1700	Rear-End	0	0	1	Day	Dry	Unknown/Not Coded
79	0.118	02/16/09	Mon	2000	Rear-End	0	0	1	Night	Dry	Unknown/Not Coded
80	0.118	04/20/09	Mon	1000	Rear-End	0	2	0	Day	Dry	Unknown/Not Coded
81	0.120	07/01/09	Wed	2200	Rear-End	0	1	0	Night	Wet	Unknown/Not Coded
82	0.121	07/02/09	Thu	1400	Rear-End	0	0	1	Day	Wet	Careless Driving
83	0.122	06/02/09	Tue	1100	Rear-End	0	0	1	Day	Dry	Careless Driving
84	0.123	05/21/09	Thu	1600	Rear-End	0	0	1	Day	Dry	Careless Driving
85	0.123	08/07/09	Fri	1600	Rear-End	0	0	1	Day	Dry	Unknown/Not Coded
86	0.123	09/19/09	Sat	1400	Angle	0	0	1	Day	Wet	Unknown/Not Coded
87	0.123	10/26/09	Mon	1400	Rear-End	0	0	1	Day	Dry	Unknown/Not Coded
88	0.123	11/12/09	Thu	1700	Rear-End	0	0	1	Night	Dry	Unknown/Not Coded
89	0.123	12/03/09	Thu	1600	Rear-End	0	1	0	Day	Dry	Careless Driving
90	0.123	12/13/09	Sun	2200	Rear-End	0	2	0	Day	Dry	Unknown/Not Coded
91	0.038	12/17/09	Thu	1300	Concrete Barrier Wall	0	0	1	Day	Wet	Exceeded Safe Speed Limit
92	0.210	04/12/09	Sun	1800	Concrete Barrier Wall	0	1	0	Day	Dry	Careless Driving
93	0.255	10/30/09	Fri	0900	Rear-End	0	0	1	Day	Dry	Careless Driving
94	0.255	12/20/09	Sun	1500	Rear-End	0	0	1	Day	Dry	Careless Driving
95	0.000	11/09/09	Mon	0900	Concrete Barrier Wall	0	1	0	Day	Dry	Careless Driving

Total No.		Fatal	Injury	PDO	Angle	Left Turn	Right Turn	Rear End	Side swipe	Ped/ Bike	
95		**0**	**60**	**35**	**13**	**6**	**1**	**60**	**2**	**1**	
		0.00%	*63.16%*	*36.84%*	*13.68%*	*6.32%*	*1.05%*	*63.16%*	*2.11%*	*1.05%*	
One Vehicle		Day	Night	Wet	Dry	Excess Speed	FTYRW	DUI			
8		**75**	**20**	**14**	**81**	**1**	**8**	**14**			
8.42%		*78.95%*	*21.05%*	*14.74%*	*85.26%*	*1.05%*	*8.42%*	*14.74%*			

TOTAL ENTERING VEHICLES/ADT: **34,383**

SEGMENT CRASH RATE: **2.846**

FLORIDA DEPARTMENT OF TRANSPORTATION
CRASH SUMMARY

SECTION: 93001000 STATE ROUTE: 786
ROADWAY LIMITS: Florida's Turnpike to Lake Victoria Gardens Dr. M.P. 4.129 TO 6.789 ENGINEER: FDOT D4
STUDY PERIOD: FROM 1/ 10 TO 12/ 10 COUNTY: Palm Beach

No.	MILE POST	DATE	DAY	TIME	CRASH TYPE	FATAL	INJURY	PROP DAM	DAY / NIGHT	WET / DRY	CONTRIBUTING CAUSE
1	4.152	01/21/10	Thu	1600	Rear-End	0	0	1	Day	Dry	Careless Driving
2	4.291	09/25/10	Sat	0700	Rear-End	0	1	0	Day	Dry	Careless Driving
3	4.575	11/26/10	Fri	1700	Hit Tree/Shrubbery	0	1	0	Night	Dry	Unknown/Not Coded
4	4.670	01/14/10	Thu	1900	Backed Into	0	0	1	Night	Dry	Improper Backing
5	4.765	07/21/10	Wed	1500	Angle	0	2	0	Day	Dry	Disregarded Traffic Signal
6	4.774	04/29/10	Thu	1700	Rear-End	0	0	1	Day	Dry	Careless Driving
7	5.030	02/04/10	Thu	2000	Angle	0	1	0	Night	Dry	Failed To Yield Right-Of-Way
8	5.271	11/30/10	Tue	0700	Angle	0	1	0	Day	Dry	Improper Lane Change
9	5.347	03/09/10	Tue	1800	Rear-End	0	0	1	Night	Dry	Careless Driving
10	5.690	07/23/10	Fri	1100	Sideswipe	0	0	1	Day	Dry	Improper Lane Change
11	5.778	03/02/10	Tue	0100	Rear-End	0	2	0	Night	Dry	Alchol-Under Influence
12	5.778	06/04/10	Fri	1800	Left-Turn	0	1	0	Day	Wet	Failed To Yield Right-Of-Way
13	5.778	10/04/10	Mon	0700	Rear-End	0	1	0	Day	Dry	Unknown/Not Coded
14	5.783	05/29/10	Sat	0200	Hit Sign/Sign Post	0	0	1	Night	Dry	Careless Driving
15	5.786	02/21/10	Sun	0200	Hit Sign/Sign Post	0	0	1	Night	Dry	Alchol-Under Influence
16	5.787	10/13/10	Wed	1300	Rear-End	0	2	0	Day	Dry	Careless Driving
17	5.825	01/27/10	Wed	1400	Rear-End	0	1	0	Day	Dry	Followed Too Closely
18	5.995	11/10/10	Wed	1700	Left-Turn	0	0	1	Night	Dry	Failed To Yield Right-Of-Way
19	6.034	09/03/10	Fri	1600	Rear-End	0	0	1	Day	Dry	Careless Driving
20	6.063	12/08/10	Wed	1700	All Other	0	1	0	Night	Dry	Unknown/Not Coded
21	6.103	03/30/10	Tue	1500	Rear-End	0	1	0	Day	Dry	Careless Driving
22	6.110	10/14/10	Thu	0600	Sideswipe	0	0	1	Day	Dry	Improper Lane Change
23	6.144	04/05/10	Mon	1300	Rear-End	0	1	0	Day	Dry	Careless Driving
24	6.177	05/26/10	Wed	1800	Rear-End	0	0	1	Day	Dry	Careless Driving
25	6.219	03/18/10	Thu	1700	Rear-End	0	0	1	Day	Dry	Careless Driving
26	6.252	12/06/10	Mon	1200	Rear-End	0	1	0	Day	Dry	Improper Turn
27	6.347	03/15/10	Mon	2000	Rear-End	0	1	0	Night	Dry	Failed To Yield Right-Of-Way
28	6.375	11/26/10	Fri	0700	Rear-End	0	1	0	Day	Dry	Careless Driving
29	6.682	07/26/10	Mon	1700	Rear-End	0	2	0	Day	Dry	Careless Driving
30	6.682	12/09/10	Thu	0900	Rear-End	0	1	0	Day	Wet	Careless Driving
31	6.701	06/21/10	Mon	0800	Rear-End	0	1	0	Day	Dry	Followed Too Closely
32	6.701	12/09/10	Thu	1000	Rear-End	0	2	0	Day	Wet	Careless Driving
33	6.705	03/29/10	Mon	1200	Rear-End	0	2	0	Day	Wet	Followed Too Closely
34	6.739	03/12/10	Fri	1200	Rear-End	0	2	0	Day	Dry	Careless Driving
35	6.739	04/26/10	Mon	0800	Rear-End	0	1	0	Day	Wet	Careless Driving
36	6.744	09/14/10	Tue	0900	Rear-End	0	1	0	Day	Wet	Careless Driving
37	6.752	04/18/10	Sun	1600	Rear-End	0	3	0	Day	Wet	Careless Driving
38	6.754	08/26/10	Thu	2000	Rear-End	0	0	1	Night	Wet	Followed Too Closely
39	6.758	01/30/10	Sat	1900	Backed Into	0	0	1	Night	Dry	Careless Driving
40	6.758	03/02/10	Tue	0500	Angle	0	1	0	Night	Dry	Unknown/Not Coded
41	6.758	10/11/10	Mon	1000	Angle	0	1	0	Day	Dry	Disregarded Traffic Signal
42	6.762	06/20/10	Sun	0400	All Other	0	1	0	Night	Dry	Careless Driving
43	6.762	07/09/10	Fri	1500	Rear-End	0	0	1	Day	Dry	Followed Too Closely
44	6.777	05/10/10	Mon	2000	Rear-End	0	1	0	Night	Dry	Driver Distraction
45	6.786	03/30/10	Tue	1600	Rear-End	0	2	0	Day	Dry	Careless Driving
46	11.069	09/21/10	Tue	2000	Rear-End	0	1	0	Night	Dry	Careless Driving
47	11.070	05/19/10	Wed	1600	Rear-End	0	1	0	Day	Wet	Careless Driving
48	11.070	09/23/10	Thu	1500	Rear-End	0	1	0	Day	Dry	Careless Driving
49	11.070	10/30/10	Sat	1400	Rear-End	0	0	1	Day	Dry	Careless Driving
50	0.185	06/04/10	Fri	1900	Rear-End	0	0	1	Night	Wet	Unknown/Not Coded
51	0.194	04/05/10	Mon	1800	Rear-End	0	0	1	Day	Dry	Careless Driving
52	0.194	08/11/10	Wed	0700	Rear-End	0	0	1	Day	Dry	Careless Driving
53	0.204	03/29/10	Mon	1000	Head-On	0	0	1	Day	Wet	Careless Driving
54	0.204	04/17/10	Sat	1500	Rear-End	0	1	0	Day	Dry	Careless Driving
55	0.223	08/14/10	Sat	1300	Rear-End	0	0	1	Day	Dry	Careless Driving
56	0.223	09/16/10	Thu	1300	Rear-End	0	1	0	Day	Dry	Careless Driving
57	0.225	11/29/10	Mon	1400	Rear-End	0	0	1	Day	Wet	Exceeded Safe Speed Limit
58	0.227	03/12/10	Fri	1100	Rear-End	0	1	0	Day	Wet	Careless Driving
59	0.228	04/19/10	Mon	1100	Rear-End	0	1	0	Day	Wet	Careless Driving
60	0.228	04/22/10	Thu	1300	Rear-End	0	1	0	Day	Dry	Careless Driving
61	0.230	02/25/10	Thu	1200	Rear-End	0	1	0	Day	Dry	Careless Driving
62	0.230	06/09/10	Wed	0800	Rear-End	0	1	0	Day	Dry	Unknown/Not Coded
63	0.231	04/06/10	Tue	0600	Rear-End	0	1	0	Day	Dry	Careless Driving
64	0.232	04/08/10	Thu	1600	Rear-End	0	3	0	Day	Dry	Careless Driving
65	0.232	04/18/10	Sun	1700	Rear-End	0	0	1	Day	Wet	Followed Too Closely
66	0.232	12/01/10	Wed	1200	Rear-End	0	0	1	Day	Dry	Careless Driving
67	0.232	12/23/10	Thu	0000	Rear-End	0	0	1	Day	Dry	Followed Too Closely
68	0.085	04/07/10	Wed	2000	Rear-End	0	0	1	Night	Dry	Unknown/Not Coded
69	0.114	09/14/10	Tue	2000	Rear-End	0	0	1	Night	Dry	Followed Too Closely
70	0.119	12/11/10	Sat	1900	Rear-End	0	0	1	Night	Dry	Exceeded Safe Speed Limit
71	0.123	01/14/10	Thu	1600	Rear-End	0	0	1	Day	Dry	Unknown/Not Coded
72	0.123	01/14/10	Thu	1800	Rear-End	0	0	1	Night	Dry	Careless Driving
73	0.123	02/18/10	Thu	1500	Rear-End	0	0	1	Day	Dry	Careless Driving
74	0.123	02/24/10	Wed	1300	Rear-End	0	2	0	Day	Wet	Careless Driving

FLORIDA DEPARTMENT OF TRANSPORTATION
CRASH SUMMARY

SECTION: **93001000** STATE ROUTE: **786**
ROADWAY LIMITS: **Florida's Turnpike to Lake Victoria Gardens Dr.** M.P. **4.129** TO **6.789** ENGINEER: **FDOT D4**
STUDY PERIOD: FROM **1/ 10** TO **12/ 10** COUNTY: **Palm Beach**

No.	MILE POST	DATE	DAY	TIME	CRASH TYPE	FATAL	INJURY	PROP DAM	DAY / NIGHT	WET / DRY	CONTRIBUTING CAUSE
75	0.123	02/25/10	Thu	1300	Rear-End	0	2	0	Day	Dry	Careless Driving
76	0.123	03/12/10	Fri	1900	Rear-End	0	0	1	Night	Dry	Careless Driving
77	0.123	03/19/10	Fri	1600	Rear-End	0	0	1	Day	Dry	Careless Driving
78	0.123	04/30/10	Fri	1400	Rear-End	0	1	0	Day	Dry	Careless Driving
79	0.123	05/03/10	Mon	1400	Rear-End	0	0	1	Day	Dry	Careless Driving
80	0.123	07/08/10	Thu	1600	Rear-End	0	0	1	Day	Dry	Careless Driving
81	0.123	08/13/10	Fri	1300	Rear-End	0	0	1	Day	Dry	Careless Driving
82	0.123	09/30/10	Thu	1700	Rear-End	0	0	1	Day	Dry	Careless Driving
83	0.123	11/04/10	Thu	1300	Head-On	0	1	0	Day	Dry	Followed Too Closely
84	0.123	11/30/10	Tue	1600	Rear-End	0	0	1	Day	Dry	Careless Driving
85	0.249	04/28/10	Wed	1900	Rear-End	0	1	0	Night	Dry	Careless Driving
86	0.250	04/12/10	Mon	1600	Rear-End	0	0	1	Day	Dry	Careless Driving
87	0.250	06/03/10	Thu	1400	Rear-End	0	0	1	Day	Dry	Careless Driving
88	0.251	05/21/10	Fri	2000	Rear-End	0	0	1	Night	Dry	Careless Driving
89	0.252	07/28/10	Wed	1800	Rear-End	0	0	1	Day	Dry	Careless Driving
90	0.253	05/25/10	Tue	2300	Rear-End	0	0	1	Night	Dry	Careless Driving
91	0.253	07/29/10	Thu	1800	Rear-End	0	0	1	Day	Dry	Careless Driving
92	0.253	10/07/10	Thu	1300	Rear-End	0	2	0	Day	Dry	Careless Driving
93	0.255	01/15/10	Fri	1400	Rear-End	0	1	0	Day	Wet	Careless Driving
94	0.255	02/17/10	Wed	1600	Rear-End	0	0	1	Day	Dry	Careless Driving
95	0.255	06/23/10	Wed	1700	Concrete Barrier Wall	0	1	0	Day	Dry	Careless Driving
96	0.255	09/30/10	Thu	1700	Rear-End	0	0	1	Day	Dry	Careless Driving
97	0.038	12/14/10	Tue	1600	Rear-End	0	0	1	Day	Dry	Careless Driving

Total No.		Fatal	Injury	PDO	Angle	Left Turn	Right Turn	Rear End	Side swipe	Ped/ Bike	
97		**0**	**50**	**47**	**5**	**2**	**0**	**78**	**2**	**0**	
		0.00%	*51.55%*	*48.45%*	*5.15%*	*2.06%*	*0.00%*	*80.41%*	*2.06%*	*0.00%*	
One Vehicle		Day	Night	Wet	Dry	Excess Speed	FTYRW	DUI			
5		**72**	**25**	**17**	**80**	**2**	**4**	**4**			
5.15%		*74.23%*	*25.77%*	*17.53%*	*82.47%*	*2.06%*	*4.12%*	*4.12%*			

TOTAL ENTERING VEHICLES/ADT: **46,762** SEGMENT CRASH RATE: **2.137**

Appendix F - 2013 Crash Analysis

FLORIDA DEPARTMENT OF TRANSPORTATION
CRASH SUMMARY

SECTION: **93001000** STATE ROUTE: **786**
ROADWAY LIMITS: **Florida's Turnpike to Lake Victoria Gardens Dr.** M.P. **4.129** TO **6.789** ENGINEER: **FDOT D4**
STUDY PERIOD: FROM **1/ 11** TO **12/ 11** COUNTY: **Palm Beach**

No.	MILE POST	DATE	DAY	TIME	CRASH TYPE	FATAL	INJURY	PROP DAM	DAY / NIGHT	WET / DRY	CONTRIBUTING CAUSE
1	4.209	11/16/11	Wed	1500	Rear-End	0	1	0	Day	Dry	Careless Driving
2	4.522	01/05/11	Wed	1000	Coll. W/ Mv On Roadway	0	1	0	Day	Dry	Careless Driving
3	4.585	08/16/11	Tue	1700	Rear-End	0	0	1	Day	Wet	Careless Driving
4	4.651	07/05/11	Tue	1600	Coll. W/ Bicycle	0	1	0	Day	Dry	Disregarded Stop Sign
5	4.765	08/03/11	Wed	1900	Rear-End	0	2	0	Night	Dry	Careless Driving
6	5.131	03/08/11	Tue	1500	All Other	0	1	0	Day	Dry	Careless Driving
7	5.135	11/28/11	Mon	0500	Angle	0	1	0	Night	Dry	Failed To Yield Right-Of-Way
8	5.721	01/14/11	Fri	0900	Coll. W/ Mv On Roadway	0	2	0	Day	Dry	Careless Driving
9	5.740	11/02/11	Wed	2300	Rear-End	0	1	0	Night	Dry	Careless Driving
10	5.769	11/25/11	Fri	2200	Coll. W/ Pedestrian	0	1	0	Night	Dry	No Improper Driving/Act
11	5.778	01/26/11	Wed	1800	Left-Turn	0	2	0	Night	Dry	Unknown/Not Coded
12	5.778	05/13/11	Fri	2200	Angle	0	0	1	Night	Dry	Disregarded Traffic Signal
13	5.971	09/02/11	Fri	2200	Head-On	0	2	0	Night	Dry	Disregarded Traffic Signal
14	5.995	12/22/11	Thu	0000	Rear-End	0	1	0	Night	Dry	Unknown/Not Coded
15	6.048	11/28/11	Mon	1800	Rear-End	0	0	1	Night	Dry	Careless Driving
16	6.129	06/27/11	Mon	1100	Rear-End	0	2	0	Day	Dry	Careless Driving
17	6.156	06/28/11	Tue	1100	Rear-End	0	1	0	Day	Dry	Careless Driving
18	6.261	03/18/11	Fri	2200	Coll. W/ Mv On Roadway	0	2	0	Night	Dry	Careless Driving
19	6.271	10/11/11	Tue	0000	Utility/Light Pole	0	1	0	Night	Wet	Exceeded Safe Speed Limit
20	6.376	10/11/11	Tue	1100	Hit Other Fixed Object	0	2	0	Day	Dry	No Improper Driving/Act
21	6.644	02/17/11	Thu	1700	All Other	0	0	1	Day	Dry	Unknown/Not Coded
22	6.663	10/30/11	Sun	2000	Rear-End	0	1	0	Night	Wet	Improper Backing
23	6.673	12/13/11	Tue	1000	Coll. W/ Mv On Roadway	0	1	0	Day	Wet	Unknown/Not Coded
24	6.682	01/06/11	Thu	1500	Coll. W/ Mv On Roadway	0	1	0	Day	Wet	Exceeded Safe Speed Limit
25	6.701	09/12/11	Mon	1500	Rear-End	0	1	0	Day	Wet	No Improper Driving/Act
26	6.754	02/16/11	Wed	1400	Coll. W/ Mv On Roadway	0	2	0	Day	Dry	Careless Driving
27	6.758	05/09/11	Mon	1600	Rear-End	0	1	0	Day	Dry	Careless Driving
28	6.758	09/04/11	Sun	0100	Rear-End	0	1	0	Night	Dry	Careless Driving
29	6.758	09/07/11	Wed	1300	Angle	0	0	1	Day	Dry	Disregarded Traffic Signal
30	6.758	09/09/11	Fri	2200	Head-On	0	1	0	Night	Wet	Disregarded Traffic Signal
31	6.758	09/12/11	Mon	1500	Rear-End	0	0	1	Day	Wet	Unknown/Not Coded
32	6.758	11/23/11	Wed	0900	Rear-End	0	2	0	Day	Dry	Disregarded Traffic Signal
33	6.762	09/09/11	Fri	1000	Rear-End	0	1	0	Day	Dry	Careless Driving
34	6.767	04/22/11	Fri	2300	Rear-End	0	0	1	Night	Dry	Careless Driving
35	6.772	08/28/11	Sun	1600	Rear-End	0	1	0	Day	Dry	Careless Driving
36	11.051	04/01/11	Fri	1600	Coll. W/ Mv On Roadway	0	0	1	Day	Dry	Unknown/Not Coded
37	11.064	12/11/11	Sun	1900	Rear-End	0	2	0	Night	Dry	Careless Driving
38	0.204	03/04/11	Fri	1500	Rear-End	0	3	0	Day	Dry	Careless Driving
39	0.213	01/06/11	Thu	1600	Rear-End	0	0	1	Day	Wet	Careless Driving
40	0.227	03/03/11	Thu	1200	Rear-End	0	1	0	Day	Dry	No Improper Driving/Act
41	0.228	07/25/11	Mon	1500	Rear-End	0	0	1	Day	Dry	Careless Driving
42	0.228	12/20/11	Tue	1300	Rear-End	0	1	0	Day	Dry	Careless Driving
43	0.230	07/26/11	Tue	1600	Rear-End	0	0	1	Day	Dry	Careless Driving
44	0.231	07/16/11	Sat	1300	Rear-End	0	0	1	Day	Dry	Careless Driving
45	0.232	02/03/11	Thu	0700	Rear-End	0	1	0	Day	Dry	Careless Driving
46	0.232	02/10/11	Thu	0500	Rear-End	0	0	1	Day	Wet	No Improper Driving/Act
47	0.232	02/17/11	Thu	0700	Rear-End	0	1	0	Day	Wet	Careless Driving
48	0.232	03/25/11	Fri	1700	Rear-End	0	0	1	Day	Dry	No Improper Driving/Act
49	0.232	04/12/11	Tue	1600	Coll. W/ Mv On Roadway	0	2	0	Day	Dry	Careless Driving
50	0.232	04/20/11	Wed	1700	Rear-End	0	0	1	Day	Dry	Careless Driving
51	0.232	06/08/11	Wed	1000	Rear-End	0	0	1	Day	Dry	Unknown/Not Coded
52	0.232	06/10/11	Fri	0700	Rear-End	0	2	0	Day	Dry	Careless Driving
53	0.232	06/23/11	Thu	1200	Rear-End	0	1	0	Day	Dry	Careless Driving
54	0.232	11/01/11	Tue	1700	Rear-End	0	2	0	Day	Dry	Careless Driving
55	0.232	11/02/11	Wed	1500	Rear-End	0	0	1	Day	Dry	Careless Driving
56	0.118	03/04/11	Fri	1900	Rear-End	0	1	0	Night	Dry	Careless Driving
57	0.123	03/04/11	Fri	1200	Rear-End	0	0	1	Day	Dry	Careless Driving
58	0.038	11/18/11	Fri	1800	Head-On	0	0	1	Night	Wet	Careless Driving
59	0.246	01/25/11	Tue	1400	Rear-End	0	0	1	Day	Dry	Improper Backing
60	0.255	02/16/11	Wed	1700	Coll. W/ Mv On Roadway	0	1	0	Day	Dry	Careless Driving

Total No.		Fatal	Injury	PDO	Angle	Left Turn	Right Turn	Rear End	Side swipe	Ped/ Bike	
60		**0**	**40**	**20**	**3**	**1**	**0**	**38**	**0**	**2**	
		0.00%	*66.67%*	*33.33%*	*5.00%*	*1.67%*	*0.00%*	*63.33%*	*0.00%*	*3.33%*	
One Vehicle		Day	Night	Wet	Dry	Excess Speed	FTYRW	DUI			
4		**42**	**18**	**12**	**48**	**2**	**1**	**2**			
6.67%		*70.00%*	*30.00%*	*20.00%*	*80.00%*	*3.33%*	*1.67%*	*3.33%*			

TOTAL ENTERING VEHICLES/ADT: **46,325** SEGMENT CRASH RATE: **1.334**

FLORIDA DEPARTMENT OF TRANSPORTATION
CRASH SUMMARY

SECTION: 93001000 STATE ROUTE: 786
ROADWAY LIMITS: Florida's Turnpike to Lake Victoria Gardens Dr. M.P. 4.129 TO 6.789 ENGINEER: FDOT D4
STUDY PERIOD: FROM 1/ 12 TO 12/ 12 COUNTY: Palm Beach

No.	MILE POST	DATE	DAY	TIME	CRASH TYPE	FATAL	INJURY	PROP DAM	DAY / NIGHT	WET / DRY	CONTRIBUTING CAUSE
1	4.152	03/13/12	Tue	2100	Angle	0	2	0	Night	Dry	Failed To Yield Right-Of-Way
2	4.152	03/22/12	Thu	1600	Angle	0	0	1	Day	Dry	Failed To Yield Right-Of-Way
3	4.152	07/14/12	Sat	0100	Angle	0	2	0	Night	Dry	Careless Driving
4	4.152	08/28/12	Tue	2300	Coll. W/ Bicycle	1	0	0	Night	Dry	Unknown/Not Coded
5	4.152	09/03/12	Mon	1900	Angle	0	2	0	Night	Dry	Unknown/Not Coded
6	4.152	10/24/12	Wed	2100	Head-On	0	2	0	Night	Wet	No Improper Driving/Act
7	4.180	05/30/12	Wed	0600	Angle	0	2	0	Night	Dry	Disregarded Traffic Signal
8	4.209	12/26/12	Wed	1000	Rear-End	0	1	0	Day	Dry	Careless Driving
9	4.214	05/23/12	Wed	1400	Rear-End	0	1	0	Day	Dry	Careless Driving
10	4.249	12/07/12	Fri	1200	Rear-End	0	1	0	Day	Dry	Careless Driving
11	4.524	11/05/12	Mon	0800	Rear-End	0	3	0	Day	Dry	Careless Driving
12	4.534	01/28/12	Sat	1400	Rear-End	0	2	0	Day	Dry	Careless Driving
13	4.757	11/19/12	Mon	1500	Rear-End	0	1	0	Day	Dry	Careless Driving
14	4.765	09/16/12	Sun	0000	Rear-End	0	1	0	Night	Dry	Careless Driving
15	4.803	12/26/12	Wed	1000	Rear-End	0	1	0	Day	Dry	Careless Driving
16	5.011	01/21/12	Sat	1900	Coll. W/ Parked Car	0	0	1	Night	Dry	Unknown/Not Coded
17	5.167	11/17/12	Sat	2200	Angle	0	1	0	Night	Dry	Failed To Yield Right-Of-Way
18	5.262	09/14/12	Fri	1400	Rear-End	0	2	0	Day	Dry	Careless Driving
19	5.282	05/27/12	Sun	0800	Rear-End	0	1	0	Day	Dry	Careless Driving
20	5.282	12/14/12	Fri	0800	Rear-End	0	1	0	Day	Dry	Careless Driving
21	5.294	04/27/12	Fri	2300	Rear-End	0	3	0	Night	Dry	Careless Driving
22	5.309	12/01/12	Sat	1900	Coll. W/ Mv On Roadway	0	1	0	Night	Dry	Unknown/Not Coded
23	5.551	05/23/12	Wed	0900	Angle	0	2	0	Day	Dry	Failed To Yield Right-Of-Way
24	5.589	06/22/12	Fri	1300	Angle	0	2	0	Day	Dry	Failed To Yield Right-Of-Way
25	5.629	10/08/12	Mon	1300	Rear-End	0	1	0	Day	Wet	Careless Driving
26	5.773	05/10/12	Thu	2100	Rear-End	0	0	1	Night	Wet	Unknown/Not Coded
27	5.778	04/21/12	Sat	1700	Angle	0	3	0	Day	Dry	Disregarded Traffic Signal
28	5.778	10/16/12	Tue	1400	Angle	0	1	0	Day	Dry	Disregarded Traffic Signal
29	5.956	12/13/12	Thu	1000	Coll. W/ Mv On Roadway	0	1	0	Day	Wet	Exceeded Safe Speed Limit
30	5.958	10/22/12	Mon	0100	Hit Sign/Sign Post	0	0	1	Night	Dry	Exceeded Safe Speed Limit
31	5.960	09/08/12	Sat	1800	Angle	0	0	1	Day	Dry	Disregarded Traffic Signal
32	6.048	10/04/12	Thu	1200	Rear-End	0	1	0	Day	Wet	Careless Driving
33	6.076	03/29/12	Thu	0800	Rear-End	0	4	0	Day	Dry	Unknown/Not Coded
34	6.076	07/13/12	Fri	0700	Rear-End	0	1	0	Day	Wet	Exceeded Safe Speed Limit
35	6.076	08/02/12	Thu	1500	Rear-End	0	0	1	Day	Dry	No Improper Driving/Act
36	6.076	10/18/12	Thu	1600	Angle	0	0	1	Day	Dry	Unknown/Not Coded
37	6.116	12/24/12	Mon	2300	Angle	0	2	0	Night	Dry	Disregarded Traffic Signal
38	6.233	09/01/12	Sat	0800	Coll. W/ Mv On Roadway	0	0	1	Day	Dry	Unknown/Not Coded
39	6.252	07/16/12	Mon	1700	Angle	0	4	0	Day	Wet	Failed To Yield Right-Of-Way
40	6.252	09/04/12	Tue	1200	Angle	0	0	1	Day	Dry	Failed To Yield Right-Of-Way
41	6.252	10/17/12	Wed	1700	Angle	0	0	1	Day	Wet	Failed To Yield Right-Of-Way
42	6.252	12/22/12	Sat	0100	Hit Other Fixed Object	0	3	0	Night	Dry	Careless Driving
43	6.377	04/02/12	Mon	1700	Rear-End	0	0	1	Day	Dry	No Improper Driving/Act
44	6.508	03/15/12	Thu	1700	Rear-End	0	1	0	Day	Dry	Careless Driving
45	6.569	03/05/12	Mon	1500	Separation Of Units	0	4	0	Day	Dry	Careless Driving
46	6.569	11/16/12	Fri	1700	Rear-End	0	0	1	Day	Dry	Followed Too Closely
47	6.606	08/07/12	Tue	1700	Rear-End	0	1	0	Day	Dry	Careless Driving
48	6.616	11/28/12	Wed	1300	Rear-End	0	0	1	Day	Dry	Unknown/Not Coded
49	6.625	12/26/12	Wed	1100	Rear-End	0	1	0	Day	Dry	Careless Driving
50	6.682	10/18/12	Thu	1300	Rear-End	0	0	1	Day	Dry	Careless Driving
51	6.701	10/26/12	Fri	1300	Rear-End	0	1	0	Day	Wet	Careless Driving
52	6.701	12/07/12	Fri	0800	Rear-End	0	1	0	Day	Wet	Careless Driving
53	6.720	02/02/12	Thu	1200	Rear-End	0	6	0	Day	Wet	Exceeded Safe Speed Limit
54	6.730	01/03/12	Tue	1200	Rear-End	0	1	0	Day	Dry	Careless Driving
55	6.730	02/13/12	Mon	1700	Rear-End	0	0	1	Day	Dry	Careless Driving
56	6.730	05/16/12	Wed	1700	Rear-End	0	2	0	Day	Dry	Exceed Stated Speed Limit
57	6.749	01/29/12	Sun	1800	Rear-End	0	5	0	Night	Dry	Careless Driving
58	6.749	09/07/12	Fri	1600	Rear-End	0	0	1	Day	Dry	Careless Driving
59	6.749	12/27/12	Thu	1400	Rear-End	0	0	1	Day	Dry	Followed Too Closely
60	6.755	02/10/12	Fri	1900	Rear-End	0	1	0	Night	Dry	Followed Too Closely
61	6.756	04/04/12	Wed	0900	Rear-End	0	1	0	Day	Dry	Careless Driving
62	6.758	08/23/12	Thu	0800	Rear-End	0	1	0	Day	Dry	Careless Driving
63	6.758	10/10/12	Wed	2000	Angle	0	0	1	Night	Dry	Improper Turn
64	6.758	12/07/12	Fri	1800	Rear-End	0	2	0	Night	Dry	Followed Too Closely
65	6.762	10/26/12	Fri	1700	Rear-End	0	2	0	Day	Dry	Careless Driving
66	6.766	06/24/12	Sun	1100	Rear-End	0	1	0	Day	Dry	Followed Too Closely
67	6.767	09/06/12	Thu	1700	Rear-End	0	0	1	Day	Dry	Careless Driving
68	6.772	02/03/12	Fri	1600	Rear-End	0	1	0	Day	Dry	Careless Driving
69	11.032	06/19/12	Tue	1500	Rear-End	0	1	0	Day	Dry	Careless Driving
70	11.042	08/17/12	Fri	0800	Rear-End	0	1	0	Day	Dry	Careless Driving
71	11.042	10/29/12	Mon	1900	Coll. W/ Pedestrian	0	1	0	Night	Dry	Failed To Yield Right-Of-Way
72	11.063	07/02/12	Mon	0400	Rear-End	0	1	0	Night	Dry	Careless Driving
73	11.065	09/01/12	Sat	2200	Rear-End	0	1	0	Night	Dry	Careless Driving
74	11.066	12/10/12	Mon	1900	Rear-End	0	1	0	Night	Dry	Careless Driving

Appendix F - 2013 Crash Analysis

FLORIDA DEPARTMENT OF TRANSPORTATION
CRASH SUMMARY

SECTION: **93001000** STATE ROUTE: **786**
ROADWAY LIMITS: **Florida's Turnpike to Lake Victoria Gardens Dr.** M.P. **4.129** TO **6.789** ENGINEER: **FDOT D4**
STUDY PERIOD: FROM **1/ 12** TO **12/ 12** COUNTY: **Palm Beach**

No.	MILE POST	DATE	DAY	TIME	CRASH TYPE	FATAL	INJURY	PROP DAM	DAY / NIGHT	WET / DRY	CONTRIBUTING CAUSE
75	11.067	07/25/12	Wed	0900	Rear-End	0	0	1	Day	Dry	No Improper Driving/Act
76	11.068	03/02/12	Fri	1900	All Other	0	0	1	Day	Dry	Unknown/Not Coded
77	11.070	05/06/12	Sun	2200	Hit Other Fixed Object	0	1	0	Night	Dry	Unknown/Not Coded
78	11.070	05/09/12	Wed	1700	Angle	0	1	0	Day	Dry	Disregarded Traffic Signal
79	11.070	07/03/12	Tue	1600	Rear-End	0	2	0	Day	Dry	Careless Driving
80	11.070	07/23/12	Mon	1600	Rear-End	0	1	0	Day	Dry	Careless Driving
81	11.070	10/09/12	Tue	1600	Rear-End	0	0	1	Day	Dry	Careless Driving
82	0.194	07/18/12	Wed	1500	Rear-End	0	2	0	Day	Dry	Careless Driving
83	0.228	06/21/12	Thu	1100	Rear-End	0	2	0	Day	Dry	Careless Driving
84	0.228	10/22/12	Mon	1300	Rear-End	0	1	0	Day	Dry	Careless Driving
85	0.229	09/12/12	Wed	0900	Rear-End	0	0	1	Day	Dry	Careless Driving
86	0.230	02/27/12	Mon	0700	Rear-End	0	0	1	Day	Dry	Careless Driving
87	0.230	07/11/12	Wed	1100	All Other	0	0	1	Day	Wet	Unknown/Not Coded
88	0.230	12/14/12	Fri	0900	All Other	0	0	1	Day	Dry	Unknown/Not Coded
89	0.232	01/09/12	Mon	0800	Rear-End	0	1	0	Day	Dry	Careless Driving
90	0.232	01/20/12	Fri	0900	Rear-End	0	0	1	Day	Dry	No Improper Driving/Act
91	0.232	01/24/12	Tue	0600	Hit Guardrail	0	1	0	Day	Wet	Unknown/Not Coded
92	0.232	10/29/12	Mon	0900	Rear-End	0	0	1	Day	Dry	Careless Driving
93	0.232	11/29/12	Thu	2200	Rear-End	0	0	1	Night	Dry	Careless Driving
94	0.232	12/07/12	Fri	0900	Rear-End	0	0	1	Day	Dry	Unknown/Not Coded
95	0.095	06/26/12	Tue	1700	Rear-End	0	1	0	Day	Dry	Careless Driving
96	0.121	07/04/12	Wed	1100	Rear-End	0	0	1	Day	Dry	Careless Driving
97	0.121	08/06/12	Mon	1100	All Other	0	0	1	Day	Wet	Exceeded Safe Speed Limit
98	0.123	02/02/12	Thu	1400	Hit Guardrail	0	1	0	Day	Wet	Exceeded Safe Speed Limit
99	0.123	12/11/12	Tue	0500	All Other	0	0	1	Night	Wet	Exceeded Safe Speed Limit
100	0.000	05/23/12	Wed	1700	Rear-End	0	3	0	Day	Dry	Unknown/Not Coded
101	0.004	07/13/12	Fri	2200	Bridge/Pier/Abutment/Rail	0	0	1	Night	Dry	Unknown/Not Coded
102	0.255	10/26/12	Fri	1200	Rear-End	0	1	0	Day	Wet	No Improper Driving/Act
103	0.038	01/24/12	Tue	1700	Rear-End	0	1	0	Day	Dry	Unknown/Not Coded

Total No.		Fatal	Injury	PDO	Angle	Left Turn	Right Turn	Rear End	Side swipe	Ped/ Bike	
103		**1**	**68**	**34**	**18**	**0**	**0**	**66**	**0**	**2**	
		0.97%	*66.02%*	*33.01%*	*17.48%*	*0.00%*	*0.00%*	*64.08%*	*0.00%*	*1.94%*	
One Vehicle		Day	Night	Wet	Dry	Excess Speed	FTYRW	DUI			
7		**76**	**27**	**17**	**86**	**8**	**9**	**1**			
6.80%		*73.79%*	*26.21%*	*16.50%*	*83.50%*	*7.77%*	*8.74%*	*0.97%*			

TOTAL ENTERING VEHICLES/ADT: **46,325** SEGMENT CRASH RATE: **1.334**

FLORIDA DEPARTMENT OF TRANSPORTATION
CRASH SUMMARY

SECTION: 93001000 STATE ROUTE: 786
ROADWAY LIMITS: Florida's Turnpike to Lake Victoria Gardens Dr. M.P. 4.129 TO 6.789 ENGINEER: FDOT D4
STUDY PERIOD: FROM 1/ 13 TO 12/ 13 COUNTY: Palm Beach

No.	MILE POST	DATE	DAY	TIME	CRASH TYPE	FATAL	INJURY	PROP DAM	DAY / NIGHT	WET / DRY	CONTRIBUTING CAUSE
1	4.138	12/06/13	Fri	1900	Rear-End	0	1	0	Night	Dry	Careless Driving
2	4.148	07/18/13	Thu	1500	Rear-End	0	1	0	Day	Dry	Careless Driving
3	4.161	04/05/13	Fri	1600	Rear-End	0	0	1	Day	Wet	Exceeded Safe Speed Limit
4	4.167	04/30/13	Tue	0900	Rear-End	0	1	0	Day	Dry	Careless Driving
5	4.237	04/26/13	Fri	1900	Left-Turn	0	1	0	Day	Dry	Unknown/Not Coded
6	4.271	11/18/13	Mon	1700	Angle	0	2	0	Day	Dry	Failed To Yield Right-Of-Way
7	4.528	02/16/13	Sat	1800	Coll. W/ Bicycle	0	1	0	Day	Dry	Careless Driving
8	4.753	11/13/13	Wed	1000	Rear-End	0	1	0	Day	Wet	Exceeded Safe Speed Limit
9	4.765	01/22/13	Tue	1200	Rear-End	0	1	0	Day	Dry	Followed Too Closely
10	4.765	03/16/13	Sat	1700	Angle	0	3	0	Day	Dry	Disregarded Traffic Signal
11	4.765	05/08/13	Wed	2000	Angle	0	2	0	Night	Dry	Disregarded Traffic Signal
12	4.765	10/18/13	Fri	2100	Angle	0	1	0	Day	Dry	Disregarded Traffic Signal
13	4.771	01/08/13	Tue	0900	Coll. W/ Parked Car	0	1	0	Day	Wet	Careless Driving
14	4.784	09/03/13	Tue	1600	Rear-End	0	1	0	Day	Dry	Careless Driving
15	4.965	08/19/13	Mon	1000	Hit Other Fixed Object	0	0	1	Day	Dry	Careless Driving
16	5.524	03/07/13	Thu	1200	Rear-End	0	1	0	Day	Dry	Careless Driving
17	5.644	03/06/13	Wed	1300	Rear-End	0	0	1	Day	Dry	Careless Driving
18	5.673	09/27/13	Fri	1500	Rear-End	0	0	1	Day	Dry	Followed Too Closely
19	5.740	06/28/13	Fri	1600	Coll. W/ Pedestrian	0	1	0	Day	Dry	No Improper Driving/Act
20	5.750	01/12/13	Sat	1200	Rear-End	0	1	0	Day	Dry	Careless Driving
21	5.755	11/11/13	Mon	1800	Rear-End	0	2	0	Night	Dry	Careless Driving
22	5.759	01/04/13	Fri	1700	Rear-End	0	1	0	Day	Dry	Followed Too Closely
23	5.772	01/07/13	Mon	1900	Hit Other Fixed Object	0	1	0	Night	Wet	Careless Driving
24	5.774	04/03/13	Wed	1600	Rear-End	0	1	0	Day	Dry	Followed Too Closely
25	5.776	05/24/13	Fri	1700	Rear-End	0	1	0	Day	Dry	Careless Driving
26	5.778	02/27/13	Wed	0900	Rear-End	0	1	0	Day	Dry	Careless Driving
27	5.778	03/08/13	Fri	1100	Rear-End	0	0	1	Night	Dry	No Improper Driving/Act
28	5.778	04/08/13	Mon	1400	Angle	0	1	0	Day	Dry	Unknown/Not Coded
29	5.778	05/03/13	Fri	0500	Angle	0	2	0	Night	Wet	Disregarded Traffic Signal
30	5.778	06/15/13	Sat	1800	Rear-End	0	0	1	Day	Dry	Careless Driving
31	5.778	08/12/13	Mon	1100	Rear-End	0	0	1	Day	Dry	Careless Driving
32	5.781	10/31/13	Thu	1900	Rear-End	0	2	0	Night	Wet	Careless Driving
33	5.782	05/11/13	Sat	0000	Rear-End	0	1	0	Night	Dry	Unknown/Not Coded
34	5.783	01/23/13	Wed	1700	Rear-End	0	1	0	Day	Dry	Followed Too Closely
35	5.783	05/12/13	Sun	0000	Hit Other Fixed Object	0	1	0	Night	Wet	Careless Driving
36	5.797	06/26/13	Wed	1200	Rear-End	0	1	0	Day	Dry	Careless Driving
37	6.049	05/08/13	Wed	1800	Angle	0	0	1	Day	Dry	Disregarded Traffic Signal
38	6.049	07/06/13	Sat	0900	Rear-End	0	0	1	Day	Dry	No Improper Driving/Act
39	6.055	02/16/13	Sat	0700	Rear-End	0	0	1	Day	Dry	Careless Driving
40	6.084	03/25/13	Mon	1700	Rear-End	0	1	0	Night	Dry	Careless Driving
41	6.091	11/21/13	Thu	1700	Angle	0	0	1	Night	Wet	Failed To Yield Right-Of-Way
42	6.091	12/30/13	Mon	1700	Rear-End	0	0	1	Night	Dry	Careless Driving
43	6.116	01/10/13	Thu	0400	Hit Other Fixed Object	1	0	0	Night	Dry	Exceed Stated Speed Limit
44	6.125	01/11/13	Fri	1800	Rear-End	0	1	0	Night	Dry	Followed Too Closely
45	6.152	06/30/13	Sun	1900	Hit Other Fixed Object	0	0	1	Day	Wet	Careless Driving
46	6.157	11/08/13	Fri	1600	Angle	0	0	1	Day	Wet	Exceeded Safe Speed Limit
47	6.252	01/08/13	Tue	0700	Angle	0	1	0	Day	Wet	Unknown/Not Coded
48	6.252	04/29/13	Mon	2100	Angle	0	1	0	Night	Dry	Improper Turn
49	6.252	06/03/13	Mon	1400	Angle	0	0	1	Day	Wet	Failed To Yield Right-Of-Way
50	6.252	07/28/13	Sun	0300	Hit Other Fixed Object	0	0	1	Night	Dry	Unknown/Not Coded
51	6.252	07/30/13	Tue	0700	Angle	0	2	0	Day	Dry	No Improper Driving/Act
52	6.252	08/04/13	Sun	0800	Angle	0	3	0	Night	Dry	Failed To Yield Right-Of-Way
53	6.252	10/11/13	Fri	0400	Median Crossover	0	0	1	Night	Dry	Unknown/Not Coded
54	6.252	11/09/13	Sat	0300	Hit Other Fixed Object	0	1	0	Night	Wet	Careless Driving
55	6.252	11/27/13	Wed	1000	Angle	0	3	0	Day	Wet	Failed To Yield Right-Of-Way
56	6.588	01/28/13	Mon	1700	Rear-End	0	1	0	Day	Dry	Careless Driving
57	6.589	04/30/13	Tue	1300	Rear-End	0	0	1	Day	Wet	Careless Driving
58	6.606	12/23/13	Mon	1500	Rear-End	0	3	0	Day	Dry	Careless Driving
59	6.621	06/11/13	Tue	0800	Rear-End	0	2	0	Day	Dry	Careless Driving
60	6.625	02/12/13	Tue	1200	Rear-End	0	2	0	Day	Dry	Careless Driving
61	6.630	12/03/13	Tue	1800	Rear-End	0	3	0	Night	Dry	Careless Driving
62	6.663	01/31/13	Thu	0800	Rear-End	0	0	1	Day	Wet	Followed Too Closely
63	6.663	04/12/13	Fri	1400	Rear-End	0	0	1	Day	Wet	Unknown/Not Coded
64	6.663	04/18/13	Thu	1200	Concrete Barrier Wall	0	1	0	Day	Dry	Exceeded Safe Speed Limit
65	6.678	04/12/13	Fri	1500	Rear-End	0	0	1	Day	Wet	Unknown/Not Coded
66	6.678	09/18/13	Wed	0900	Rear-End	0	0	1	Day	Wet	Careless Driving
67	6.682	03/13/13	Wed	1400	Rear-End	0	1	0	Day	Dry	Careless Driving
68	6.682	04/05/13	Fri	2100	Rear-End	0	1	0	Night	Dry	Careless Driving
69	6.691	08/07/13	Wed	0800	Rear-End	0	1	0	Day	Wet	Careless Driving
70	6.692	02/16/13	Sat	1400	Rear-End	0	0	1	Day	Dry	Followed Too Closely
71	6.701	09/17/13	Tue	0900	Rear-End	0	0	1	Day	Wet	Careless Driving
72	6.701	11/13/13	Wed	1200	Rear-End	0	0	1	Day	Wet	No Improper Driving/Act
73	6.707	07/15/13	Mon	1700	Rear-End	0	3	0	Day	Wet	Careless Driving
74	6.720	07/13/13	Sat	1400	Rear-End	0	13	0	Day	Wet	Unknown/Not Coded

Appendix F - 2013 Crash Analysis

FLORIDA DEPARTMENT OF TRANSPORTATION
CRASH SUMMARY

SECTION: **93001000** STATE ROUTE: **786**
ROADWAY LIMITS: **Florida's Turnpike to Lake Victoria Gardens Dr.** M.P. **4.129** TO **6.789** ENGINEER: **FDOT D4**
STUDY PERIOD: FROM **1/ 13** TO **12/ 13** COUNTY: **Palm Beach**

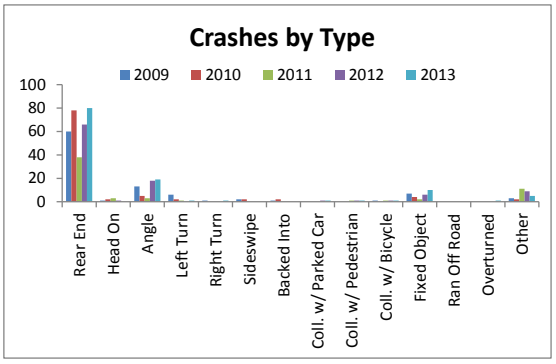
No.	MILE POST	DATE	DAY	TIME	CRASH TYPE	FATAL	INJURY	PROP DAM	DAY / NIGHT	WET / DRY	CONTRIBUTING CAUSE
75	6.730	11/24/13	Sun	1800	Rear-End	0	0	1	Night	Wet	Unknown/Not Coded
76	6.739	02/14/13	Thu	0900	Rear-End	0	1	0	Day	Wet	Exceeded Safe Speed Limit
77	6.739	03/22/13	Fri	1100	Angle	0	0	1	Day	Dry	Careless Driving
78	6.739	11/27/13	Wed	2300	Rear-End	0	2	0	Night	Dry	Careless Driving
79	6.749	07/09/13	Tue	2100	Rear-End	0	2	0	Day	Dry	Followed Too Closely
80	6.749	11/14/13	Thu	1800	Rear-End	0	2	0	Night	Dry	No Improper Driving/Act
81	6.752	01/15/13	Tue	1800	Rear-End	0	1	0	Night	Dry	Careless Driving
82	6.752	09/12/13	Thu	0900	Overturned	0	4	0	Day	Dry	Careless Driving
83	6.756	07/18/13	Thu	1700	Angle	0	0	1	Day	Dry	Careless Driving
84	6.758	01/26/13	Sat	1900	Rear-End	0	2	0	Night	Dry	No Improper Driving/Act
85	6.758	03/13/13	Wed	1700	Angle	0	2	0	Day	Dry	Disregarded Traffic Signal
86	6.758	04/02/13	Tue	2000	Rear-End	0	1	0	Night	Dry	Careless Driving
87	6.758	09/30/13	Mon	0900	Rear-End	0	2	0	Day	Dry	Careless Driving
88	6.762	01/30/13	Wed	1400	Rear-End	0	1	0	Day	Dry	Followed Too Closely
89	6.764	12/30/13	Mon	1700	Coll. W/ Mv On Roadway	0	0	1	Night	Dry	Unknown/Not Coded
90	6.767	02/12/13	Tue	1700	Rear-End	0	1	0	Day	Dry	Careless Driving
91	6.767	09/28/13	Sat	1800	Rear-End	0	0	1	Night	Wet	Exceeded Safe Speed Limit
92	6.786	01/03/13	Thu	1500	Rear-End	0	0	1	Day	Dry	Careless Driving
93	11.066	06/28/13	Fri	1000	Right-Turn	0	1	0	Unknown	Unknown	Careless Driving
94	11.068	07/08/13	Mon	0800	Rear-End	0	1	0	Day	Dry	No Improper Driving/Act
95	11.070	03/03/13	Sun	1200	Rear-End	0	1	0	Day	Dry	Careless Driving
96	11.070	07/05/13	Fri	1700	Rear-End	0	0	1	Day	Dry	Careless Driving
97	11.070	07/09/13	Tue	0000	Rear-End	0	0	1	Night	Dry	Careless Driving
98	11.070	10/21/13	Mon	2200	Rear-End	0	1	0	Night	Dry	Careless Driving
99	11.070	11/08/13	Fri	1800	Rear-End	0	1	0	Night	Wet	Followed Too Closely
100	11.070	12/22/13	Sun	2200	Angle	0	1	0	Night	Dry	Failed To Yield Right-Of-Way
101	0.194	09/24/13	Tue	1300	Rear-End	0	1	0	Day	Wet	Careless Driving
102	0.204	07/16/13	Tue	1200	Rear-End	0	0	1	Day	Wet	Failed To Yield Right-Of-Way
103	0.213	06/06/13	Thu	2100	Rear-End	0	1	0	Night	Wet	Careless Driving
104	0.213	08/03/13	Sat	2100	All Other	0	1	0	Night	Wet	Unknown/Not Coded
105	0.223	07/16/13	Tue	1700	Rear-End	0	0	1	Day	Dry	Careless Driving
106	0.223	08/02/13	Fri	2000	Hit Other Fixed Object	0	0	1	Night	Wet	Unknown/Not Coded
107	0.223	10/09/13	Wed	1700	Rear-End	0	0	1	Day	Dry	Exceeded Safe Speed Limit
108	0.226	10/02/13	Wed	0900	Rear-End	0	1	0	Day	Dry	Unknown/Not Coded
109	0.227	02/02/13	Sat	1300	Rear-End	0	0	1	Day	Dry	Unknown/Not Coded
110	0.227	07/11/13	Thu	1800	Rear-End	0	4	0	Day	Dry	Careless Driving
111	0.227	10/11/13	Fri	1900	All Other	0	0	1	Night	Dry	Unknown/Not Coded
112	0.230	08/02/13	Fri	1700	All Other	0	1	0	Day	Wet	Unknown/Not Coded
113	0.230	12/17/13	Tue	0800	Rear-End	0	0	1	Day	Dry	Exceeded Safe Speed Limit
114	0.231	09/09/13	Mon	1300	Rear-End	0	1	0	Day	Dry	Careless Driving
115	0.232	01/08/13	Tue	0700	Rear-End	0	0	1	Day	Wet	Exceeded Safe Speed Limit
116	0.232	01/11/13	Fri	0800	Rear-End	0	1	0	Day	Wet	Exceeded Safe Speed Limit
117	0.232	03/19/13	Tue	1600	Rear-End	0	0	1	Day	Dry	No Improper Driving/Act
118	0.100	11/13/13	Wed	1100	Hit Guardrail	0	0	1	Day	Wet	Exceeded Safe Speed Limit
119	0.217	07/17/13	Wed	1500	Rear-End	0	0	1	Day	Wet	No Improper Driving/Act
120	0.000	07/30/13	Tue	1700	Rear-End	0	1	0	Day	Dry	Followed Too Closely

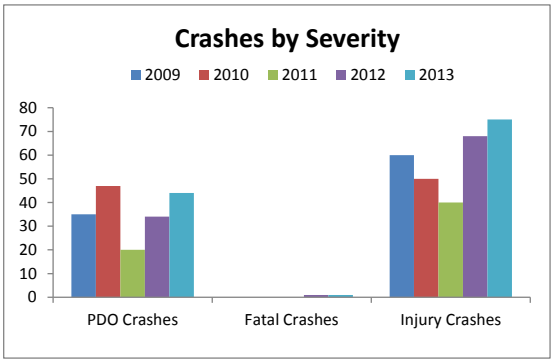
Total No.		Fatal	Injury	PDO	Angle	Left Turn	Right Turn	Rear End	Side swipe	Ped/ Bike	
120		**1**	**75**	**44**	**19**	**1**	**1**	**80**	**0**	**2**	
		0.83%	*62.50%*	*36.67%*	*15.83%*	*0.83%*	*0.83%*	*66.67%*	*0.00%*	*1.67%*	
One Vehicle		Day	Night	Wet	Dry	Excess Speed	FTYRW	DUI			
13		**82**	**37**	**38**	**81**	**12**	**7**	**0**			
10.83%		*68.33%*	*30.83%*	*31.67%*	*67.50%*	*10.00%*	*5.83%*	*0.00%*			

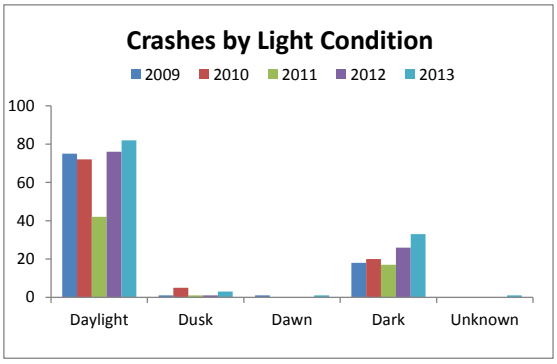
TOTAL ENTERING VEHICLES/ADT: **46,325** SEGMENT CRASH RATE: **1.334**

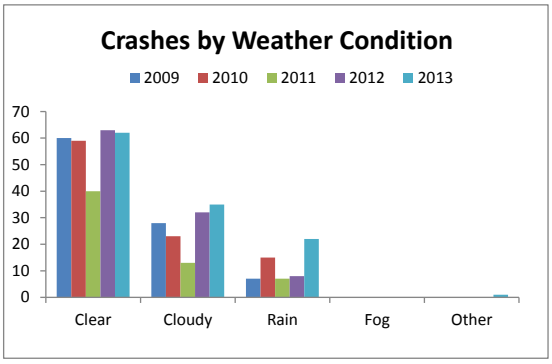
CRASH HISTOGRAMS

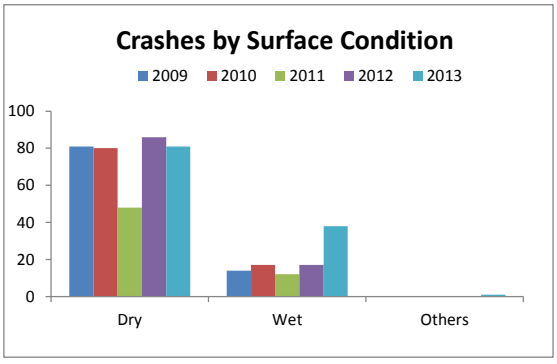
SR 786/PGABlvd

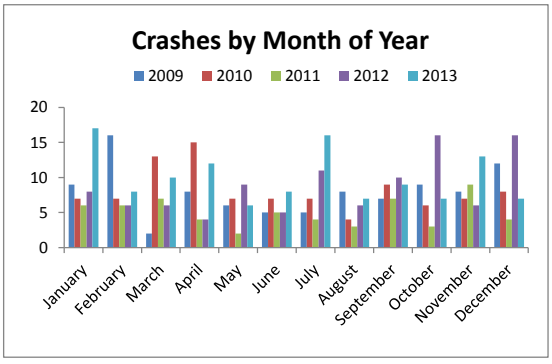


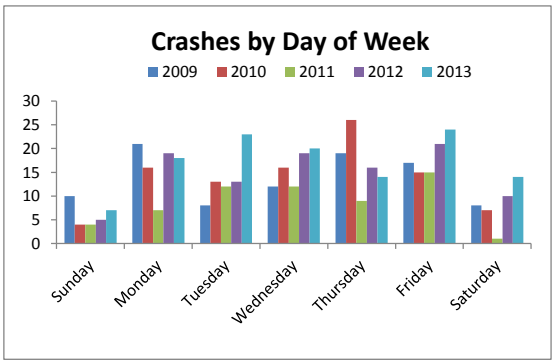


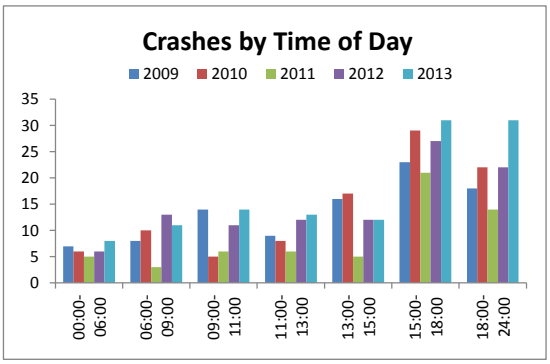












I-95

CORRIDOR

FROM: NORTHLAKE BOULEVARD

TO: DONALD ROSS ROAD

CRASH STATISTICS

SR 9/I-95: Northlake Blvd to Donald Ross Rd		Number of Crashes Year					5 Year Total Crashes	Mean Crashes Per Year	%
		2009	2010	2011	2012	2013			
CRASH TYPE	Rear End	42	73	55	19	30	219	43.80	25.9%
	Head On	2	4	0	2	0	8	1.60	0.9%
	Angle	10	9	7	4	8	38	7.60	4.5%
	Left Turn	0	1	0	0	0	1	0.20	0.1%
	Right Turn	0	0	0	0	0	0	0.00	0.0%
	Sideswipe	33	43	0	0	0	76	15.20	9.0%
	Backed Into	0	0	0	0	0	0	0.00	0.0%
	Coll. w/ Parked Car	0	2	3	1	0	6	1.20	0.7%
	Coll. w/ Pedestrian	0	0	1	1	1	3	0.60	0.4%
	Coll. w/ Bicycle	0	0	0	0	0	0	0.00	0.0%
	Fixed Object	26	56	34	38	53	207	41.40	24.4%
	Ran Off Road	2	3	0	0	1	6	1.20	0.7%
	Overturned	4	2	2	2	1	11	2.20	1.3%
	Other	28	41	68	56	79	272	54.40	32.1%
	Total Crashes	**147**	**234**	**170**	**123**	**173**	**847**	**169.40**	**100.0%**
SEVERITY	PDO Crashes	84	131	95	62	105	477	95.40	56.3%
	Fatal Crashes	1	0	2	4	1	8	1.60	0.9%
	Injury Crashes	62	103	73	57	67	362	72.40	42.7%
LIGHTING CONDITIONS	Daylight	86	150	105	79	117	537	107.40	63.4%
	Dusk	8	9	13	6	14	50	10.00	5.9%
	Dawn	0	4	3	4	5	16	3.20	1.9%
	Dark	53	71	49	34	37	244	48.80	28.8%
	Unknown	0	0	0	0	0	0	0.00	0.0%
SURFACE CONDITIONS	Dry	131	172	121	85	113	622	124.40	73.4%
	Wet	15	61	49	38	60	223	44.60	26.3%
	Others	1	1	0	0	0	2	0.40	0.2%
MONTH OF YEAR	January	13	16	16	13	4	62	12.40	7.3%
	February	8	25	15	4	11	63	12.60	7.4%
	March	12	25	12	12	20	81	16.20	9.6%
	April	9	19	11	6	12	57	11.40	6.7%
	May	13	32	7	5	17	74	14.80	8.7%
	June	14	13	9	15	12	63	12.60	7.4%
	July	11	17	23	15	20	86	17.20	10.2%
	August	16	19	19	9	11	74	14.80	8.7%
	September	4	13	10	15	18	60	12.00	7.1%
	October	13	11	16	9	14	63	12.60	7.4%
	November	22	26	16	13	16	93	18.60	11.0%
	December	12	18	16	7	18	71	14.20	8.4%
DAY OF WEEK	Sunday	13	34	18	18	24	107	21.40	12.6%
	Monday	28	32	28	19	26	133	26.60	15.7%
	Tuesday	23	33	22	15	34	127	25.40	15.0%
	Wednesday	21	25	27	13	29	115	23.00	13.6%
	Thursday	32	40	27	19	22	140	28.00	16.5%
	Friday	13	46	24	20	21	124	24.80	14.6%
	Saturday	17	24	24	19	17	101	20.20	11.9%
HOUR OF DAY	00:00-06:00	21	27	16	16	21	101	20.20	11.9%
	06:00-09:00	22	26	17	16	27	108	21.60	12.8%
	09:00-11:00	8	15	9	8	8	48	9.60	5.7%
	11:00-13:00	11	9	10	16	23	69	13.80	8.1%
	13:00-15:00	17	23	24	16	20	100	20.00	11.8%
	15:00-18:00	39	75	47	27	40	228	45.60	26.9%
	18:00-24:00	29	59	47	24	34	193	38.60	22.8%

Notes:

1) Collision with Bicycle Crashes include Collision with Bicycle/Collision with Bicycle in Bike Lane (Codes 11 and 12).
2) Fixed Object Crashes include collisions with sign/sign post, utility/light pole, guardrail, fence, concrete barrier wall, bridge, pier, abutment, rail, tree, shrubbery, construction barricade/sign, traffic gate, crash attenuators, other fixed objects (incl. above road).
3) Ran-off-Road Crashes include Ran in Ditch/Culvert and Ran off road into water (Codes 29 and 30).
4) Other crashes include crashes not categorized as the crash types shown in the table.
5) Dark Crashes include both scenarios - with and without street lighting.

FLORIDA DEPARTMENT OF TRANSPORTATION
CRASH SUMMARY

SECTION: 93220000 STATE ROUTE: 9
ROADWAY LIMITS: SR 9/I-95: Northlake Blvd to Donald Ross Rd M.P. 34.056 TO 40.837 ENGINEER: FDOT D4
STUDY PERIOD: FROM 1/ 09 TO 12/ 09 COUNTY: Palm Beach

No.	MILE POST	DATE	DAY	TIME	CRASH TYPE	FATAL	INJURY	PROP DAM	DAY / NIGHT	WET / DRY	CONTRIBUTING CAUSE
1	34.156	08/11/09	Tue	1700	Coll. W/Mvble Obj On Road	0	0	1	Day	Dry	No Improper Driving/Act
2	34.245	06/13/09	Sat	0400	Rear-End	0	0	1	Night	Dry	Careless Driving
3	34.285	07/29/09	Wed	0000	Sideswipe	0	0	1	Night	Dry	Careless Driving
4	34.285	11/03/09	Tue	1500	Cargo Loss Or Shift	0	0	1	Day	Dry	Improper Load
5	34.308	05/12/09	Tue	1400	Rear-End	0	1	0	Day	Dry	Unknown/Not Coded
6	34.346	01/02/09	Fri	1200	Rear-End	0	0	1	Day	Dry	Followed Too Closely
7	34.435	04/23/09	Thu	1700	Concrete Barrier Wall	0	1	0	Day	Dry	Unknown/Not Coded
8	34.440	01/06/09	Tue	1900	Rear-End	0	0	1	Night	Dry	Careless Driving
9	34.440	11/25/09	Wed	2000	Concrete Barrier Wall	0	0	1	Night	Slippery	Careless Driving
10	34.516	02/23/09	Mon	1600	Sideswipe	0	0	1	Day	Dry	Careless Driving
11	34.535	08/11/09	Tue	1600	Coll. W/Mvble Obj On Road	0	0	1	Day	Dry	No Improper Driving/Act
12	34.574	11/15/09	Sun	1600	Sideswipe	0	0	1	Day	Dry	Careless Driving
13	34.583	11/13/09	Fri	1700	Rear-End	0	1	0	Night	Dry	Careless Driving
14	34.631	03/12/09	Thu	1400	Rear-End	0	0	1	Day	Dry	Improper Backing
15	34.669	06/08/09	Mon	0100	Rear-End	0	2	0	Night	Wet	Careless Driving
16	34.824	10/27/09	Tue	1700	Concrete Barrier Wall	0	1	0	Night	Dry	No Improper Driving/Act
17	34.858	06/04/09	Thu	2300	Rear-End	0	0	1	Night	Dry	Careless Driving
18	34.858	11/15/09	Sun	1000	Concrete Barrier Wall	0	2	0	Day	Dry	No Improper Driving/Act
19	34.953	05/11/09	Mon	1600	Sideswipe	0	0	1	Day	Dry	Improper Lane Change
20	34.974	12/23/09	Wed	0900	Concrete Barrier Wall	0	1	0	Day	Dry	Careless Driving
21	35.005	08/31/09	Mon	1400	Rear-End	0	0	1	Day	Dry	Followed Too Closely
22	35.013	08/04/09	Tue	1600	Rear-End	0	1	0	Day	Dry	Careless Driving
23	35.047	02/12/09	Thu	1900	Concrete Barrier Wall	0	1	0	Night	Dry	No Improper Driving/Act
24	35.056	10/21/09	Wed	2000	Utility/Light Pole	0	0	1	Night	Wet	Careless Driving
25	35.074	02/12/09	Thu	2000	Sideswipe	0	0	1	Night	Dry	Followed Too Closely
26	35.074	06/09/09	Tue	0300	Concrete Barrier Wall	0	0	1	Night	Dry	Disregarded Traffic Signal
27	35.074	08/22/09	Sat	0900	Angle	0	3	0	Day	Dry	Careless Driving
28	35.231	10/24/09	Sat	1900	Head-On	0	2	0	Night	Dry	Careless Driving
29	35.231	10/24/09	Sat	2000	Sideswipe	0	0	1	Night	Dry	Improper Lane Change
30	35.518	03/17/09	Tue	2300	Hit Other Fixed Object	0	1	0	Night	Dry	Unknown/Not Coded
31	35.574	02/06/09	Fri	1700	Sideswipe	0	0	1	Night	Dry	Improper Lane Change
32	35.574	03/28/09	Sat	1300	Coll. W/Mvble Obj On Road	0	0	1	Day	Dry	Failed To Maintain Equipment
33	35.574	05/01/09	Fri	0800	Sideswipe	0	1	0	Day	Dry	Unknown/Not Coded
34	35.574	08/30/09	Sun	1200	All Other	0	0	1	Day	Dry	Unknown/Not Coded
35	35.731	01/08/09	Thu	1100	Sideswipe	0	0	1	Day	Dry	Improper Lane Change
36	35.731	03/14/09	Sat	1700	Rear-End	0	0	1	Day	Dry	Failed To Maintain Equipment
37	35.731	05/01/09	Fri	1300	Concrete Barrier Wall	0	0	1	Day	Dry	Unknown/Not Coded
38	35.731	07/27/09	Mon	1700	All Other	0	0	1	Day	Dry	Improper Lane Change
39	35.731	08/17/09	Mon	1600	Angle	0	0	1	Day	Dry	Improper Lane Change
40	35.731	11/05/09	Thu	1800	Rear-End	0	1	0	Night	Wet	Unknown/Not Coded
41	35.731	12/21/09	Mon	1900	Concrete Barrier Wall	0	2	0	Night	Dry	Careless Driving
42	35.902	08/18/09	Tue	1200	Sideswipe	0	0	1	Day	Dry	Improper Lane Change
43	36.163	04/11/09	Sat	1700	Sideswipe	0	0	1	Day	Dry	Improper Lane Change
44	36.163	11/18/09	Wed	1700	Rear-End	0	0	1	Night	Dry	Careless Driving
45	36.163	11/25/09	Wed	1700	Angle	0	0	1	Night	Dry	Improper Lane Change
46	36.231	01/31/09	Sat	1600	Sideswipe	0	2	0	Day	Dry	Unknown/Not Coded
47	36.231	05/17/09	Sun	0100	All Other	0	2	0	Night	Dry	Alchol-Under Influence
48	36.231	08/05/09	Wed	1700	All Other	0	2	0	Day	Dry	Fleeing Police
49	36.231	11/12/09	Thu	1100	All Other	0	0	1	Day	Dry	Unknown/Not Coded
50	36.231	12/03/09	Thu	1700	Rear-End	0	0	1	Night	Dry	Careless Driving
51	36.231	12/17/09	Thu	1000	Sideswipe	0	0	1	Day	Wet	Improper Lane Change
52	36.447	07/08/09	Wed	1800	Rear-End	0	0	1	Day	Wet	Unknown/Not Coded
53	36.481	03/31/09	Tue	0600	Sideswipe	0	0	1	Night	Dry	Improper Lane Change
54	36.481	04/18/09	Sat	1900	Angle	0	7	0	Day	Dry	Improper Lane Change
55	36.481	10/19/09	Mon	1600	Coll. W/Mvble Obj On Road	0	0	1	Day	Dry	No Improper Driving/Act
56	36.481	11/03/09	Tue	1700	Rear-End	0	2	0	Night	Dry	Unknown/Not Coded
57	36.481	11/04/09	Wed	1700	Rear-End	0	0	1	Night	Dry	Unknown/Not Coded
58	36.504	01/01/09	Thu	1300	Sideswipe	0	0	1	Day	Dry	Improper Lane Change
59	36.523	08/24/09	Mon	0700	Rear-End	0	1	0	Day	Dry	Careless Driving
60	36.542	01/22/09	Thu	0700	Concrete Barrier Wall	0	1	0	Day	Dry	Unknown/Not Coded
61	36.542	05/18/09	Mon	2300	Sideswipe	0	0	1	Night	Wet	Improper Lane Change
62	36.542	10/12/09	Mon	1900	Concrete Barrier Wall	0	0	1	Night	Dry	Unknown/Not Coded
63	36.542	11/13/09	Fri	1400	Sideswipe	0	0	1	Day	Dry	Improper Lane Change
64	36.542	11/25/09	Wed	0800	Rear-End	0	1	0	Day	Wet	Improper Lane Change
65	36.636	11/13/09	Fri	1600	Angle	0	0	1	Night	Dry	Drove Left Of Center
66	36.636	11/17/09	Tue	0600	Rear-End	0	1	0	Day	Dry	Unknown/Not Coded
67	36.703	04/14/09	Tue	0700	Rear-End	0	3	0	Day	Dry	Failed To Maintain Equipment
68	36.703	07/17/09	Fri	1600	Sideswipe	0	0	1	Day	Wet	Drove Left Of Center
69	36.783	11/05/09	Thu	0800	Rear-End	0	0	1	Day	Dry	Exceeded Safe Speed Limit
70	36.878	10/30/09	Fri	0700	Concrete Barrier Wall	0	1	0	Day	Dry	Unknown/Not Coded
71	36.916	10/20/09	Tue	1400	Concrete Barrier Wall	0	1	0	Day	Dry	Failed To Maintain Equipment
72	36.972	05/14/09	Thu	1100	All Other	0	4	0	Day	Dry	Obstructing Traffic
73	36.972	07/20/09	Mon	1400	All Other	0	1	0	Day	Wet	Improper Lane Change
74	37.031	09/14/09	Mon	0700	All Other	0	0	1	Day	Dry	Improper Lane Change

FLORIDA DEPARTMENT OF TRANSPORTATION
CRASH SUMMARY

SECTION: 93220000 STATE ROUTE: 9
ROADWAY LIMITS: SR 9/I-95: Northlake Blvd to Donald Ross Rd M.P. 34.056 TO 40.837 ENGINEER: FDOT D4
STUDY PERIOD: FROM 1/ 09 TO 12/ 09 COUNTY: Palm Beach

No.	MILE POST	DATE	DAY	TIME	CRASH TYPE	FATAL	INJURY	PROP DAM	DAY / NIGHT	WET / DRY	CONTRIBUTING CAUSE
75	37.033	10/05/09	Mon	1400	Rear-End	0	0	1	Day	Dry	Unknown/Not Coded
76	37.256	11/14/09	Sat	1100	Rear-End	0	3	0	Day	Dry	Careless Driving
77	37.283	07/21/09	Tue	2300	Concrete Barrier Wall	0	1	0	Night	Dry	Unknown/Not Coded
78	37.283	11/17/09	Tue	1600	Sideswipe	0	0	1	Day	Dry	Improper Lane Change
79	37.321	05/14/09	Thu	1100	Rear-End	0	1	0	Day	Dry	Unknown/Not Coded
80	37.783	02/25/09	Wed	2300	Rear-End	0	1	0	Night	Dry	Improper Lane Change
81	37.783	12/20/09	Sun	0800	Ran Off Rd Into Water	0	1	0	Day	Dry	Unknown/Not Coded
82	38.094	05/29/09	Fri	1500	Overturned	0	3	0	Day	Wet	Unknown/Not Coded
83	38.141	01/05/09	Mon	0800	Cargo Loss Or Shift	0	0	1	Day	Dry	Improper Load
84	38.206	01/01/09	Thu	0300	Sideswipe	0	0	1	Night	Dry	Improper Lane Change
85	38.206	06/06/09	Sat	1100	Coll. W/Mvble Obj On Road	0	0	1	Day	Dry	No Improper Driving/Act
86	38.206	06/29/09	Mon	0900	All Other	0	0	1	Day	Dry	Improper Lane Change
87	38.214	12/24/09	Thu	0200	Rear-End	0	3	0	Night	Dry	Careless Driving
88	38.777	11/05/09	Thu	0200	Overturned	0	1	0	Night	Wet	Careless Driving
89	38.928	07/16/09	Thu	1300	All Other	0	0	1	Day	Dry	Improper Lane Change
90	39.141	01/24/09	Sat	2300	Sideswipe	0	0	1	Night	Dry	Unknown/Not Coded
91	39.141	03/22/09	Sun	1900	Sideswipe	0	0	1	Night	Dry	Improper Lane Change
92	39.141	03/29/09	Sun	0000	Coll. W/Crash Attenuators	0	0	1	Night	Dry	Unknown/Not Coded
93	39.141	04/19/09	Sun	0500	Ran In Ditch/Culvert	0	0	1	Night	Dry	Failed To Maintain Equipment
94	39.141	06/10/09	Wed	1700	Sideswipe	0	0	1	Day	Dry	Improper Lane Change
95	39.141	06/25/09	Thu	1400	Sideswipe	0	0	1	Day	Dry	Improper Lane Change
96	39.141	07/26/09	Sun	0800	All Other	0	0	1	Day	Dry	Improper Lane Change
97	39.141	08/01/09	Sat	0000	Coll. W/Mvble Obj On Road	0	0	1	Night	Dry	Careless Driving
98	39.141	08/18/09	Tue	1600	Sideswipe	0	0	1	Day	Dry	Improper Lane Change
99	39.141	09/30/09	Wed	1300	Sideswipe	0	0	1	Day	Dry	Improper Lane Change
100	39.141	10/07/09	Wed	0900	Angle	0	0	1	Day	Dry	Failed To Yield Right-Of-Way
101	39.141	10/29/09	Thu	0700	Rear-End	0	1	0	Day	Dry	Followed Too Closely
102	39.141	12/13/09	Sun	0800	Sideswipe	0	1	0	Day	Dry	Improper Lane Change
103	39.141	12/14/09	Mon	0800	Rear-End	0	0	1	Day	Dry	Followed Too Closely
104	39.573	03/18/09	Wed	2100	Rear-End	0	0	1	Night	Dry	Careless Driving
105	39.573	06/10/09	Wed	1700	All Other	0	1	0	Day	Dry	Improper Lane Change
106	39.641	01/28/09	Wed	1600	Angle	0	0	1	Day	Dry	Improper Lane Change
107	39.641	02/02/09	Mon	1500	All Other	0	0	1	Day	Dry	Improper Lane Change
108	39.641	06/29/09	Mon	1700	Overturned	0	1	0	Day	Wet	Unknown/Not Coded
109	39.668	04/14/09	Tue	1900	Hit Guardrail	0	3	0	Night	Dry	Careless Driving
110	39.668	04/29/09	Wed	2200	All Other	0	1	0	Night	Dry	Unknown/Not Coded
111	39.668	05/16/09	Sat	0100	Rear-End	0	3	0	Night	Dry	Alchol-Under Influence
112	39.812	07/16/09	Thu	0100	Rear-End	0	1	0	Night	Dry	Careless Driving
113	40.016	03/27/09	Fri	1200	Sideswipe	0	0	1	Day	Dry	Failed To Yield Right-Of-Way
114	40.077	01/16/09	Fri	0700	All Other	0	1	0	Day	Dry	Unknown/Not Coded
115	40.134	08/17/09	Mon	0800	Rear-End	0	0	1	Day	Dry	Careless Driving
116	40.172	04/18/09	Sat	0000	Construction Barricade/Sign	0	0	1	Night	Dry	Alchol-Under Influence
117	40.172	05/15/09	Fri	1600	Angle	0	1	0	Day	Dry	Careless Driving
118	40.172	08/06/09	Thu	2200	Angle	0	1	0	Night	Dry	Failed To Yield Right-Of-Way
119	40.172	11/30/09	Mon	1700	Rear-End	0	0	1	Night	Dry	Careless Driving
120	40.172	12/10/09	Thu	2300	Concrete Barrier Wall	0	0	1	Night	Dry	Unknown/Not Coded
121	40.247	03/02/09	Mon	2300	Utility/Light Pole	0	1	0	Night	Dry	Unknown/Not Coded
122	40.261	10/22/09	Thu	0700	Construction Barricade/Sign	0	0	1	Day	Wet	Careless Driving
123	40.266	02/17/09	Tue	1800	Rear-End	0	0	1	Night	Dry	Unknown/Not Coded
124	40.266	09/15/09	Tue	0900	Sideswipe	0	0	1	Day	Dry	Improper Lane Change
125	40.304	04/26/09	Sun	0600	Hit Guardrail	0	1	0	Day	Dry	Careless Driving
126	40.304	08/17/09	Mon	0600	Overturned	0	1	0	Night	Wet	No Improper Driving/Act
127	40.304	11/07/09	Sat	2300	Sideswipe	0	0	1	Night	Dry	Improper Lane Change
128	40.323	12/01/09	Tue	1700	All Other	0	0	1	Night	Dry	No Improper Driving/Act
129	40.352	02/09/09	Mon	0500	Rear-End	0	2	0	Night	Dry	Unknown/Not Coded
130	40.352	06/15/09	Mon	0000	All Other	0	3	0	Night	Dry	Unknown/Not Coded
131	40.359	05/14/09	Thu	0900	Sideswipe	0	1	0	Day	Dry	Improper Lane Change
132	40.360	01/29/09	Thu	0700	Rear-End	0	1	0	Day	Dry	No Improper Driving/Act
133	40.360	10/11/09	Sun	1700	Construction Barricade/Sign	0	1	0	Day	Dry	Careless Driving
134	40.371	12/10/09	Thu	1200	All Other	0	0	1	Day	Dry	No Improper Driving/Act
135	40.392	11/26/09	Thu	0000	Rear-End	0	1	0	Night	Wet	Alc & Drugs-Under Infl
136	40.420	03/30/09	Mon	1500	Sideswipe	0	0	1	Day	Dry	Unknown/Not Coded
137	40.420	06/15/09	Mon	0000	Angle	0	2	0	Night	Dry	Unknown/Not Coded
138	40.420	06/15/09	Mon	0000	Head-On	0	5	0	Night	Dry	Unknown/Not Coded
139	40.421	08/30/09	Sun	1300	Rear-End	0	4	0	Day	Dry	Careless Driving
140	40.421	09/22/09	Tue	1400	Construction Barricade/Sign	0	0	1	Day	Dry	Improper Lane Change
141	40.439	03/05/09	Thu	2200	Rear-End	0	0	1	Night	Dry	Unknown/Not Coded
142	40.671	01/03/09	Sat	1700	Rear-End	0	0	1	Day	Dry	Careless Driving
143	40.671	07/22/09	Wed	1300	Construction Barricade/Sign	0	1	0	Day	Dry	Driver Distraction
144	40.671	07/23/09	Thu	0200	All Other	0	1	0	Night	Dry	Unknown/Not Coded
145	40.671	12/23/09	Wed	1300	Sideswipe	0	0	1	Day	Dry	Improper Lane Change
146	40.771	05/13/09	Wed	0100	Coll. W/ Mv On Roadway	1	1	0	Night	Dry	Drugs-Under Influence
147	40.774	06/18/09	Thu	2100	Rear-End	0	0	1	Night	Dry	Careless Driving

FLORIDA DEPARTMENT OF TRANSPORTATION
CRASH SUMMARY

SECTION:	93220000			STATE ROUTE:	9
ROADWAY LIMITS:	SR 9/I-95: Northlake Blvd to Donald Ross Rd	M.P. 34.056	TO 40.837	ENGINEER:	FDOT D4
STUDY PERIOD:	FROM 1/ 09	TO 12/ 09		COUNTY:	Palm Beach

No.	MILE POST	DATE	DAY	TIME	CRASH TYPE	FATAL	INJURY	PROP DAM	DAY / NIGHT	WET / DRY	CONTRIBUTING CAUSE
Total No.		Fatal	Injury	PDO	Angle	Left Turn	Right Turn	Rear End	Side swipe	Ped/ Bike	
147		**1**	**62**	**84**	**10**	**0**	**0**	**42**	**33**	**0**	
		0.68%	*42.18%*	*57.14%*	*6.80%*	*0.00%*	*0.00%*	*28.57%*	*22.45%*	*0.00%*	
One Vehicle		Day	Night	Wet	Dry	Excess Speed	FTYRW	DUI			
32		**86**	**61**	**15**	**131**	**1**	**3**	**13**			
21.77%		*58.50%*	*41.50%*	*10.20%*	*89.12%*	*0.68%*	*2.04%*	*8.84%*			

TOTAL ENTERING VEHICLES/ADT: **108,372**

SEGMENT CRASH RATE: **0.548**

Appendix F - 2013 Crash Analysis

FLORIDA DEPARTMENT OF TRANSPORTATION
CRASH SUMMARY

SECTION: 93220000 STATE ROUTE: 9
ROADWAY LIMITS: SR 9/I-95: Northlake Blvd to Donald Ross Rd M.P. 34.056 TO 40.837 ENGINEER: FDOT D4
STUDY PERIOD: FROM 1/ 10 TO 12/ 10 COUNTY: Palm Beach

No.	MILE POST	DATE	DAY	TIME	CRASH TYPE	FATAL	INJURY	PROP DAM	DAY / NIGHT	WET / DRY	CONTRIBUTING CAUSE
1	34.156	08/10/10	Tue	1700	Rear-End	0	0	1	Day	Wet	Careless Driving
2	34.285	03/04/10	Thu	1700	Rear-End	0	0	1	Day	Dry	Unknown/Not Coded
3	34.285	03/25/10	Thu	1800	Coll. W/Mvble Obj On Road	0	1	0	Day	Dry	No Improper Driving/Act
4	34.285	05/02/10	Sun	1500	All Other	0	1	0	Day	Dry	Improper Lane Change
5	34.322	03/25/10	Thu	1700	Cargo Loss Or Shift	0	0	1	Day	Dry	Improper Load
6	34.335	12/19/10	Sun	2000	Cargo Loss Or Shift	0	0	1	Night	Dry	Unknown/Not Coded
7	34.346	01/21/10	Thu	1200	Coll. W/Mvble Obj On Road	0	0	1	Day	Dry	No Improper Driving/Act
8	34.365	08/31/10	Tue	1800	Sideswipe	0	1	0	Day	Dry	Driver Distraction
9	34.383	09/14/10	Tue	0800	Rear-End	0	0	1	Day	Wet	Unknown/Not Coded
10	34.393	03/25/10	Thu	1700	Coll. W/Mvble Obj On Road	0	0	1	Day	Dry	Unknown/Not Coded
11	34.435	04/03/10	Sat	1900	Rear-End	0	0	1	Night	Dry	Improper Lane Change
12	34.435	04/30/10	Fri	1700	Concrete Barrier Wall	0	0	1	Day	Dry	Alc & Drugs-Under Infl
13	34.435	05/06/10	Thu	1700	Sideswipe	0	1	0	Day	Wet	Failed To Yield Right-Of-Way
14	34.435	05/07/10	Fri	0800	Rear-End	0	1	0	Day	Dry	Improper Lane Change
15	34.435	05/11/10	Tue	1300	Rear-End	0	0	1	Day	Dry	Careless Driving
16	34.435	12/03/10	Fri	1600	Rear-End	0	0	1	Day	Dry	Careless Driving
17	34.440	06/04/10	Fri	0100	All Other	0	1	0	Night	Wet	Unknown/Not Coded
18	34.497	07/11/10	Sun	1000	Angle	0	1	0	Day	Dry	Unknown/Not Coded
19	34.516	09/24/10	Fri	0700	Concrete Barrier Wall	0	0	1	Day	Dry	Careless Driving
20	34.530	08/29/10	Sun	2000	Concrete Barrier Wall	0	1	0	Night	Wet	Exceeded Safe Speed Limit
21	34.534	03/19/10	Fri	0700	Concrete Barrier Wall	0	2	0	Day	Dry	Improper Lane Change
22	34.570	01/11/10	Mon	1600	Rear-End	0	1	0	Day	Dry	Careless Driving
23	34.574	06/18/10	Fri	1200	Cargo Loss Or Shift	0	1	0	Day	Dry	Improper Load
24	34.574	08/29/10	Sun	0200	Rear-End	0	1	0	Night	Dry	Unknown/Not Coded
25	34.574	10/23/10	Sat	1700	Left-Turn	0	0	1	Day	Dry	Disregarded Traffic Signal
26	34.631	07/08/10	Thu	0800	Rear-End	0	1	0	Day	Dry	Careless Driving
27	34.674	05/06/10	Thu	1700	Sideswipe	0	0	1	Day	Wet	Failed To Yield Right-Of-Way
28	34.674	06/18/10	Fri	2100	Rear-End	0	1	0	Night	Dry	Careless Driving
29	34.674	11/27/10	Sat	2100	Sideswipe	0	1	0	Night	Dry	Careless Driving
30	34.674	12/11/10	Sat	1700	Coll. W/ Mv On Roadway	0	0	1	Night	Dry	Careless Driving
31	34.726	01/25/10	Mon	0800	Sideswipe	0	1	0	Day	Dry	Improper Lane Change
32	34.726	08/29/10	Sun	1300	Sideswipe	0	0	1	Day	Dry	Improper Lane Change
33	34.763	08/29/10	Sun	0200	Rear-End	0	0	1	Night	Dry	Unknown/Not Coded
34	34.801	11/21/10	Sun	1000	Concrete Barrier Wall	0	1	0	Day	Dry	Unknown/Not Coded
35	34.824	05/05/10	Wed	0900	Concrete Barrier Wall	0	0	1	Day	Dry	No Improper Driving/Act
36	34.824	10/27/10	Wed	1800	Sideswipe	0	0	1	Night	Dry	Improper Lane Change
37	34.824	11/19/10	Fri	0700	Sideswipe	0	0	1	Day	Dry	Improper Lane Change
38	34.953	11/12/10	Fri	0700	Rear-End	0	0	1	Day	Dry	Careless Driving
39	35.024	03/15/10	Mon	0800	Rear-End	0	0	1	Day	Dry	Careless Driving
40	35.024	06/04/10	Fri	1500	Rear-End	0	1	0	Day	Dry	Followed Too Closely
41	35.056	12/09/10	Thu	1700	Angle	0	1	0	Day	Wet	Disregarded Traffic Signal
42	35.060	11/30/10	Tue	2000	Rear-End	0	1	0	Night	Wet	Careless Driving
43	35.074	03/04/10	Thu	1500	Sideswipe	0	0	1	Day	Dry	Improper Lane Change
44	35.074	04/06/10	Tue	2100	Concrete Barrier Wall	0	1	0	Night	Dry	Exceeded Safe Speed Limit
45	35.074	06/08/10	Tue	1600	Rear-End	0	1	0	Day	Dry	Careless Driving
46	35.574	03/01/10	Mon	1100	Sideswipe	0	0	1	Day	Dry	Improper Lane Change
47	35.574	03/17/10	Wed	1700	Rear-End	0	2	0	Day	Dry	Careless Driving
48	35.574	04/10/10	Sat	1100	Hit Guardrail	0	2	0	Day	Dry	Unknown/Not Coded
49	35.574	05/03/10	Mon	1400	Sideswipe	0	0	1	Day	Dry	Improper Lane Change
50	35.574	05/14/10	Fri	1600	All Other	0	1	0	Day	Dry	Improper Lane Change
51	35.574	07/19/10	Mon	1400	Sideswipe	0	3	0	Day	Dry	Improper Lane Change
52	35.574	10/19/10	Tue	1600	All Other	0	0	1	Day	Dry	Improper Lane Change
53	35.731	02/09/10	Tue	1800	Rear-End	0	1	0	Night	Wet	Unknown/Not Coded
54	35.731	02/12/10	Fri	1600	Rear-End	0	0	1	Night	Wet	Careless Driving
55	35.731	03/08/10	Mon	1500	Rear-End	0	3	0	Day	Dry	Careless Driving
56	35.731	04/22/10	Thu	1000	Sideswipe	0	1	0	Day	Dry	Improper Lane Change
57	35.731	05/05/10	Wed	1700	Rear-End	0	0	1	Day	Dry	Careless Driving
58	35.731	05/06/10	Thu	1800	Rear-End	0	0	1	Day	Wet	Careless Driving
59	35.731	06/03/10	Thu	1700	Rear-End	0	0	1	Day	Wet	Unknown/Not Coded
60	35.731	07/11/10	Sun	0000	Sideswipe	0	0	1	Night	Dry	Unknown/Not Coded
61	35.731	08/03/10	Tue	1100	Concrete Barrier Wall	0	0	1	Day	Dry	Unknown/Not Coded
62	35.731	09/03/10	Fri	1600	Rear-End	0	0	1	Day	Wet	Careless Driving
63	35.731	09/28/10	Tue	0700	Rear-End	0	1	0	Day	Dry	Careless Driving
64	35.731	09/28/10	Tue	1600	Concrete Barrier Wall	0	2	0	Night	Wet	Improper Lane Change
65	35.731	12/03/10	Fri	1800	Rear-End	0	0	1	Night	Dry	Careless Driving
66	36.231	01/04/10	Mon	1700	All Other	0	2	0	Night	Dry	Unknown/Not Coded
67	36.231	02/01/10	Mon	0800	Sideswipe	0	0	1	Day	Wet	Improper Lane Change
68	36.231	02/04/10	Thu	1600	Head-On	0	2	0	Day	Dry	Careless Driving
69	36.231	02/10/10	Wed	1600	Rear-End	0	2	0	Day	Dry	Unknown/Not Coded
70	36.231	02/12/10	Fri	1700	Rear-End	0	0	1	Day	Wet	Careless Driving
71	36.231	03/10/10	Wed	1600	Sideswipe	0	0	1	Day	Dry	Improper Lane Change
72	36.231	04/05/10	Mon	1600	Rear-End	0	0	1	Day	Dry	Careless Driving
73	36.231	05/06/10	Thu	1800	Rear-End	0	0	1	Day	Wet	Followed Too Closely
74	36.231	05/13/10	Thu	1600	All Other	0	0	1	Day	Dry	Improper Lane Change

FLORIDA DEPARTMENT OF TRANSPORTATION
CRASH SUMMARY

SECTION: 93220000 STATE ROUTE: 9
ROADWAY LIMITS: SR 9/I-95: Northlake Blvd to Donald Ross Rd M.P. 34.056 TO 40.837 ENGINEER: FDOT D4
STUDY PERIOD: FROM 1/ 10 TO 12/ 10 COUNTY: Palm Beach

No.	MILE POST	DATE	DAY	TIME	CRASH TYPE	FATAL	INJURY	PROP DAM	DAY / NIGHT	WET / DRY	CONTRIBUTING CAUSE
75	36.231	08/25/10	Wed	1600	Coll. W/Mvble Obj On Road	0	0	1	Day	Dry	No Improper Driving/Act
76	36.231	09/30/10	Thu	1700	Rear-End	0	3	0	Day	Dry	Careless Driving
77	36.231	11/04/10	Thu	1700	Rear-End	0	0	1	Night	Wet	Unknown/Not Coded
78	36.231	11/05/10	Fri	1600	Rear-End	0	3	0	Day	Dry	Unknown/Not Coded
79	36.231	11/09/10	Tue	1800	Head-On	0	0	1	Night	Dry	Followed Too Closely
80	36.231	11/17/10	Wed	1500	All Other	0	0	1	Day	Dry	Failed To Yield Right-Of-Way
81	36.231	12/03/10	Fri	2300	Coll. W/ Parked Car	0	4	0	Night	Dry	Unknown/Not Coded
82	36.231	12/06/10	Mon	0600	All Other	0	0	1	Day	Dry	Unknown/Not Coded
83	36.258	06/02/10	Wed	2000	Angle	0	2	0	Night	Wet	Failed To Maintain Equipment
84	36.447	11/30/10	Tue	1700	Rear-End	0	0	1	Night	Dry	Careless Driving
85	36.481	02/23/10	Tue	2200	Rear-End	0	0	1	Night	Dry	Careless Driving
86	36.481	02/24/10	Wed	1700	Rear-End	0	0	1	Night	Wet	Unknown/Not Coded
87	36.481	05/19/10	Wed	1900	All Other	0	0	1	Night	Wet	Improper Lane Change
88	36.481	06/07/10	Mon	1400	Concrete Barrier Wall	0	1	0	Day	Dry	Failed To Maintain Equipment
89	36.481	06/25/10	Fri	2200	Rear-End	0	1	0	Night	Dry	Unknown/Not Coded
90	36.481	09/05/10	Sun	0100	Concrete Barrier Wall	0	0	1	Night	Dry	Unknown/Not Coded
91	36.481	12/09/10	Thu	1400	Rear-End	0	3	0	Day	Wet	Careless Driving
92	36.481	12/18/10	Sat	1400	Concrete Barrier Wall	0	0	1	Day	Wet	Exceeded Safe Speed Limit
93	36.481	12/31/10	Fri	1300	Concrete Barrier Wall	0	0	1	Day	Dry	Unknown/Not Coded
94	36.504	02/12/10	Fri	1600	Rear-End	0	3	0	Day	Dry	Careless Driving
95	36.517	09/27/10	Mon	1500	Rear-End	0	0	1	Day	Dry	Careless Driving
96	36.531	04/06/10	Tue	1600	Sideswipe	0	1	0	Day	Dry	Alchol-Under Influence
97	36.542	02/20/10	Sat	1800	All Other	0	0	1	Night	Dry	Driving Wrong Side/Way
98	36.542	02/27/10	Sat	0800	Concrete Barrier Wall	0	2	0	Day	Dry	Careless Driving
99	36.542	03/03/10	Wed	0500	Construction Barricade/Sign	0	1	0	Day	Dry	Unknown/Not Coded
100	36.542	03/25/10	Thu	1500	Rear-End	0	1	0	Day	Dry	Followed Too Closely
101	36.542	05/10/10	Mon	0700	Concrete Barrier Wall	0	1	0	Day	Dry	Unknown/Not Coded
102	36.542	06/03/10	Thu	1600	Sideswipe	0	0	1	Day	Wet	Improper Lane Change
103	36.542	06/03/10	Thu	2000	Sideswipe	0	0	1	Night	Wet	Unknown/Not Coded
104	36.542	07/10/10	Sat	1200	Angle	0	1	0	Day	Dry	Careless Driving
105	36.542	10/07/10	Thu	1900	Sideswipe	0	0	1	Night	Dry	Careless Driving
106	36.579	09/03/10	Fri	1700	Rear-End	0	0	1	Day	Wet	Careless Driving
107	36.631	02/02/10	Tue	1700	Concrete Barrier Wall	0	1	0	Day	Wet	Careless Driving
108	36.631	07/10/10	Sat	1300	Rear-End	0	0	1	Day	Dry	Careless Driving
109	36.631	07/11/10	Sun	1400	Rear-End	0	0	1	Day	Dry	Careless Driving
110	36.631	09/28/10	Tue	2100	Concrete Barrier Wall	0	0	1	Night	Wet	Careless Driving
111	36.631	11/10/10	Wed	1700	Sideswipe	0	0	1	Night	Dry	Improper Lane Change
112	36.631	11/11/10	Thu	2000	Rear-End	0	0	1	Night	Dry	Careless Driving
113	36.631	11/18/10	Thu	1800	Rear-End	0	1	0	Night	Dry	Careless Driving
114	36.631	12/01/10	Wed	2000	Rear-End	0	0	1	Night	Dry	Careless Driving
115	36.631	12/03/10	Fri	1800	Rear-End	0	0	1	Night	Dry	Careless Driving
116	36.635	04/06/10	Tue	1500	Head-On	0	4	0	Day	Dry	Careless Driving
117	36.636	01/22/10	Fri	1300	Sideswipe	0	0	1	Day	Dry	Unknown/Not Coded
118	36.636	03/13/10	Sat	1400	Concrete Barrier Wall	0	0	1	Day	Dry	Unknown/Not Coded
119	36.636	05/15/10	Sat	1400	Sideswipe	0	0	1	Day	Dry	Drove Left Of Center
120	36.636	08/31/10	Tue	0700	Sideswipe	0	1	0	Day	Dry	Careless Driving
121	36.636	12/11/10	Sat	0500	Coll. W/ Mv On Roadway	0	0	1	Night	Dry	No Improper Driving/Act
122	36.665	07/22/10	Thu	0000	Concrete Barrier Wall	0	1	0	Night	Dry	Careless Driving
123	36.703	11/29/10	Mon	1200	All Other	0	1	0	Day	Dry	Unknown/Not Coded
124	36.712	04/20/10	Tue	1400	Rear-End	0	0	1	Day	Dry	Careless Driving
125	36.712	05/19/10	Wed	1700	Rear-End	0	0	1	Day	Wet	Followed Too Closely
126	36.722	03/10/10	Wed	1500	Concrete Barrier Wall	0	1	0	Day	Dry	Unknown/Not Coded
127	36.726	08/23/10	Mon	0700	Sideswipe	0	1	0	Day	Dry	Improper Lane Change
128	36.727	02/14/10	Sun	2100	Rear-End	0	5	0	Night	Dry	Exceed Stated Speed Limit
129	36.731	03/09/10	Tue	2300	Concrete Barrier Wall	0	1	0	Night	Dry	Exceeded Safe Speed Limit
130	36.731	05/17/10	Mon	1700	Angle	0	0	1	Day	Wet	Careless Driving
131	36.731	08/29/10	Sun	2300	Sideswipe	0	0	1	Night	Dry	Improper Lane Change
132	36.731	09/28/10	Tue	1200	All Other	0	0	1	Day	Wet	Unknown/Not Coded
133	36.783	03/29/10	Mon	2200	Rear-End	0	2	0	Night	Dry	Careless Driving
134	36.802	05/26/10	Wed	1700	Rear-End	0	1	0	Day	Dry	Followed Too Closely
135	36.802	12/31/10	Fri	2000	Coll. W/Mvble Obj On Road	0	0	1	Night	Dry	No Improper Driving/Act
136	36.821	05/22/10	Sat	1400	Concrete Barrier Wall	0	0	1	Day	Dry	Unknown/Not Coded
137	36.830	08/15/10	Sun	1300	Concrete Barrier Wall	0	1	0	Day	Wet	Unknown/Not Coded
138	36.840	03/14/10	Sun	2300	Sideswipe	0	0	1	Night	Dry	Improper Lane Change
139	36.840	09/03/10	Fri	1400	Coll. W/Mvble Obj On Road	0	2	0	Day	Slippery	Unknown/Not Coded
140	36.878	01/20/10	Wed	0800	Rear-End	0	0	1	Day	Dry	No Improper Driving/Act
141	36.878	03/21/10	Sun	2200	Concrete Barrier Wall	0	0	1	Night	Wet	No Improper Driving/Act
142	36.878	05/05/10	Wed	0200	Concrete Barrier Wall	0	1	0	Night	Dry	Careless Driving
143	36.883	02/02/10	Tue	1900	Sideswipe	0	0	1	Night	Wet	Improper Passing
144	36.883	05/28/10	Fri	1500	Sideswipe	0	0	1	Day	Dry	Improper Lane Change
145	36.934	11/10/10	Wed	0500	Concrete Barrier Wall	0	1	0	Night	Dry	Careless Driving
146	36.935	04/06/10	Tue	1000	Coll. W/Mvble Obj On Road	0	0	1	Day	Dry	Unknown/Not Coded
147	36.962	02/28/10	Sun	1700	Sideswipe	0	0	1	Day	Dry	Improper Lane Change
148	36.972	03/16/10	Tue	0700	Rear-End	0	1	0	Day	Dry	Careless Driving

FLORIDA DEPARTMENT OF TRANSPORTATION
CRASH SUMMARY

SECTION: 93220000 STATE ROUTE: 9
ROADWAY LIMITS: SR 9/I-95: Northlake Blvd to Donald Ross Rd M.P. 34.056 TO 40.837 ENGINEER: FDOT D4
STUDY PERIOD: FROM 1/ 10 TO 12/ 10 COUNTY: Palm Beach

No.	MILE POST	DATE	DAY	TIME	CRASH TYPE	FATAL	INJURY	PROP DAM	DAY / NIGHT	WET / DRY	CONTRIBUTING CAUSE
149	37.097	02/25/10	Thu	0100	Hit Tree/Shrubbery	0	1	0	Night	Dry	Careless Driving
150	37.162	02/26/10	Fri	0500	Concrete Barrier Wall	0	4	0	Night	Dry	Careless Driving
151	37.162	04/09/10	Fri	0700	All Other	0	0	1	Day	Dry	No Improper Driving/Act
152	37.162	05/10/10	Mon	2300	Sideswipe	0	0	1	Night	Dry	Careless Driving
153	37.206	02/02/10	Tue	2000	Sideswipe	0	1	0	Night	Dry	Unknown/Not Coded
154	37.283	01/16/10	Sat	1000	Concrete Barrier Wall	0	1	0	Day	Dry	Unknown/Not Coded
155	37.283	01/30/10	Sat	1700	Construction Barricade/Sign	0	1	0	Night	Dry	Improper Lane Change
156	37.283	04/06/10	Tue	1000	Cargo Loss Or Shift	0	0	1	Day	Dry	Improper Load
157	37.283	07/27/10	Tue	1700	Rear-End	0	0	1	Day	Dry	Careless Driving
158	37.283	10/14/10	Thu	0300	Sideswipe	0	0	1	Night	Dry	Improper Lane Change
159	37.306	01/08/10	Fri	0200	Hit Guardrail	0	0	1	Night	Dry	Unknown/Not Coded
160	37.456	01/07/10	Thu	2000	All Other	0	2	0	Night	Dry	Unknown/Not Coded
161	37.456	11/30/10	Tue	2100	Concrete Barrier Wall	0	0	1	Night	Wet	Unknown/Not Coded
162	37.706	07/22/10	Thu	1900	Rear-End	0	6	0	Day	Dry	Unknown/Not Coded
163	37.706	11/05/10	Fri	1600	Rear-End	0	0	1	Day	Dry	Careless Driving
164	37.706	11/05/10	Fri	1000	Sideswipe	0	0	1	Day	Dry	Improper Lane Change
165	37.783	08/15/10	Sun	1300	Hit Guardrail	0	3	0	Day	Wet	Unknown/Not Coded
166	37.783	08/26/10	Thu	2200	Sideswipe	0	0	1	Night	Dry	Improper Lane Change
167	37.833	03/12/10	Fri	1000	Sideswipe	0	0	1	Day	Wet	Careless Driving
168	38.206	02/05/10	Fri	2000	Concrete Barrier Wall	0	0	1	Night	Dry	Failed To Maintain Equipment
169	38.206	02/05/10	Fri	0200	Sideswipe	0	0	1	Day	Wet	Improper Lane Change
170	38.206	06/04/10	Fri	1600	Hit Guardrail	0	1	0	Day	Dry	Unknown/Not Coded
171	38.323	01/17/10	Sun	1000	Hit Guardrail	0	0	1	Day	Wet	Careless Driving
172	38.634	05/16/10	Sun	0500	Rear-End	0	0	1	Night	Dry	Careless Driving
173	39.023	05/30/10	Sun	0300	Hit Guardrail	0	1	0	Night	Wet	Careless Driving
174	39.141	02/14/10	Sun	1900	Ran In Ditch/Culvert	0	5	0	Night	Dry	No Improper Driving/Act
175	39.141	04/18/10	Sun	2200	All Other	0	4	0	Night	Wet	Unknown/Not Coded
176	39.141	05/03/10	Mon	0100	Hit Guardrail	0	0	1	Night	Dry	Exceed Stated Speed Limit
177	39.141	05/27/10	Thu	1000	Concrete Barrier Wall	0	0	1	Day	Dry	Unknown/Not Coded
178	39.141	08/29/10	Sun	1700	All Other	0	0	1	Day	Wet	Improper Lane Change
179	39.141	11/22/10	Mon	1600	Coll. W/Mvble Obj On Road	0	0	1	Day	Dry	No Improper Driving/Act
180	39.141	12/11/10	Sat	0000	Coll. W/ Mv On Roadway	0	0	1	Day	Dry	No Improper Driving/Act
181	39.641	02/12/10	Fri	1600	Rear-End	0	1	0	Day	Wet	Unknown/Not Coded
182	39.641	03/12/10	Fri	0100	Hit Guardrail	0	0	1	Night	Wet	Unknown/Not Coded
183	39.641	04/11/10	Sun	0500	Rear-End	0	0	1	Night	Dry	Careless Driving
184	39.641	07/04/10	Sun	1800	Concrete Barrier Wall	0	0	1	Day	Wet	Failed To Maintain Equipment
185	39.641	07/05/10	Mon	1700	Concrete Barrier Wall	0	0	1	Day	Wet	Unknown/Not Coded
186	39.641	08/08/10	Sun	1500	Hit Guardrail	0	1	0	Day	Wet	Failed To Maintain Equipment
187	39.641	10/13/10	Wed	1400	Coll. W/Mvble Obj On Road	0	0	1	Day	Dry	Unknown/Not Coded
188	39.812	03/20/10	Sat	0300	Utility/Light Pole	0	1	0	Night	Dry	Careless Driving
189	40.016	02/17/10	Wed	1100	Coll. W/Mvble Obj On Road	0	0	1	Day	Dry	Unknown/Not Coded
190	40.111	01/21/10	Thu	1400	Concrete Barrier Wall	0	1	0	Day	Dry	No Improper Driving/Act
191	40.111	05/30/10	Sun	1800	Collision With Animal	0	0	1	Day	Dry	Unknown/Not Coded
192	40.111	06/03/10	Thu	1800	Hit Guardrail	0	0	1	Day	Wet	Unknown/Not Coded
193	40.111	10/12/10	Tue	0900	Sideswipe	0	0	1	Day	Dry	Improper Lane Change
194	40.161	01/15/10	Fri	1700	Concrete Barrier Wall	0	0	1	Day	Dry	Unknown/Not Coded
195	40.172	03/20/10	Sat	1500	All Other	0	0	1	Day	Dry	Improper Lane Change
196	40.172	07/31/10	Sat	1700	Hit Guardrail	0	0	1	Day	Dry	Careless Driving
197	40.191	04/10/10	Sat	1700	Ran In Ditch/Culvert	0	1	0	Day	Dry	Unknown/Not Coded
198	40.209	11/07/10	Sun	0200	Rear-End	0	0	1	Night	Dry	Improper Lane Change
199	40.213	12/19/10	Sun	0200	Coll. W/ Parked Car	0	0	1	Night	Wet	Driving Wrong Side/Way
200	40.261	02/05/10	Fri	1900	Rear-End	0	4	0	Night	Wet	Careless Driving
201	40.261	02/05/10	Fri	1900	Rear-End	0	4	0	Night	Wet	Careless Driving
202	40.261	07/30/10	Fri	1700	Angle	0	0	1	Day	Wet	Careless Driving
203	40.266	05/30/10	Sun	1800	Collision With Animal	0	4	0	Day	Dry	Unknown/Not Coded
204	40.266	07/05/10	Mon	1800	Rear-End	0	1	0	Day	Wet	Unknown/Not Coded
205	40.304	03/07/10	Sun	0100	Concrete Barrier Wall	0	1	0	Night	Dry	Careless Driving
206	40.304	10/04/10	Mon	1700	Rear-End	0	2	0	Day	Dry	Careless Driving
207	40.333	11/29/10	Mon	0900	Hit Guardrail	0	0	1	Day	Wet	Unknown/Not Coded
208	40.333	12/11/10	Sat	0600	Hit Guardrail	0	0	1	Night	Dry	No Improper Driving/Act
209	40.360	05/31/10	Mon	1800	Ran In Ditch/Culvert	0	0	1	Day	Dry	Careless Driving
210	40.392	01/31/10	Sun	1800	Rear-End	0	0	1	Night	Wet	Careless Driving
211	40.392	04/01/10	Thu	1500	Rear-End	0	0	1	Day	Dry	Careless Driving
212	40.392	04/06/10	Tue	0800	Rear-End	0	1	0	Day	Dry	Careless Driving
213	40.392	05/28/10	Fri	0600	Sideswipe	0	0	1	Day	Dry	Careless Driving
214	40.392	08/06/10	Fri	2000	Overturned	0	1	0	Night	Dry	No Improper Driving/Act
215	40.392	10/04/10	Mon	0700	Head-On	0	2	0	Night	Dry	Driver Distraction
216	40.392	10/04/10	Mon	1600	Coll. W/ Mv On Roadway	0	1	0	Day	Dry	Improper Turn
217	40.401	01/23/10	Sat	1600	Concrete Barrier Wall	0	1	0	Day	Dry	Improper Lane Change
218	40.411	09/08/10	Wed	0800	Hit Guardrail	0	2	0	Day	Dry	Careless Driving
219	40.411	11/04/10	Thu	2000	Rear-End	0	2	0	Night	Wet	Exceeded Safe Speed Limit
220	40.421	08/11/10	Wed	1500	Overturned	0	1	0	Day	Dry	Careless Driving
221	40.421	11/15/10	Mon	0400	Sideswipe	0	3	0	Night	Dry	Unknown/Not Coded
222	40.430	11/01/10	Mon	1300	Sideswipe	0	0	1	Day	Wet	Unknown/Not Coded

FLORIDA DEPARTMENT OF TRANSPORTATION
CRASH SUMMARY

SECTION: **93220000** STATE ROUTE: **9**

ROADWAY LIMITS: **SR 9/I-95: Northlake Blvd to Donald Ross Rd** M.P. **34.056** TO **40.837** ENGINEER: **FDOT D4**

STUDY PERIOD: FROM **1/ 10** TO **12/ 10** COUNTY: **Palm Beach**

No.	MILE POST	DATE	DAY	TIME	CRASH TYPE	FATAL	INJURY	PROP DAM	DAY / NIGHT	WET / DRY	CONTRIBUTING CAUSE
223	40.455	01/26/10	Tue	0600	All Other	0	0	1	Night	Dry	Improper Lane Change
224	40.487	11/04/10	Thu	2000	Angle	0	0	1	Night	Wet	Unknown/Not Coded
225	40.487	11/04/10	Thu	2000	Angle	0	2	0	Night	Wet	Careless Driving
226	40.492	07/02/10	Fri	1700	Sideswipe	0	0	1	Day	Wet	Failed To Maintain Equipment
227	40.493	08/29/10	Sun	0600	Utility/Light Pole	0	4	0	Night	Dry	Careless Driving
228	40.534	10/16/10	Sat	1800	Sideswipe	0	4	0	Day	Dry	Careless Driving
229	40.550	12/27/10	Mon	1000	Coll. W/ Mv On Roadway	0	0	1	Day	Dry	Unknown/Not Coded
230	40.644	05/13/10	Thu	1000	Angle	0	1	0	Day	Dry	Improper Lane Change
231	40.671	04/14/10	Wed	0200	Coll. W/Mvble Obj On Road	0	0	1	Night	Dry	No Improper Driving/Act
232	40.671	04/26/10	Mon	1300	Rear-End	0	0	1	Day	Wet	Unknown/Not Coded
233	40.671	05/14/10	Fri	1400	All Other	0	1	0	Day	Dry	Improper Lane Change
234	40.671	07/01/10	Thu	1700	Rear-End	0	1	0	Day	Dry	Careless Driving

Total No.		Fatal	Injury	PDO	Angle	Left Turn	Right Turn	Rear End	Side swipe	Ped/ Bike	
234		**0**	**103**	**131**	**9**	**1**	**0**	**73**	**43**	**0**	
		0.00%	*44.02%*	*55.98%*	*3.85%*	*0.43%*	*0.00%*	*31.20%*	*18.38%*	*0.00%*	
One Vehicle		Day	Night	Wet	Dry	Excess Speed	FTYRW	DUI			
69		**150**	**84**	**61**	**172**	**7**	**3**	**15**			
29.49%		*64.10%*	*35.90%*	*26.07%*	*73.50%*	*2.99%*	*1.28%*	*6.41%*			

TOTAL ENTERING VEHICLES/ADT: **145,659**

SEGMENT CRASH RATE: **0.649**

FLORIDA DEPARTMENT OF TRANSPORTATION
CRASH SUMMARY

SECTION: 93220000 STATE ROUTE: 9
ROADWAY LIMITS: SR 9/I-95: Northlake Blvd to Donald Ross Rd M.P. 34.056 TO 40.837 ENGINEER: FDOT D4
STUDY PERIOD: FROM 1/ 11 TO 12/ 11 COUNTY: Palm Beach

No.	MILE POST	DATE	DAY	TIME	CRASH TYPE	FATAL	INJURY	PROP DAM	DAY / NIGHT	WET / DRY	CONTRIBUTING CAUSE
1	34.235	11/19/11	Sat	1000	Coll. W/ Mv On Roadway	0	1	0	Day	Dry	Improper Passing
2	34.270	06/23/11	Thu	1800	All Other	0	0	1	Day	Dry	Unknown/Not Coded
3	34.346	06/09/11	Thu	0600	Hit Guardrail	0	1	0	Day	Dry	Careless Driving
4	34.346	07/10/11	Sun	1100	Coll. W/ Mv On Roadway	0	0	1	Day	Wet	No Improper Driving/Act
5	34.402	12/08/11	Thu	1700	Rear-End	0	0	1	Night	Dry	Followed Too Closely
6	34.435	07/17/11	Sun	1800	All Other	0	0	1	Night	Dry	Unknown/Not Coded
7	34.440	02/24/11	Thu	1500	Separation Of Units	0	0	1	Day	Dry	No Improper Driving/Act
8	34.507	04/04/11	Mon	1500	All Other	0	0	1	Day	Dry	No Improper Driving/Act
9	34.574	01/03/11	Mon	0200	Concrete Barrier Wall	1	0	0	Night	Dry	Unknown/Not Coded
10	34.601	04/08/11	Fri	1600	All Other	0	0	1	Day	Dry	Unknown/Not Coded
11	34.669	02/12/11	Sat	1500	Coll. W/ Mv On Roadway	0	0	1	Day	Dry	No Improper Driving/Act
12	34.674	06/23/11	Thu	1700	Angle	0	2	0	Day	Dry	Careless Driving
13	34.688	12/07/11	Wed	1600	Coll. W/ Mv On Roadway	0	0	1	Day	Dry	Unknown/Not Coded
14	34.716	01/06/11	Thu	1800	Rear-End	0	0	1	Night	Wet	Careless Driving
15	34.731	08/25/11	Thu	1700	Rear-End	0	0	1	Day	Wet	Exceeded Safe Speed Limit
16	34.765	05/24/11	Tue	1200	All Other	0	0	1	Day	Dry	No Improper Driving/Act
17	34.774	07/31/11	Sun	0200	Rear-End	0	2	0	Night	Dry	Unknown/Not Coded
18	34.774	11/29/11	Tue	0500	Coll. W/Crash Attenuators	0	1	0	Night	Dry	Unknown/Not Coded
19	34.824	01/26/11	Wed	0500	Coll. W/ Parked Car	0	1	0	Night	Wet	Careless Driving
20	34.824	07/08/11	Fri	1900	Concrete Barrier Wall	0	0	1	Night	Wet	Exceeded Safe Speed Limit
21	35.074	02/18/11	Fri	1600	Coll. W/ Mv On Roadway	0	1	0	Day	Dry	No Improper Driving/Act
22	35.074	07/13/11	Wed	1000	Concrete Barrier Wall	0	0	1	Day	Dry	No Improper Driving/Act
23	35.074	07/14/11	Thu	1700	Coll. W/ Mv On Roadway	0	0	1	Day	Dry	Failed To Yield Right-Of-Way
24	35.074	08/22/11	Mon	1400	Concrete Barrier Wall	0	1	0	Day	Dry	No Improper Driving/Act
25	35.074	11/02/11	Wed	1100	Cargo Loss Or Shift	0	0	1	Day	Dry	No Improper Driving/Act
26	35.174	08/17/11	Wed	1700	Rear-End	0	1	0	Day	Dry	Followed Too Closely
27	35.374	02/26/11	Sat	1000	Coll. W/ Mv On Roadway	0	0	1	Day	Dry	Unknown/Not Coded
28	35.499	01/21/11	Fri	1600	Rear-End	0	4	0	Day	Wet	Unknown/Not Coded
29	35.731	01/26/11	Wed	1100	Coll. W/ Mv On Roadway	0	0	1	Day	Dry	Unknown/Not Coded
30	35.731	02/08/11	Tue	1800	Rear-End	0	2	0	Night	Dry	Careless Driving
31	35.731	02/12/11	Sat	1400	Rear-End	0	0	1	Day	Dry	No Improper Driving/Act
32	35.731	08/28/11	Sun	2100	All Other	0	0	1	Night	Dry	Unknown/Not Coded
33	35.731	08/31/11	Wed	1700	Rear-End	0	0	1	Day	Wet	Exceeded Safe Speed Limit
34	35.731	08/31/11	Wed	1900	Rear-End	0	1	0	Night	Wet	Exceeded Safe Speed Limit
35	35.731	08/31/11	Wed	1700	Rear-End	0	0	1	Night	Wet	Careless Driving
36	35.731	08/31/11	Wed	1900	Rear-End	0	0	1	Night	Wet	Careless Driving
37	35.921	04/09/11	Sat	0700	All Other	0	0	1	Day	Dry	Unknown/Not Coded
38	35.981	01/06/11	Thu	1700	Rear-End	0	1	0	Night	Wet	Careless Driving
39	35.981	01/18/11	Tue	1700	All Other	0	0	1	Night	Wet	Unknown/Not Coded
40	35.981	02/08/11	Tue	1800	Rear-End	0	1	0	Night	Dry	Careless Driving
41	35.981	10/10/11	Mon	1400	Coll. W/ Mv On Roadway	0	1	0	Day	Dry	Improper Passing
42	36.031	01/18/11	Tue	1700	All Other	0	0	1	Night	Wet	Unknown/Not Coded
43	36.231	01/03/11	Mon	1400	Concrete Barrier Wall	0	1	0	Day	Dry	Careless Driving
44	36.231	01/06/11	Thu	1800	All Other	0	0	1	Night	Wet	Unknown/Not Coded
45	36.231	01/06/11	Thu	1600	Rear-End	0	0	1	Day	Wet	Unknown/Not Coded
46	36.231	03/06/11	Sun	1500	Rear-End	0	0	1	Day	Wet	Exceeded Safe Speed Limit
47	36.231	03/21/11	Mon	1700	Rear-End	0	0	1	Day	Dry	Followed Too Closely
48	36.231	04/01/11	Fri	1800	Rear-End	0	3	0	Day	Dry	Followed Too Closely
49	36.231	05/24/11	Tue	1600	Rear-End	0	0	1	Day	Dry	Careless Driving
50	36.231	06/15/11	Wed	1700	All Other	0	0	1	Day	Dry	Unknown/Not Coded
51	36.231	07/08/11	Fri	1800	Rear-End	0	1	0	Day	Wet	Careless Driving
52	36.231	07/21/11	Thu	1700	Rear-End	0	1	0	Day	Dry	Careless Driving
53	36.231	11/27/11	Sun	1500	Rear-End	0	2	0	Day	Dry	Careless Driving
54	36.231	12/03/11	Sat	2000	Coll. W/ Mv On Roadway	0	0	1	Night	Dry	Unknown/Not Coded
55	36.276	08/01/11	Mon	1400	Angle	0	1	0	Day	Wet	Careless Driving
56	36.331	10/20/11	Thu	1400	Coll. W/ Mv On Roadway	0	0	1	Day	Dry	Unknown/Not Coded
57	36.352	01/12/11	Wed	1800	Rear-End	0	0	1	Night	Dry	Careless Driving
58	36.426	09/27/11	Tue	1300	Coll. W/ Mv On Roadway	0	0	1	Day	Dry	Unknown/Not Coded
59	36.431	06/13/11	Mon	2100	All Other	0	4	0	Night	Dry	Unknown/Not Coded
60	36.447	03/01/11	Tue	0800	All Other	0	0	1	Day	Dry	Unknown/Not Coded
61	36.447	07/08/11	Fri	1800	Concrete Barrier Wall	0	1	0	Day	Wet	Exceeded Safe Speed Limit
62	36.447	09/23/11	Fri	1700	Rear-End	0	3	0	Day	Dry	Unknown/Not Coded
63	36.481	04/23/11	Sat	0100	Concrete Barrier Wall	0	0	1	Night	Dry	No Improper Driving/Act
64	36.481	05/09/11	Mon	1400	Rear-End	0	2	0	Day	Dry	Unknown/Not Coded
65	36.481	10/03/11	Mon	0600	All Other	0	1	0	Night	Dry	Unknown/Not Coded
66	36.481	10/11/11	Tue	2000	Concrete Barrier Wall	0	1	0	Night	Dry	Unknown/Not Coded
67	36.522	12/16/11	Fri	0900	Rear-End	0	0	1	Day	Dry	Careless Driving
68	36.526	03/07/11	Mon	0600	All Other	0	0	1	Day	Dry	Careless Driving
69	36.531	12/06/11	Tue	1600	All Other	0	1	0	Day	Dry	Unknown/Not Coded
70	36.531	12/07/11	Wed	1500	Rear-End	0	2	0	Day	Dry	Careless Driving
71	36.542	07/01/11	Fri	1500	Rear-End	0	1	0	Day	Wet	No Improper Driving/Act
72	36.542	07/08/11	Fri	1800	Concrete Barrier Wall	0	1	0	Day	Wet	Exceeded Safe Speed Limit
73	36.542	07/08/11	Fri	1700	Rear-End	0	0	1	Day	Wet	Followed Too Closely
74	36.542	11/14/11	Mon	1400	Rear-End	0	4	0	Day	Dry	No Improper Driving/Act

FLORIDA DEPARTMENT OF TRANSPORTATION
CRASH SUMMARY

SECTION: 93220000 STATE ROUTE: 9
ROADWAY LIMITS: SR 9/I-95: Northlake Blvd to Donald Ross Rd M.P. 34.056 TO 40.837 ENGINEER: FDOT D4
STUDY PERIOD: FROM 1/ 11 TO 12/ 11 COUNTY: Palm Beach

No.	MILE POST	DATE	DAY	TIME	CRASH TYPE	FATAL	INJURY	PROP DAM	DAY / NIGHT	WET / DRY	CONTRIBUTING CAUSE
75	36.579	04/01/11	Fri	1400	All Other	0	5	0	Day	Dry	Unknown/Not Coded
76	36.581	03/31/11	Thu	1000	Coll. W/ Mv On Roadway	0	0	1	Day	Dry	Unknown/Not Coded
77	36.631	10/28/11	Fri	1600	Rear-End	0	0	1	Day	Wet	Careless Driving
78	36.631	12/07/11	Wed	1500	Rear-End	0	1	0	Day	Dry	Careless Driving
79	36.636	01/21/11	Fri	1500	All Other	0	0	1	Day	Wet	Unknown/Not Coded
80	36.636	04/22/11	Fri	1400	Rear-End	0	1	0	Day	Dry	No Improper Driving/Act
81	36.674	11/26/11	Sat	0500	All Other	0	0	1	Night	Wet	Unknown/Not Coded
82	36.693	09/22/11	Thu	0700	Rear-End	0	1	0	Day	Dry	No Improper Driving/Act
83	36.777	12/22/11	Thu	1300	Coll. W/ Mv On Roadway	0	4	0	Day	Dry	Careless Driving
84	36.830	02/24/11	Thu	1900	Coll. W/ Mv On Roadway	0	0	1	Night	Dry	Careless Driving
85	36.834	10/04/11	Tue	1800	Rear-End	0	1	0	Night	Dry	No Improper Driving/Act
86	36.860	10/25/11	Tue	2300	All Other	0	2	0	Night	Dry	Unknown/Not Coded
87	36.883	08/17/11	Wed	0800	Coll. W/ Parked Car	0	0	1	Day	Dry	Careless Driving
88	36.885	11/21/11	Mon	1300	Coll. W/ Mv On Roadway	0	0	1	Day	Wet	Unknown/Not Coded
89	36.935	08/18/11	Thu	0500	Angle	0	1	0	Night	Wet	Careless Driving
90	36.935	09/23/11	Fri	2200	Angle	0	2	0	Night	Wet	Careless Driving
91	36.946	10/29/11	Sat	1400	All Other	0	0	1	Day	Wet	Unknown/Not Coded
92	37.033	03/25/11	Fri	1400	All Other	0	0	1	Day	Dry	Unknown/Not Coded
93	37.033	07/29/11	Fri	1900	Rear-End	0	0	1	Night	Dry	Careless Driving
94	37.033	10/23/11	Sun	2100	Coll. W/Mvble Obj On Road	0	0	1	Night	Dry	Careless Driving
95	37.033	12/16/11	Fri	1500	Rear-End	0	0	1	Night	Dry	Careless Driving
96	37.067	07/01/11	Fri	1400	Concrete Barrier Wall	0	0	1	Day	Wet	Exceeded Safe Speed Limit
97	37.067	08/27/11	Sat	2000	All Other	0	0	1	Night	Dry	Unknown/Not Coded
98	37.085	11/15/11	Tue	0700	Coll. W/ Pedestrian	0	0	1	Day	Wet	No Improper Driving/Act
99	37.087	07/30/11	Sat	1400	Concrete Barrier Wall	0	0	1	Day	Dry	No Improper Driving/Act
100	37.132	11/17/11	Thu	2200	Hit Sign/Sign Post	0	3	0	Night	Wet	Exceeded Safe Speed Limit
101	37.183	11/24/11	Thu	1000	Rear-End	0	0	1	Day	Dry	Careless Driving
102	37.334	02/14/11	Mon	1700	Rear-End	0	1	0	Day	Dry	Careless Driving
103	37.378	05/30/11	Mon	1600	Concrete Barrier Wall	0	3	0	Day	Dry	No Improper Driving/Act
104	37.395	07/10/11	Sun	2100	Rear-End	0	1	0	Night	Dry	Unknown/Not Coded
105	37.395	07/10/11	Sun	2300	Rear-End	0	0	1	Night	Dry	Exceeded Safe Speed Limit
106	37.456	09/10/11	Sat	1400	Rear-End	0	0	1	Day	Wet	Exceeded Safe Speed Limit
107	37.456	10/14/11	Fri	0200	All Other	0	0	1	Night	Dry	Unknown/Not Coded
108	37.456	10/29/11	Sat	0000	Coll. W/ Mv On Roadway	0	2	0	Night	Wet	Improper Passing
109	37.490	07/04/11	Mon	1700	Angle	0	2	0	Day	Dry	No Improper Driving/Act
110	37.993	01/16/11	Sun	1200	Concrete Barrier Wall	0	0	1	Day	Dry	No Improper Driving/Act
111	38.088	04/21/11	Thu	1200	Coll. W/ Mv On Roadway	0	1	0	Day	Dry	Improper Passing
112	38.094	12/19/11	Mon	1500	Rear-End	0	1	0	Day	Dry	Careless Driving
113	38.141	03/05/11	Sat	2000	Rear-End	0	0	1	Night	Wet	Unknown/Not Coded
114	38.206	09/20/11	Tue	0300	Coll. W/ Parked Car	0	0	1	Night	Dry	Improper Backing
115	38.206	11/09/11	Wed	0500	Overturned	0	1	0	Night	Dry	Exceed Stated Speed Limit
116	38.264	05/15/11	Sun	1600	Hit Guardrail	0	1	0	Day	Dry	Unknown/Not Coded
117	38.383	08/01/11	Mon	1200	Angle	0	1	0	Day	Dry	Unknown/Not Coded
118	38.577	11/14/11	Mon	0500	Coll. W/ Mv On Roadway	0	0	1	Night	Dry	Careless Driving
119	38.641	01/24/11	Mon	2000	Hit Guardrail	0	1	0	Night	Dry	No Improper Driving/Act
120	38.703	11/12/11	Sat	0500	Hit Other Fixed Object	0	0	1	Night	Dry	No Improper Driving/Act
121	38.834	01/26/11	Wed	0600	Hit Guardrail	0	0	1	Night	Dry	No Improper Driving/Act
122	39.041	02/02/11	Wed	0800	All Other	0	0	1	Day	Dry	Unknown/Not Coded
123	39.141	10/30/11	Sun	2000	Hit Guardrail	0	3	0	Night	Wet	No Improper Driving/Act
124	39.239	09/20/11	Tue	2000	All Other	0	0	1	Night	Dry	Unknown/Not Coded
125	39.541	12/07/11	Wed	1000	All Other	0	0	1	Day	Dry	Unknown/Not Coded
126	39.641	02/28/11	Mon	1700	Rear-End	0	0	1	Day	Dry	Careless Driving
127	39.641	02/28/11	Mon	0400	Hit Guardrail	0	1	0	Night	Dry	No Improper Driving/Act
128	39.641	03/05/11	Sat	1900	Concrete Barrier Wall	0	0	1	Night	Wet	Careless Driving
129	39.641	07/04/11	Mon	1800	Rear-End	0	0	1	Day	Dry	Careless Driving
130	39.641	08/10/11	Wed	2300	Coll. W/Mvble Obj On Road	0	0	1	Night	Dry	No Improper Driving/Act
131	39.641	08/25/11	Thu	1600	Coll. W/ Mv On Roadway	0	1	0	Day	Wet	Unknown/Not Coded
132	39.641	11/22/11	Tue	0800	Rear-End	0	1	0	Day	Dry	Careless Driving
133	40.061	03/09/11	Wed	1700	Rear-End	0	0	1	Night	Dry	Careless Driving
134	40.061	11/22/11	Tue	0800	Rear-End	0	2	0	Day	Dry	Unknown/Not Coded
135	40.077	03/06/11	Sun	1800	Coll. W/Mvble Obj On Road	0	0	1	Night	Wet	No Improper Driving/Act
136	40.077	08/03/11	Wed	0600	Utility/Light Pole	0	1	0	Night	Dry	Careless Driving
137	40.111	02/22/11	Tue	1300	Hit Other Fixed Object	0	1	0	Day	Dry	Careless Driving
138	40.111	04/13/11	Wed	1800	All Other	0	0	1	Day	Dry	Unknown/Not Coded
139	40.111	06/07/11	Tue	0800	Rear-End	0	1	0	Day	Dry	Exceeded Safe Speed Limit
140	40.111	07/06/11	Wed	0800	Concrete Barrier Wall	0	0	1	Day	Wet	No Improper Driving/Act
141	40.111	07/19/11	Tue	2000	Coll. W/Mvble Obj On Road	0	0	1	Night	Dry	No Improper Driving/Act
142	40.172	05/14/11	Sat	0600	Hit Guardrail	0	1	0	Day	Dry	Careless Driving
143	40.172	12/22/11	Thu	1100	Rear-End	0	4	0	Day	Dry	Careless Driving
144	40.219	12/22/11	Thu	1500	Coll. W/Mvble Obj On Road	0	0	1	Day	Dry	No Improper Driving/Act
145	40.228	10/30/11	Sun	1900	All Other	0	0	1	Night	Wet	No Improper Driving/Act
146	40.261	04/11/11	Mon	2000	All Other	0	0	1	Night	Dry	Unknown/Not Coded
147	40.261	06/29/11	Wed	2000	All Other	0	1	0	Night	Wet	Exceeded Safe Speed Limit
148	40.261	12/22/11	Thu	0900	Rear-End	0	1	0	Day	Dry	No Improper Driving/Act

FLORIDA DEPARTMENT OF TRANSPORTATION
CRASH SUMMARY

SECTION: **93220000** STATE ROUTE: **9**
ROADWAY LIMITS: **SR 9/I-95: Northlake Blvd to Donald Ross Rd** M.P. **34.056** TO **40.837** ENGINEER: **FDOT D4**
STUDY PERIOD: FROM **1/ 11** TO **12/ 11** COUNTY: **Palm Beach**

No.	MILE POST	DATE	DAY	TIME	CRASH TYPE	FATAL	INJURY	PROP DAM	DAY / NIGHT	WET / DRY	CONTRIBUTING CAUSE
149	40.261	12/27/11	Tue	1900	Coll. W/ Mv On Roadway	0	0	1	Night	Dry	Failed To Yield Right-Of-Way
150	40.266	06/13/11	Mon	1300	Bridge/Pier/Abutment/Rail	0	1	0	Day	Wet	Exceeded Safe Speed Limit
151	40.266	08/18/11	Thu	1300	All Other	0	0	1	Day	Dry	Unknown/Not Coded
152	40.266	09/09/11	Fri	1800	Coll. W/ Mv On Roadway	0	0	1	Night	Wet	No Improper Driving/Act
153	40.266	09/28/11	Wed	1500	Coll. W/ Mv On Roadway	0	0	1	Day	Dry	Careless Driving
154	40.333	04/16/11	Sat	1700	All Other	0	0	1	Day	Dry	No Improper Driving/Act
155	40.352	02/26/11	Sat	1400	Hit Sign/Sign Post	0	0	1	Day	Dry	Unknown/Not Coded
156	40.359	10/17/11	Mon	1400	All Other	0	1	0	Day	Wet	Exceeded Safe Speed Limit
157	40.360	07/02/11	Sat	0600	Angle	0	0	1	Day	Wet	Careless Driving
158	40.360	10/15/11	Sat	1800	Coll. W/ Mv On Roadway	0	1	0	Night	Dry	Improper Passing
159	40.360	11/27/11	Sun	1600	Hit Guardrail	0	1	0	Day	Wet	Exceeded Safe Speed Limit
160	40.364	03/20/11	Sun	0400	All Other	0	0	1	Night	Dry	Unknown/Not Coded
161	40.392	09/25/11	Sun	1400	Concrete Barrier Wall	0	2	0	Day	Wet	Exceeded Safe Speed Limit
162	40.411	12/25/11	Sun	2000	Rear-End	0	0	1	Night	Dry	Careless Driving
163	40.421	05/09/11	Mon	1800	All Other	0	0	1	Day	Dry	No Improper Driving/Act
164	40.421	08/18/11	Thu	2100	Rear-End	0	1	0	Night	Dry	Careless Driving
165	40.449	06/18/11	Sat	1500	Overturned	0	5	0	Day	Dry	Unknown/Not Coded
166	40.492	03/04/11	Fri	0000	Rear-End	0	0	1	Night	Dry	Careless Driving
167	40.492	10/22/11	Sat	1200	Utility/Light Pole	0	0	1	Day	Dry	No Improper Driving/Act
168	40.550	08/22/11	Mon	1100	Utility/Light Pole	0	0	1	Day	Dry	No Improper Driving/Act
169	40.671	02/23/11	Wed	1500	Occupant Fell From Veh	1	0	0	Day	Dry	Unknown/Not Coded
170	40.671	07/09/11	Sat	0900	Utility/Light Pole	0	1	0	Day	Wet	Careless Driving

Total No.		Fatal	Injury	PDO	Angle	Left Turn	Right Turn	Rear End	Side swipe	Ped/ Bike	
170		**2**	**73**	**95**	**7**	**0**	**0**	**55**	**0**	**1**	
		1.18%	*42.94%*	*55.88%*	*4.12%*	*0.00%*	*0.00%*	*32.35%*	*0.00%*	*0.59%*	
One Vehicle		Day	Night	Wet	Dry	Excess Speed	FTYRW	DUI			
48		**105**	**65**	**49**	**121**	**18**	**2**	**8**			
28.24%		*61.76%*	*38.24%*	*28.82%*	*71.18%*	*10.59%*	*1.18%*	*4.71%*			

TOTAL ENTERING VEHICLES/ADT: **142,346**

SEGMENT CRASH RATE: **0.483**

FLORIDA DEPARTMENT OF TRANSPORTATION
CRASH SUMMARY

SECTION: 93220000 STATE ROUTE: 9
ROADWAY LIMITS: SR 9/I-95: Northlake Blvd to Donald Ross Rd M.P. 34.056 TO 40.837 ENGINEER: FDOT D4
STUDY PERIOD: FROM 1/ 12 TO 12/ 12 COUNTY: Palm Beach

No.	MILE POST	DATE	DAY	TIME	CRASH TYPE	FATAL	INJURY	PROP DAM	DAY / NIGHT	WET / DRY	CONTRIBUTING CAUSE
1	34.251	07/12/12	Thu	1900	Coll. W/ Mv On Roadway	0	0	1	Day	Dry	Unknown/Not Coded
2	34.251	09/11/12	Tue	2000	All Other	0	0	1	Night	Wet	No Improper Driving/Act
3	34.285	01/30/12	Mon	1300	Coll. W/ Mv On Roadway	0	0	1	Day	Dry	No Improper Driving/Act
4	34.308	04/27/12	Fri	1100	Rear-End	0	0	1	Day	Dry	No Improper Driving/Act
5	34.340	03/20/12	Tue	1800	Angle	0	1	0	Day	Dry	Careless Driving
6	34.340	04/25/12	Wed	0800	Coll. W/ Mv On Roadway	0	1	0	Day	Dry	Unknown/Not Coded
7	34.435	06/16/12	Sat	1300	All Other	0	0	1	Day	Dry	Unknown/Not Coded
8	34.488	08/03/12	Fri	1500	Rear-End	0	0	1	Day	Wet	No Improper Driving/Act
9	34.507	11/20/12	Tue	1500	Coll. W/ Mv On Roadway	1	2	0	Day	Dry	No Improper Driving/Act
10	34.593	10/23/12	Tue	0800	Overturned	0	3	0	Day	Dry	No Improper Driving/Act
11	34.612	12/15/12	Sat	1400	Rear-End	0	0	1	Day	Dry	Careless Driving
12	34.620	05/20/12	Sun	0100	Coll. W/ Parked Car	0	0	1	Night	Dry	Improper Passing
13	34.669	01/06/12	Fri	0400	Rear-End	0	0	1	Night	Dry	Careless Driving
14	34.674	06/30/12	Sat	2000	Concrete Barrier Wall	0	3	0	Night	Dry	No Improper Driving/Act
15	34.674	07/15/12	Sun	1900	Rear-End	0	2	0	Night	Wet	Unknown/Not Coded
16	34.674	09/08/12	Sat	2100	Rear-End	0	0	1	Night	Dry	Unknown/Not Coded
17	34.707	09/08/12	Sat	1600	All Other	0	1	0	Day	Dry	Careless Driving
18	34.744	11/05/12	Mon	1000	Rear-End	0	1	0	Day	Dry	Followed Too Closely
19	34.763	11/21/12	Wed	1200	Coll. W/Mvble Obj On Road	0	0	1	Day	Dry	No Improper Driving/Act
20	34.858	07/16/12	Mon	1700	Rear-End	0	0	1	Day	Wet	Followed Too Closely
21	34.877	05/10/12	Thu	1300	Concrete Barrier Wall	0	6	0	Day	Dry	No Improper Driving/Act
22	34.966	10/18/12	Thu	1700	Head-On	0	0	1	Day	Wet	Careless Driving
23	34.974	09/15/12	Sat	1000	Rear-End	0	2	0	Day	Wet	Careless Driving
24	35.056	06/22/12	Fri	2200	All Other	0	1	0	Night	Wet	Unknown/Not Coded
25	35.074	03/01/12	Thu	1500	All Other	0	0	1	Day	Dry	No Improper Driving/Act
26	35.074	07/30/12	Mon	1700	Angle	0	1	0	Day	Dry	Careless Driving
27	35.074	08/26/12	Sun	1400	Concrete Barrier Wall	0	0	1	Day	Wet	Exceeded Safe Speed Limit
28	35.142	07/17/12	Tue	2300	Concrete Barrier Wall	0	1	0	Night	Wet	No Improper Driving/Act
29	35.481	09/28/12	Fri	2000	Concrete Barrier Wall	0	6	0	Night	Dry	Unknown/Not Coded
30	35.574	05/19/12	Sat	1300	Coll. W/ Mv On Roadway	0	2	0	Day	Wet	Unknown/Not Coded
31	35.635	11/22/12	Thu	1500	Rear-End	0	0	1	Day	Dry	Careless Driving
32	35.731	01/27/12	Fri	1200	Concrete Barrier Wall	0	1	0	Day	Dry	No Improper Driving/Act
33	35.731	02/27/12	Mon	1700	Coll. W/ Mv On Roadway	0	0	1	Night	Dry	No Improper Driving/Act
34	35.731	03/29/12	Thu	0900	Rear-End	0	1	0	Day	Dry	Careless Driving
35	35.731	07/16/12	Mon	1700	Coll. W/ Mv On Roadway	0	2	0	Day	Wet	Unknown/Not Coded
36	35.731	10/31/12	Wed	0700	Coll. W/ Mv On Roadway	0	1	0	Day	Dry	Unknown/Not Coded
37	36.135	06/04/12	Mon	0600	Hit Fence	0	0	1	Night	Dry	Unknown/Not Coded
38	36.231	01/27/12	Fri	2100	Coll. W/ Mv On Roadway	0	0	1	Night	Dry	Improper Passing
39	36.231	06/29/12	Fri	2000	Concrete Barrier Wall	0	0	1	Night	Dry	Careless Driving
40	36.231	07/11/12	Wed	0800	Coll. W/ Mv On Roadway	0	1	0	Day	Wet	Careless Driving
41	36.231	10/18/12	Thu	1700	Concrete Barrier Wall	0	1	0	Day	Wet	Exceeded Safe Speed Limit
42	36.231	11/02/12	Fri	1800	Concrete Barrier Wall	0	0	1	Night	Dry	No Improper Driving/Act
43	36.431	06/20/12	Wed	1100	Concrete Barrier Wall	0	0	1	Day	Wet	Careless Driving
44	36.566	10/02/12	Tue	1100	All Other	0	0	1	Day	Dry	No Improper Driving/Act
45	36.631	03/21/12	Wed	0600	Concrete Barrier Wall	0	1	0	Night	Wet	No Improper Driving/Act
46	36.631	06/19/12	Tue	2100	Coll. W/ Mv On Roadway	0	0	1	Night	Dry	Failed To Yield Right-Of-Way
47	36.666	11/03/12	Sat	0800	Coll. W/ Mv On Roadway	0	1	0	Day	Dry	No Improper Driving/Act
48	36.712	02/06/12	Mon	1400	Concrete Barrier Wall	0	3	0	Day	Wet	No Improper Driving/Act
49	36.722	03/29/12	Thu	1600	Concrete Barrier Wall	0	2	0	Day	Dry	Exceeded Safe Speed Limit
50	36.833	09/04/12	Tue	1600	Coll. W/Mvble Obj On Road	0	0	1	Day	Dry	No Improper Driving/Act
51	36.834	03/01/12	Thu	1400	Hit Other Fixed Object	0	1	0	Day	Dry	Careless Driving
52	36.866	07/17/12	Tue	1400	Head-On	0	0	1	Day	Wet	Exceeded Safe Speed Limit
53	36.866	08/13/12	Mon	1200	Concrete Barrier Wall	0	0	1	Day	Wet	Exceeded Safe Speed Limit
54	36.866	10/26/12	Fri	0400	Coll. W/Mvble Obj On Road	0	2	0	Night	Wet	No Improper Driving/Act
55	36.871	07/26/12	Thu	1500	Coll. W/Mvble Obj On Road	0	0	1	Day	Dry	No Improper Driving/Act
56	36.871	08/26/12	Sun	1500	Concrete Barrier Wall	0	1	0	Day	Wet	Exceeded Safe Speed Limit
57	36.909	07/16/12	Mon	1500	Coll. W/ Mv On Roadway	0	0	1	Day	Wet	Careless Driving
58	36.909	09/11/12	Tue	1100	Concrete Barrier Wall	0	1	0	Day	Wet	Careless Driving
59	36.919	06/24/12	Sun	1400	Concrete Barrier Wall	0	1	0	Day	Wet	Exceeded Safe Speed Limit
60	36.919	08/16/12	Thu	1400	Concrete Barrier Wall	0	0	1	Day	Wet	Careless Driving
61	36.928	12/12/12	Wed	1600	Cargo Loss Or Shift	0	0	1	Day	Dry	Unknown/Not Coded
62	36.946	09/26/12	Wed	1500	All Other	0	1	0	Day	Dry	Unknown/Not Coded
63	36.947	12/07/12	Fri	1200	Coll. W/Mvble Obj On Road	0	0	1	Day	Dry	No Improper Driving/Act
64	36.947	12/07/12	Fri	1200	Coll. W/Mvble Obj On Road	0	0	1	Day	Dry	No Improper Driving/Act
65	36.957	12/06/12	Thu	1800	All Other	0	1	0	Night	Wet	Exceeded Safe Speed Limit
66	36.983	09/17/12	Mon	0500	Angle	0	0	1	Night	Wet	Exceeded Safe Speed Limit
67	37.033	06/28/12	Thu	1500	Coll. W/ Mv On Roadway	0	2	0	Day	Dry	Unknown/Not Coded
68	37.033	08/27/12	Mon	1500	Concrete Barrier Wall	0	1	0	Day	Wet	Exceeded Safe Speed Limit
69	37.035	04/06/12	Fri	1200	All Other	0	0	1	Day	Wet	Unknown/Not Coded
70	37.067	08/01/12	Wed	1600	Rear-End	0	1	0	Day	Dry	Followed Too Closely
71	37.102	06/22/12	Fri	2000	Coll. W/ Mv On Roadway	0	2	0	Night	Wet	Exceeded Safe Speed Limit
72	37.116	06/29/12	Fri	1600	Concrete Barrier Wall	0	1	0	Day	Dry	No Improper Driving/Act
73	37.283	03/21/12	Wed	0600	Concrete Barrier Wall	0	1	0	Night	Wet	Careless Driving
74	37.283	05/13/12	Sun	0600	Rear-End	0	1	0	Day	Dry	Careless Driving

FLORIDA DEPARTMENT OF TRANSPORTATION
CRASH SUMMARY

SECTION: 93220000 STATE ROUTE: 9
ROADWAY LIMITS: SR 9/I-95: Northlake Blvd to Donald Ross Rd M.P. 34.056 TO 40.837 ENGINEER: FDOT D4
STUDY PERIOD: FROM 1/ 12 TO 12/ 12 COUNTY: Palm Beach

No.	MILE POST	DATE	DAY	TIME	CRASH TYPE	FATAL	INJURY	PROP DAM	DAY / NIGHT	WET / DRY	CONTRIBUTING CAUSE
75	37.344	08/26/12	Sun	1700	Concrete Barrier Wall	0	0	1	Day	Wet	Exceeded Safe Speed Limit
76	37.352	12/15/12	Sat	0700	Rear-End	0	1	0	Day	Dry	Careless Driving
77	37.594	01/24/12	Tue	1200	All Other	0	0	1	Day	Dry	Unknown/Not Coded
78	37.738	06/02/12	Sat	0300	Coll. W/ Mv On Roadway	0	0	1	Night	Dry	Unknown/Not Coded
79	37.783	03/29/12	Thu	0900	All Other	0	0	1	Day	Dry	Unknown/Not Coded
80	37.783	04/15/12	Sun	0500	Hit Guardrail	0	1	0	Night	Dry	Unknown/Not Coded
81	37.816	09/11/12	Tue	0900	Coll. W/ Mv On Roadway	0	0	1	Day	Dry	Unknown/Not Coded
82	38.094	09/30/12	Sun	2000	All Other	0	1	0	Night	Dry	Unknown/Not Coded
83	38.094	11/17/12	Sat	1200	All Other	0	0	1	Day	Dry	No Improper Driving/Act
84	38.206	09/13/12	Thu	2300	Hit Guardrail	0	0	1	Night	Dry	Careless Driving
85	38.214	11/19/12	Mon	1800	Coll. W/Mvble Obj On Road	0	0	1	Night	Dry	No Improper Driving/Act
86	38.283	02/23/12	Thu	1200	Coll. W/Mvble Obj On Road	0	0	1	Day	Dry	No Improper Driving/Act
87	38.302	03/17/12	Sat	0700	Coll. W/ Mv On Roadway	0	1	0	Night	Dry	No Improper Driving/Act
88	38.641	03/19/12	Mon	1100	Coll. W/Mvble Obj On Road	0	1	0	Day	Dry	No Improper Driving/Act
89	38.641	05/30/12	Wed	1200	Coll. W/ Mv On Roadway	0	3	0	Day	Dry	Unknown/Not Coded
90	38.653	07/07/12	Sat	0200	All Other	0	0	1	Night	Dry	Unknown/Not Coded
91	38.806	03/16/12	Fri	1000	Overturned	1	1	0	Day	Dry	No Improper Driving/Act
92	38.891	04/20/12	Fri	1700	Rear-End	0	1	0	Night	Wet	Careless Driving
93	39.141	01/22/12	Sun	0400	All Other	0	0	1	Night	Dry	Unknown/Not Coded
94	39.141	07/09/12	Mon	1600	Coll. W/ Mv On Roadway	0	0	1	Day	Dry	No Improper Driving/Act
95	39.141	09/11/12	Tue	1900	Concrete Barrier Wall	0	1	0	Night	Wet	Exceeded Safe Speed Limit
96	39.141	11/17/12	Sat	1500	Coll. W/ Mv On Roadway	0	0	1	Day	Dry	Unknown/Not Coded
97	39.541	06/12/12	Tue	0700	Rear-End	0	0	1	Day	Dry	Careless Driving
98	39.611	11/04/12	Sun	1800	All Other	0	0	1	Night	Dry	No Improper Driving/Act
99	39.641	01/01/12	Sun	0200	Concrete Barrier Wall	0	0	1	Night	Dry	Unknown/Not Coded
100	39.641	01/13/12	Fri	1800	All Other	0	0	1	Night	Dry	Unknown/Not Coded
101	39.741	01/30/12	Mon	0500	Rear-End	0	1	0	Night	Dry	Careless Driving
102	39.861	08/13/12	Mon	1000	Rear-End	0	3	0	Day	Dry	Careless Driving
103	39.916	06/03/12	Sun	1100	Rear-End	0	1	0	Day	Dry	Followed Too Closely
104	39.961	07/22/12	Sun	2100	Coll. W/ Pedestrian	1	0	0	Night	Dry	Careless Driving
105	40.016	06/16/12	Sat	0100	Utility/Light Pole	0	1	0	Night	Wet	No Improper Driving/Act
106	40.016	12/20/12	Thu	0800	Coll. W/ Mv On Roadway	0	0	1	Day	Dry	Careless Driving
107	40.061	09/12/12	Wed	0600	Concrete Barrier Wall	0	0	1	Day	Dry	Unknown/Not Coded
108	40.111	01/13/12	Fri	1300	Coll. W/ Mv On Roadway	0	0	1	Day	Dry	Careless Driving
109	40.111	07/13/12	Fri	0800	Hit Guardrail	0	1	0	Day	Wet	No Improper Driving/Act
110	40.111	11/25/12	Sun	1300	Hit Guardrail	0	0	1	Day	Dry	Exceeded Safe Speed Limit
111	40.228	10/15/12	Mon	1400	All Other	0	0	1	Day	Dry	Unknown/Not Coded
112	40.240	09/03/12	Mon	1600	All Other	0	0	1	Day	Dry	No Improper Driving/Act
113	40.261	11/03/12	Sat	0300	Angle	0	1	0	Night	Dry	Careless Driving
114	40.323	01/10/12	Tue	0400	Hit Guardrail	0	1	0	Night	Dry	Unknown/Not Coded
115	40.323	03/04/12	Sun	2100	Hit Guardrail	0	1	0	Night	Dry	No Improper Driving/Act
116	40.342	02/09/12	Thu	0400	Coll. W/ Mv On Roadway	0	0	1	Night	Wet	No Improper Driving/Act
117	40.342	07/21/12	Sat	0700	Cargo Loss Or Shift	0	1	0	Day	Dry	Unknown/Not Coded
118	40.392	01/18/12	Wed	0900	Coll. W/ Mv On Roadway	0	0	1	Day	Dry	Careless Driving
119	40.392	10/06/12	Sat	2300	Concrete Barrier Wall	0	1	0	Night	Wet	Exceeded Safe Speed Limit
120	40.487	10/06/12	Sat	0100	Hit Guardrail	0	0	1	Night	Wet	Exceeded Safe Speed Limit
121	40.525	04/12/12	Thu	1400	All Other	0	0	1	Day	Dry	No Improper Driving/Act
122	40.671	01/08/12	Sun	1400	Utility/Light Pole	3	0	0	Day	Dry	Unknown/Not Coded
123	40.671	11/04/12	Sun	0100	Hit Guardrail	0	5	0	Night	Dry	Exceed Stated Speed Limit

Total No.		Fatal	Injury	PDO	Angle	Left Turn	Right Turn	Rear End	Side swipe	Ped/ Bike	
123		**4**	**57**	**62**	**4**	**0**	**0**	**19**	**0**	**1**	
		3.25%	*46.34%*	*50.41%*	*3.25%*	*0.00%*	*0.00%*	*15.45%*	*0.00%*	*0.81%*	
One Vehicle		Day	Night	Wet	Dry	Excess Speed	FTYRW	DUI			
56		**79**	**44**	**38**	**85**	**17**	**1**	**6**			
45.53%		*64.23%*	*35.77%*	*30.89%*	*69.11%*	*13.82%*	*0.81%*	*4.88%*			

TOTAL ENTERING VEHICLES/ADT: **142,346** SEGMENT CRASH RATE: **0.483**

FLORIDA DEPARTMENT OF TRANSPORTATION
CRASH SUMMARY

SECTION: 93220000 STATE ROUTE: 9
ROADWAY LIMITS: SR 9/I-95: Northlake Blvd to Donald Ross Rd M.P. 34.056 TO 40.837 ENGINEER: FDOT D4
STUDY PERIOD: FROM 1/ 13 TO 12/ 13 COUNTY: Palm Beach

No.	MILE POST	DATE	DAY	TIME	CRASH TYPE	FATAL	INJURY	PROP DAM	DAY / NIGHT	WET / DRY	CONTRIBUTING CAUSE
1	34.235	09/28/13	Sat	0400	Coll. W/ Mv On Roadway	0	0	1	Night	Wet	Careless Driving
2	34.285	03/26/13	Tue	1100	Rear-End	0	1	0	Day	Dry	Exceeded Safe Speed Limit
3	34.285	04/10/13	Wed	0800	Rear-End	0	0	1	Day	Dry	Careless Driving
4	34.285	07/01/13	Mon	0900	Coll. W/ Mv On Roadway	0	4	0	Day	Dry	Unknown/Not Coded
5	34.285	07/15/13	Mon	2200	Coll. W/ Mv On Roadway	0	0	1	Night	Dry	Unknown/Not Coded
6	34.285	07/17/13	Wed	1500	Concrete Barrier Wall	0	0	1	Day	Wet	Unknown/Not Coded
7	34.285	07/30/13	Tue	1500	All Other	0	1	0	Day	Dry	No Improper Driving/Act
8	34.285	08/15/13	Thu	1700	Rear-End	0	1	0	Day	Dry	Failed To Yield Right-Of-Way
9	34.285	09/25/13	Wed	0700	Rear-End	0	0	1	Day	Wet	Careless Driving
10	34.285	11/12/13	Tue	1400	Coll. W/ Mv On Roadway	0	0	1	Day	Dry	Unknown/Not Coded
11	34.285	11/27/13	Wed	0500	Rear-End	0	0	1	Night	Wet	Careless Driving
12	34.290	09/24/13	Tue	1700	Coll. W/ Mv On Roadway	0	0	1	Day	Wet	No Improper Driving/Act
13	34.346	10/10/13	Thu	0800	Rear-End	0	1	0	Day	Dry	Careless Driving
14	34.374	09/15/13	Sun	1400	Concrete Barrier Wall	0	2	0	Day	Dry	Unknown/Not Coded
15	34.435	03/26/13	Tue	1300	Coll. W/ Mv On Roadway	0	0	1	Day	Dry	Improper Passing
16	34.435	11/26/13	Tue	0800	Coll. W/ Mv On Roadway	0	1	0	Day	Wet	No Improper Driving/Act
17	34.440	04/21/13	Sun	1300	Angle	0	0	1	Day	Dry	No Improper Driving/Act
18	34.471	07/23/13	Tue	1500	Coll. W/ Mv On Roadway	0	2	0	Day	Dry	Careless Driving
19	34.488	12/29/13	Sun	0100	Rear-End	0	1	0	Night	Wet	Unknown/Not Coded
20	34.516	03/19/13	Tue	1600	Cargo Loss Or Shift	0	0	1	Day	Dry	Unknown/Not Coded
21	34.574	03/26/13	Tue	1100	Coll. W/ Mv On Roadway	0	0	1	Day	Dry	Unknown/Not Coded
22	34.578	12/19/13	Thu	1400	Rear-End	0	0	1	Day	Dry	Careless Driving
23	34.593	06/30/13	Sun	1300	All Other	0	0	1	Day	Wet	Unknown/Not Coded
24	34.612	12/15/13	Sun	1800	Concrete Barrier Wall	0	2	0	Night	Dry	Careless Driving
25	34.650	10/23/13	Wed	1900	All Other	0	0	1	Night	Dry	Unknown/Not Coded
26	34.674	02/08/13	Fri	0100	Concrete Barrier Wall	0	2	0	Night	Dry	Unknown/Not Coded
27	34.674	03/26/13	Tue	1200	Rear-End	0	0	1	Day	Dry	Followed Too Closely
28	34.707	10/02/13	Wed	1900	Rear-End	0	2	0	Night	Dry	Careless Driving
29	34.726	03/26/13	Tue	1100	All Other	1	0	0	Day	Dry	Unknown/Not Coded
30	34.763	05/17/13	Fri	1800	All Other	0	0	1	Night	Dry	Unknown/Not Coded
31	34.763	10/02/13	Wed	1900	All Other	0	1	0	Night	Dry	Unknown/Not Coded
32	34.763	12/18/13	Wed	1500	Coll. W/ Mv On Roadway	0	0	1	Day	Dry	Careless Driving
33	34.824	03/16/13	Sat	0300	Concrete Barrier Wall	0	0	1	Day	Dry	Careless Driving
34	34.824	03/22/13	Fri	0800	Coll. W/ Mv On Roadway	0	0	1	Day	Dry	No Improper Driving/Act
35	34.824	07/16/13	Tue	0200	All Other	0	1	0	Night	Dry	Unknown/Not Coded
36	34.824	09/07/13	Sat	1900	Angle	0	0	1	Night	Wet	Careless Driving
37	34.824	11/25/13	Mon	2300	All Other	0	0	1	Night	Wet	Unknown/Not Coded
38	34.824	12/17/13	Tue	1700	Cargo Loss Or Shift	0	0	1	Day	Dry	No Improper Driving/Act
39	34.874	07/19/13	Fri	1600	Rear-End	0	4	0	Day	Dry	Unknown/Not Coded
40	35.074	02/17/13	Sun	0300	Rear-End	0	0	1	Night	Dry	Careless Driving
41	35.304	11/07/13	Thu	0800	Bridge/Pier/Abutment/Rail	0	1	0	Day	Dry	Unknown/Not Coded
42	35.324	03/01/13	Fri	1800	Coll. W/ Mv On Roadway	0	0	1	Night	Dry	Unknown/Not Coded
43	35.554	02/19/13	Tue	0200	Concrete Barrier Wall	0	0	1	Night	Wet	Exceeded Safe Speed Limit
44	35.574	02/26/13	Tue	0600	Angle	0	2	0	Night	Wet	Careless Driving
45	35.574	03/23/13	Sat	1800	Coll. W/Mvble Obj On Road	0	0	1	Day	Dry	No Improper Driving/Act
46	35.574	03/23/13	Sat	1700	Coll. W/Mvble Obj On Road	0	0	1	Day	Dry	No Improper Driving/Act
47	35.574	07/24/13	Wed	1600	All Other	0	2	0	Day	Dry	Unknown/Not Coded
48	35.574	08/05/13	Mon	1700	Concrete Barrier Wall	0	1	0	Night	Wet	Unknown/Not Coded
49	35.574	09/07/13	Sat	1900	Rear-End	0	1	0	Night	Wet	Exceeded Safe Speed Limit
50	35.574	09/26/13	Thu	1700	Coll. W/ Mv On Roadway	0	0	1	Day	Dry	Unknown/Not Coded
51	35.574	12/17/13	Tue	1200	Rear-End	0	0	1	Day	Dry	Followed Too Closely
52	35.574	12/17/13	Tue	1200	Coll. W/Mvble Obj On Road	0	0	1	Day	Dry	No Improper Driving/Act
53	35.574	12/18/13	Wed	1600	Rear-End	0	0	1	Day	Dry	Exceeded Safe Speed Limit
54	35.574	12/18/13	Wed	1700	Cargo Loss Or Shift	0	0	1	Day	Dry	No Improper Driving/Act
55	35.731	01/08/13	Tue	0800	Jackknifed	0	0	1	Day	Wet	Unknown/Not Coded
56	35.731	03/13/13	Wed	0700	Concrete Barrier Wall	0	1	0	Day	Dry	Exceeded Safe Speed Limit
57	35.731	06/23/13	Sun	1800	Concrete Barrier Wall	0	0	1	Day	Dry	Careless Driving
58	35.731	07/18/13	Thu	0200	Hit Other Fixed Object	0	0	1	Night	Wet	Careless Driving
59	35.731	11/13/13	Wed	1000	Concrete Barrier Wall	0	0	1	Day	Wet	No Improper Driving/Act
60	35.731	11/20/13	Wed	0200	All Other	0	1	0	Night	Dry	Careless Driving
61	35.731	11/27/13	Wed	0800	Angle	0	2	0	Day	Wet	Unknown/Not Coded
62	35.731	12/01/13	Sun	1000	Concrete Barrier Wall	0	0	1	Day	Wet	Unknown/Not Coded
63	35.731	12/30/13	Mon	1100	Coll. W/ Mv On Roadway	0	0	1	Day	Dry	Unknown/Not Coded
64	36.231	07/28/13	Sun	0200	All Other	0	0	1	Night	Dry	Unknown/Not Coded
65	36.231	10/24/13	Thu	0400	All Other	0	0	1	Night	Dry	Unknown/Not Coded
66	36.231	11/27/13	Wed	0800	Coll. W/ Mv On Roadway	0	0	1	Day	Wet	Exceeded Safe Speed Limit
67	36.258	12/04/13	Wed	0800	Coll. W/ Mv On Roadway	0	1	0	Day	Dry	Careless Driving
68	36.682	02/09/13	Sat	1300	Concrete Barrier Wall	0	0	1	Day	Dry	No Improper Driving/Act
69	36.716	02/21/13	Thu	1100	Coll. W/ Mv On Roadway	0	2	0	Day	Dry	Unknown/Not Coded
70	36.716	05/23/13	Thu	0900	All Other	0	0	1	Day	Dry	Unknown/Not Coded
71	36.716	07/09/13	Tue	1200	Concrete Barrier Wall	0	0	1	Day	Wet	Exceeded Safe Speed Limit
72	36.716	08/07/13	Wed	2100	All Other	0	0	1	Night	Dry	Unknown/Not Coded
73	36.716	08/09/13	Fri	1400	Concrete Barrier Wall	0	0	1	Day	Wet	Unknown/Not Coded
74	36.716	10/07/13	Mon	1600	Concrete Barrier Wall	0	0	1	Day	Wet	Exceeded Safe Speed Limit

FLORIDA DEPARTMENT OF TRANSPORTATION
CRASH SUMMARY

SECTION: 93220000 STATE ROUTE: 9
ROADWAY LIMITS: SR 9/I-95: Northlake Blvd to Donald Ross Rd M.P. 34.056 TO 40.837 ENGINEER: FDOT D4
STUDY PERIOD: FROM 1/ 13 TO 12/ 13 COUNTY: Palm Beach

No.	MILE POST	DATE	DAY	TIME	CRASH TYPE	FATAL	INJURY	PROP DAM	DAY / NIGHT	WET / DRY	CONTRIBUTING CAUSE
75	36.753	04/12/13	Fri	1400	Rear-End	0	0	1	Day	Wet	Unknown/Not Coded
76	36.753	05/23/13	Thu	1600	Concrete Barrier Wall	0	3	0	Day	Dry	Careless Driving
77	36.766	03/10/13	Sun	1100	Coll. W/ Mv On Roadway	0	1	0	Day	Dry	Failed To Yield Right-Of-Way
78	36.766	08/23/13	Fri	0900	Concrete Barrier Wall	0	0	1	Day	Dry	Careless Driving
79	36.777	07/09/13	Tue	1100	Coll. W/ Mv On Roadway	0	1	0	Day	Dry	No Improper Driving/Act
80	36.777	10/16/13	Wed	0600	Concrete Barrier Wall	0	1	0	Night	Dry	Careless Driving
81	36.866	04/15/13	Mon	1700	Concrete Barrier Wall	0	0	1	Day	Wet	Exceeded Safe Speed Limit
82	36.866	05/02/13	Thu	1300	All Other	0	0	1	Day	Wet	Exceeded Safe Speed Limit
83	36.866	05/20/13	Mon	1300	Angle	0	1	0	Day	Wet	Careless Driving
84	36.866	07/27/13	Sat	1400	Concrete Barrier Wall	0	0	1	Day	Wet	Unknown/Not Coded
85	36.866	09/12/13	Thu	1800	Coll. W/ Mv On Roadway	0	1	0	Night	Wet	Careless Driving
86	36.871	05/24/13	Fri	1500	All Other	0	0	1	Day	Dry	Unknown/Not Coded
87	36.871	06/15/13	Sat	2200	Coll. W/ Mv On Roadway	0	0	1	Night	Dry	Unknown/Not Coded
88	36.907	05/01/13	Wed	1800	Coll. W/ Mv On Roadway	0	1	0	Day	Wet	Exceeded Safe Speed Limit
89	36.909	06/30/13	Sun	1300	Concrete Barrier Wall	0	3	0	Day	Wet	Careless Driving
90	36.928	07/02/13	Tue	1500	Concrete Barrier Wall	0	1	0	Day	Wet	Unknown/Not Coded
91	36.928	07/16/13	Tue	1000	Coll. W/ Mv On Roadway	0	0	1	Day	Wet	Exceeded Safe Speed Limit
92	36.928	10/07/13	Mon	1700	Concrete Barrier Wall	0	1	0	Day	Wet	Exceeded Safe Speed Limit
93	36.938	06/27/13	Thu	2000	Coll. W/Mvble Obj On Road	0	0	1	Night	Dry	No Improper Driving/Act
94	36.963	01/20/13	Sun	1200	Angle	0	2	0	Day	Dry	Unknown/Not Coded
95	36.972	02/13/13	Wed	1600	Concrete Barrier Wall	0	1	0	Day	Dry	Unknown/Not Coded
96	37.020	02/14/13	Thu	1300	Rear-End	0	0	1	Day	Wet	Careless Driving
97	37.029	02/23/13	Sat	2000	Coll. W/ Mv On Roadway	0	0	1	Night	Wet	Exceeded Safe Speed Limit
98	37.035	05/12/13	Sun	1900	Concrete Barrier Wall	0	0	1	Night	Wet	Exceeded Safe Speed Limit
99	37.054	10/07/13	Mon	1500	Concrete Barrier Wall	0	1	0	Day	Wet	Unknown/Not Coded
100	37.067	01/08/13	Tue	2100	Coll. W/ Mv On Roadway	0	0	1	Night	Dry	No Improper Driving/Act
101	37.073	05/12/13	Sun	2000	Hit Guardrail	0	0	1	Night	Wet	No Improper Driving/Act
102	37.103	06/08/13	Sat	1000	Angle	0	0	1	Day	Wet	No Improper Driving/Act
103	37.111	04/26/13	Fri	1100	Rear-End	0	1	0	Day	Dry	Careless Driving
104	37.113	05/29/13	Wed	0700	Angle	0	0	1	Day	Wet	No Improper Driving/Act
105	37.113	06/03/13	Mon	0300	All Other	0	0	1	Night	Wet	Unknown/Not Coded
106	37.113	10/06/13	Sun	1200	Concrete Barrier Wall	0	2	0	Day	Wet	Exceeded Safe Speed Limit
107	37.116	09/05/13	Thu	2300	Concrete Barrier Wall	0	0	1	Night	Wet	Unknown/Not Coded
108	37.132	07/02/13	Tue	1500	Concrete Barrier Wall	0	0	1	Day	Wet	Unknown/Not Coded
109	37.189	09/02/13	Mon	1600	Concrete Barrier Wall	0	1	0	Day	Wet	No Improper Driving/Act
110	37.194	08/12/13	Mon	1100	Coll. W/ Mv On Roadway	0	0	1	Day	Dry	Careless Driving
111	37.194	09/10/13	Tue	1100	All Other	0	0	1	Day	Wet	Careless Driving
112	37.194	09/10/13	Tue	1100	Coll. W/ Mv On Roadway	0	1	0	Day	Wet	Careless Driving
113	37.266	10/11/13	Fri	1500	Coll. W/ Mv On Roadway	0	5	0	Day	Dry	Unknown/Not Coded
114	37.266	12/09/13	Mon	0300	Rear-End	0	0	1	Night	Dry	Careless Driving
115	37.283	06/11/13	Tue	1600	Rear-End	0	3	0	Day	Dry	Unknown/Not Coded
116	37.283	08/23/13	Fri	0800	Concrete Barrier Wall	0	2	0	Day	Dry	No Improper Driving/Act
117	37.283	09/25/13	Wed	1500	All Other	0	0	1	Day	Dry	Unknown/Not Coded
118	37.476	07/11/13	Thu	1500	Concrete Barrier Wall	0	1	0	Day	Dry	Unknown/Not Coded
119	37.509	06/07/13	Fri	0400	Hit Guardrail	0	3	0	Night	Wet	Careless Driving
120	37.516	05/21/13	Tue	2300	Concrete Barrier Wall	0	1	0	Night	Dry	Careless Driving
121	37.516	05/31/13	Fri	1500	All Other	0	0	1	Day	Wet	No Improper Driving/Act
122	37.626	08/19/13	Mon	0800	Coll. W/ Mv On Roadway	0	0	1	Day	Dry	Unknown/Not Coded
123	37.755	06/02/13	Sun	0400	Concrete Barrier Wall	0	1	0	Night	Wet	Careless Driving
124	37.876	08/02/13	Fri	1400	Overturned	0	1	0	Day	Dry	No Improper Driving/Act
125	37.876	11/08/13	Fri	1300	All Other	0	0	1	Day	Wet	Unknown/Not Coded
126	37.938	10/28/13	Mon	1500	Rear-End	0	0	1	Day	Dry	Careless Driving
127	38.016	04/22/13	Mon	0600	Coll. W/ Mv On Roadway	0	2	0	Night	Wet	Careless Driving
128	38.094	12/18/13	Wed	1100	Concrete Barrier Wall	0	1	0	Day	Dry	Unknown/Not Coded
129	38.094	12/23/13	Mon	1200	Rear-End	0	0	1	Day	Dry	Careless Driving
130	38.121	03/24/13	Sun	2100	Coll. W/ Mv On Roadway	0	0	1	Night	Wet	Exceeded Safe Speed Limit
131	38.141	11/15/13	Fri	1800	All Other	0	0	1	Night	Dry	Unknown/Not Coded
132	38.206	04/13/13	Sat	1200	Hit Guardrail	0	2	0	Day	Dry	Careless Driving
133	38.206	05/19/13	Sun	1100	Coll. W/ Mv On Roadway	0	2	0	Day	Dry	Careless Driving
134	38.206	10/09/13	Wed	1200	Ran In Ditch/Culvert	0	0	1	Day	Wet	Improper Passing
135	38.206	11/10/13	Sun	2300	All Other	0	0	1	Night	Dry	Unknown/Not Coded
136	38.247	02/28/13	Thu	1500	Rear-End	0	0	1	Day	Dry	Exceeded Safe Speed Limit
137	38.641	03/10/13	Sun	1600	All Other	0	0	1	Day	Dry	Unknown/Not Coded
138	38.641	06/20/13	Thu	1400	Coll. W/ Pedestrian	0	2	0	Day	Dry	Unknown/Not Coded
139	39.141	03/28/13	Thu	1800	Utility/Light Pole	0	1	0	Day	Dry	Unknown/Not Coded
140	39.141	05/11/13	Sat	1800	Hit Guardrail	0	1	0	Day	Dry	No Improper Driving/Act
141	39.141	06/15/13	Sat	1400	Hit Guardrail	0	0	1	Day	Dry	No Improper Driving/Act
142	39.141	08/06/13	Tue	1700	Rear-End	0	0	1	Day	Dry	Unknown/Not Coded
143	39.141	09/04/13	Wed	0800	Hit Guardrail	0	1	0	Day	Dry	No Improper Driving/Act
144	39.141	09/10/13	Tue	2100	Hit Guardrail	0	0	1	Night	Dry	Unknown/Not Coded
145	39.141	12/27/13	Fri	0600	Hit Guardrail	0	1	0	Night	Wet	Unknown/Not Coded
146	39.611	02/10/13	Sun	0200	Utility/Light Pole	0	0	1	Night	Dry	Careless Driving
147	39.793	03/18/13	Mon	0700	Coll. W/Mvble Obj On Road	0	0	1	Day	Dry	No Improper Driving/Act
148	39.793	03/18/13	Mon	0700	Coll. W/Mvble Obj On Road	0	0	1	Day	Dry	No Improper Driving/Act

FLORIDA DEPARTMENT OF TRANSPORTATION
CRASH SUMMARY

SECTION: **93220000** STATE ROUTE: **9**

ROADWAY LIMITS: **SR 9/I-95: Northlake Blvd to Donald Ross Rd** M.P. **34.056** TO **40.837** ENGINEER: **FDOT D4**

STUDY PERIOD: FROM **1/ 13** TO **12/ 13** COUNTY: **Palm Beach**

No.	MILE POST	DATE	DAY	TIME	CRASH TYPE	FATAL	INJURY	PROP DAM	DAY / NIGHT	WET / DRY	CONTRIBUTING CAUSE
149	39.861	04/04/13	Thu	0700	All Other	0	0	1	Night	Dry	Unknown/Not Coded
150	39.861	04/17/13	Wed	1700	Coll. W/Mvble Obj On Road	0	2	0	Day	Dry	No Improper Driving/Act
151	39.861	05/14/13	Tue	1900	Rear-End	0	1	0	Day	Dry	Unknown/Not Coded
152	39.861	05/25/13	Sat	0500	Hit Guardrail	0	3	0	Night	Dry	Unknown/Not Coded
153	39.982	09/26/13	Thu	1000	Rear-End	0	0	1	Day	Dry	Unknown/Not Coded
154	39.997	11/05/13	Tue	1400	Hit Guardrail	0	0	1	Day	Dry	No Improper Driving/Act
155	40.057	07/01/13	Mon	2100	Hit Tree/Shrubbery	0	1	0	Night	Wet	Disregarded Other Traffic Control
156	40.111	04/03/13	Wed	0400	Rear-End	0	0	1	Night	Dry	Careless Driving
157	40.111	05/19/13	Sun	2000	Coll. W/ Mv On Roadway	0	0	1	Night	Dry	Improper Passing
158	40.115	11/27/13	Wed	1700	Rear-End	0	0	1	Night	Dry	Careless Driving
159	40.161	03/18/13	Mon	0700	All Other	0	1	0	Night	Dry	Failed To Yield Right-Of-Way
160	40.172	11/08/13	Fri	1500	Coll. W/ Mv On Roadway	0	0	1	Day	Wet	No Improper Driving/Act
161	40.191	07/29/13	Mon	0700	All Other	0	0	1	Day	Dry	No Improper Driving/Act
162	40.261	04/06/13	Sat	1700	Rear-End	0	0	1	Day	Dry	Careless Driving
163	40.297	12/31/13	Tue	1600	All Other	0	0	1	Day	Dry	Unknown/Not Coded
164	40.333	11/01/13	Fri	0700	Collision With Animal	0	1	0	Day	Dry	No Improper Driving/Act
165	40.360	10/05/13	Sat	0600	All Other	0	0	1	Day	Dry	Unknown/Not Coded
166	40.421	01/06/13	Sun	0500	Hit Tree/Shrubbery	0	0	1	Night	Dry	Unknown/Not Coded
167	40.421	04/04/13	Thu	2200	Hit Guardrail	0	0	1	Night	Wet	Followed Too Closely
168	40.421	12/09/13	Mon	0800	Coll. W/ Mv On Roadway	0	0	1	Day	Dry	Improper Passing
169	40.492	07/29/13	Mon	1100	All Other	0	1	0	Day	Dry	Exceed Stated Speed Limit
170	40.671	03/29/13	Fri	1700	Cargo Loss Or Shift	0	0	1	Day	Dry	No Improper Driving/Act
171	40.671	08/13/13	Tue	2200	Rear-End	0	1	0	Night	Dry	Careless Driving
172	40.671	09/01/13	Sun	1400	Hit Sign/Sign Post	0	0	1	Day	Dry	Unknown/Not Coded
173	40.771	09/16/13	Mon	0500	All Other	0	0	1	Night	Wet	Unknown/Not Coded

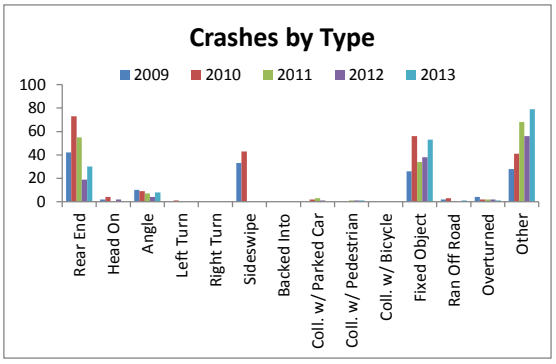
Total No.		Fatal	Injury	PDO	Angle	Left Turn	Right Turn	Rear End	Side swipe	Ped/ Bike	
173		**1**	**67**	**105**	**8**	**0**	**0**	**30**	**0**	**1**	
		0.58%	*38.73%*	*60.69%*	*4.62%*	*0.00%*	*0.00%*	*17.34%*	*0.00%*	*0.58%*	
One Vehicle		Day	Night	Wet	Dry	Excess Speed	FTYRW	DUI			
75		**117**	**56**	**60**	**113**	**19**	**3**	**5**			
43.35%		*67.63%*	*32.37%*	*34.68%*	*65.32%*	*10.98%*	*1.73%*	*2.89%*			

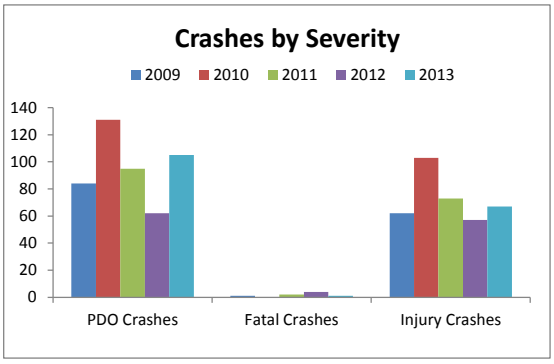
TOTAL ENTERING VEHICLES/ADT: **142,346**

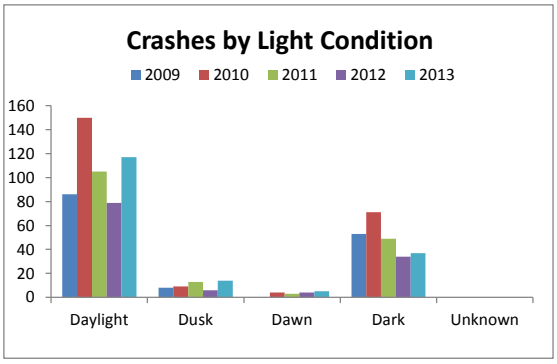
SEGMENT CRASH RATE: **0.483**

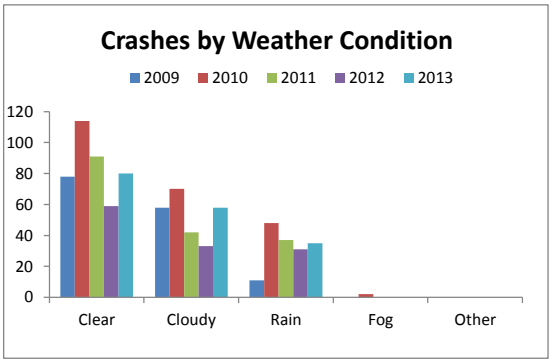
CRASH HISTOGRAMS

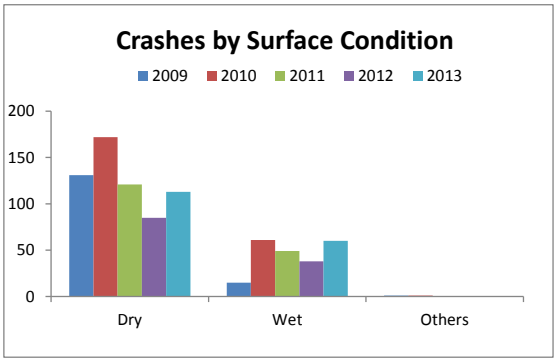
SR 9/I-95: Northlake Blvd to Donald Ross Rd

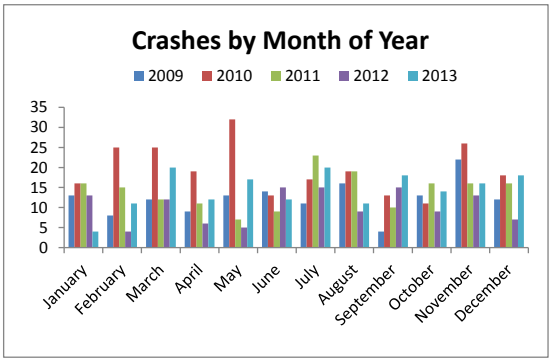


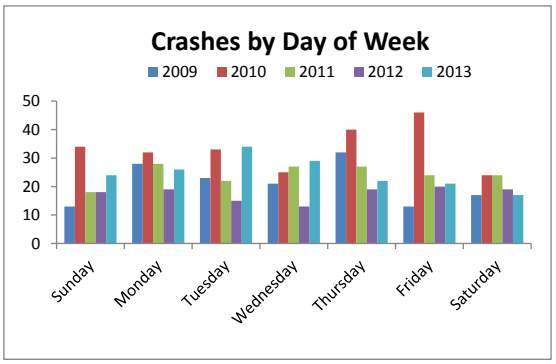


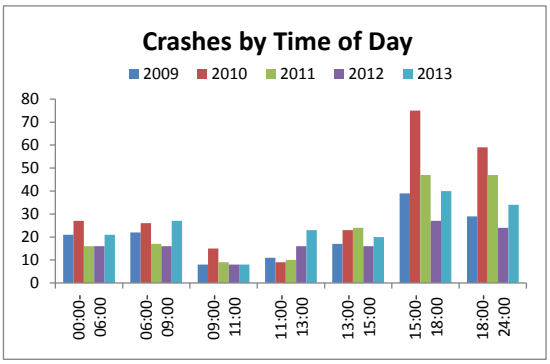












APPENDIX G

Work Program Excerpts

Phase	Fund Source	2015	2016	2017	2018	2019	Total
I-95/SR-9 AT CENTRAL BLVD/PGA - Proj# 4132651					**Length: 0.010 MI**	***SIS***	
Type of Work: INTERCHANGE JUSTIFICA/MODIFICA					**Lead Agency: FDOT**		
					LRTP#: CH6-P10		
Notes: INTERCHANGE MODIFICATION							
PE	SA	0	25,000	0	0	0	**25,000**
PE	DS	0	2,500,000	0	0	0	**2,500,000**
Total		**0**	**2,525,000**	**0**	**0**	**0**	**2,525,000**
	Prior Years Cost	*1,467,742*	*Future Years Cost*			*Total Project Cost*	*3,992,742*
I-95/SR-9 AT GLADES RD/SR 808 - Proj# 4124204					**Length: 3.605 MI**	***SIS***	
Type of Work: INTERCHANGE IMPROVEMENT					**Lead Agency: FDOT**		
New Project?: Yes			**Lanes (Existing/Improve/Addl): 6/ 0/ 0**		**LRTP#: CH6-P10**		
Notes: PROJECT INCLUDES AUXILARY LANES ON GLADES ROAD BETWEEN EXECUTIVE CENTER DR AND NW 13TH ST / FAU BLVD; I-95 AT GLADES RD. INTERCHANGE IMPROVEMENTS, INCLUDING WIDENING GLADES RD FROM 6 LANES TO 8 LANES 2011 MPO PRIORITY #2. RFP PACKAGE BEING PREPARED UNDER 412420-2							
PE	DIH	25,000	0	0	0	0	**25,000**
PE	ACNP	4,500,000	0	0	0	0	**4,500,000**
Total		**4,525,000**	**0**	**0**	**0**	**0**	**4,525,000**
	Prior Years Cost		*Future Years Cost*			*Total Project Cost*	*4,525,000*
I-95/SR-9 AT LINTON BOULEVARD INTERCHANGE - Proj# 4353841					**Length: 1.140 MI**	***Non-SIS***	
Type of Work: INTERCHANGE IMPROVEMENT					**Lead Agency: FDOT**		
New Project?: Yes			**Lanes (Existing/Improve/Addl): 3/ 0/ 0**		**LRTP#: CH6-T10**		
Notes: ADD EB AUX LANE TO EB LINTON BLVD FROM W OF CONGRESS AVE TO SB ON-RAMP. ADD WB AUX LANE TO WB LINTON BLVD FROM E OF WATERFORD TO NB ON-RAMP. ADD SB RTL AND EB RTL @ CONGRESS AV & LINTON. REALIGN NB & SB RAMP TERMINI INTERSECTIONS. ADD ADDITIONAL RAMP LANE ON I-95 SB							
PE	DIH	10,000	0	0	0	0	**10,000**
MSC	DS	20,000	0	0	0	0	**20,000**
PE	DS	1,580,000	0	0	0	0	**1,580,000**
ROW	DS	0	0	6,926,281	0	0	**6,926,281**
ROW	DIH	0	0	180,000	0	0	**180,000**
RRU	DS	0	0	0	0	1,000,000	**1,000,000**
CST	DS	0	0	0	0	11,242,437	**11,242,437**
CST	DIH	0	0	0	0	11,550	**11,550**
Total		**1,610,000**	**0**	**7,106,281**	**0**	**12,253,987**	**20,970,268**
	Prior Years Cost	*17,000*	*Future Years Cost*			*Total Project Cost*	*20,987,268*

Phase	Fund Source	2015	2016	2017	2018	2019	Total
SR-9/I-95 @ NORTHLAKE BOULEVARD INTERCHANGE - Proj# 4358031					**Length: .000 MI**	***SIS***	
Type of Work: PD&E/EMO STUDY					**Lead Agency: FDOT**		
New Project?: Yes					**LRTP#: CH6-P10**		
PE	GMR	1,000,000	0	0	0	0	**1,000,000**
PE	DIH	5,000	0	0	0	0	**5,000**
Total		**1,005,000**	**0**	**0**	**0**	**0**	**1,005,000**
	Prior Years Cost		*Future Years Cost*			*Total Project Cost*	*1,005,000*
SR-9/I-95 @ SR-80/SOUTHERN BLVD. INTERCHG. ULTIM. IMPRVMT. - Proj# 4355161					**Length: 6.562 MI**	***SIS***	
Type of Work: INTERCHANGE IMPROVEMENT					**Lead Agency: FDOT**		
New Project?: Yes		**Lanes (Existing/Improve/Addl): 10/ 10/ 0**			**LRTP#: CH6-P10**		
PE	DIH	5,000	0	0	0	0	**5,000**
PE	DI	2,000,000	0	0	0	0	**2,000,000**
Total		**2,005,000**	**0**	**0**	**0**	**0**	**2,005,000**
	Prior Years Cost		*Future Years Cost*	*116,678,015*		*Total Project Cost*	*118,683,015*
SR-9/I-95 @ SR-804/BOYNTON BEACH BLVD INTERCHANGE - Proj# 4358041					**Length: .000 MI**	***SIS***	
Type of Work: PD&E/EMO STUDY					**Lead Agency: FDOT**		
New Project?: Yes					**LRTP#: CH6-P10**		
PE	GMR	1,000,000	0	0	0	0	**1,000,000**
PE	DIH	5,000	0	0	0	0	**5,000**
Total		**1,005,000**	**0**	**0**	**0**	**0**	**1,005,000**
	Prior Years Cost		*Future Years Cost*			*Total Project Cost*	*1,005,000*
SR-9/I-95 @ SR-806/ATLANTIC AVENUE INTERCHANGE - Proj# 4347221					**Length: 2.779 MI**	***Non-SIS***	
Type of Work: INTERCHANGE - ADD LANES					**Lead Agency: FDOT**		
New Project?: Yes		**Lanes (Existing/Improve/Addl): 3/ 0/ 3**			**LRTP#: CH6-P10**		
Notes: NEW SIS/NHS CONNECTOR PROJECT. FROM I-95 PALM BEACH COUNTY INTERCHANGE MASTER PLAN #432785-1-22-01.							
RRU	SA	0	0	500,000	0	0	**500,000**
CST	DS	0	0	0	164,062	0	**164,062**
RRU	ACNP	0	0	0	1,393,048	0	**1,393,048**
CST	ACNP	0	0	0	6,235,794	0	**6,235,794**
Total		**0**	**0**	**500,000**	**7,792,904**	**0**	**8,292,904**
	Prior Years Cost	*1,000,000*	*Future Years Cost*			*Total Project Cost*	*9,292,904*

Phase	Fund Source	2015	2016	2017	2018	2019	Total
COMPUTER SOFTWARE PURCHASES - Proj# 4138912					**Length: .000 MI**	***SIS***	
Type of Work: TOLL DATA CENTER					**Lead Agency: FDOT**		
New Project?: Yes					**LRTP#: CH6-P1**		
MSC	PKYI	500,000	0	0	0	0	**500,000**
	Total	**500,000**	**0**	**0**	**0**	**0**	**500,000**
	Prior Years Cost	*1,069,458*	*Future Years Cost*			*Total Project Cost*	*1,569,458*
COMPUTER SYSTEM AT HARDWARE ENHANCEMENTS - Proj# 4138911						***SIS***	
Type of Work: TOLL DATA CENTER					**Lead Agency: FDOT**		
					LRTP#: CH6-P1		
MSC	PKYI	420,000	320,000	320,000	320,000	320,000	**1,700,000**
	Total	**420,000**	**320,000**	**320,000**	**320,000**	**320,000**	**1,700,000**
	Prior Years Cost	*14,854,191*	*Future Years Cost*	*1,690,000*		*Total Project Cost*	*18,244,191*
FLORIDA TURNPIKE FROM PALM BEACH GARDENS/PGA BLVD TO INTERCHANGE RAMP IMPROVEMENTS - Proj# 4293341					**Length: 0.500 MI**	***SIS***	***RSP***
Type of Work: INTERCHANGE IMPROVEMENT					**Lead Agency: FDOT**		
		Lanes (Existing/Improve/Addl): 4/ 0/ 0			**LRTP#: CH6-P1**		
CST	PKYI	0	1,120,542	0	0	0	**1,120,542**
	Total	**0**	**1,120,542**	**0**	**0**	**0**	**1,120,542**
	Prior Years Cost	*382,667*	*Future Years Cost*			*Total Project Cost*	*1,503,209*
INDIANTOWN ROAD AND AT TURNPIKE VWS - Proj# 4303561					**Length: 6.000 MI**	***Non-SIS***	
Type of Work: MCCO WEIGH STATION STATIC/WIM					**Lead Agency: FDOT**		
		Lanes (Existing/Improve/Addl): 5/ 0/ 0			**LRTP#: CH6-P1**		
Notes: CHANGE TRANSPORTATION SYSTEM 05 TO 03 2013-07-23							
CST	DIH	11,240	0	0	0	0	**11,240**
CST	DWS	393,411	0	0	0	0	**393,411**
	Total	**404,651**	**0**	**0**	**0**	**0**	**404,651**
	Prior Years Cost		*Future Years Cost*			*Total Project Cost*	*404,651*

Phase	Fund Source	2015	2016	2017	2018	2019	Total
WIDEN TPK FROM OKEECHOBEE BLVD (MP 99-109) (4TO6) - Proj# 4157481					**Length: 9.170 MI**	***SIS***	
Type of Work: ADD LANES & RECONSTRUCT					**Lead Agency: FDOT**		
New Project?: Yes		**Lanes (Existing/Improve/Addl): 4/ 0/ 2**			**LRTP#: CH6-P1**		
MSC	PKYI	0	0	0	0	1,000,000	**1,000,000**
Total		**0**	**0**	**0**	**0**	**1,000,000**	**1,000,000**
	Prior Years Cost		*Future Years Cost*	*171,190,390*		*Total Project Cost*	*172,190,390*

Phase	Fund Source	2015	2016	2017	2018	2019	Total
FOREST HILL BLVD./SR-882 AT KIRK ROAD - Proj# 4351221					**Length: .103 MI**	***Non-SIS***	
Type of Work:					**Lead Agency: FDOT**		
New Project?: Yes			**Lanes (Existing/Improve/Addl): 6/ 0/ 0**		**LRTP#: CH6-T10**		
Notes: NPV=7486758 INSTALL DUAL LEFT TURN LANES IN THE EAST/WEST DIRECTIONS & ASSOCIATED IMPROVEMENTS. MODIFY EAST/WEST LEFT TURN PHASE TO "PROTECTED ONLY." INSTALL ADDITIONAL SIGNAL HEADS FACING EAST/WEST THROUGH TRAFFIC AND BACK PLATES ON SIGNAL HEADS. INSTALL LIGHT FIXTURES ON EXISTING POLES ON N.							
PE	SA	5,000	0	0	0	0	**5,000**
PE	HSP	162,321	0	0	0	0	**162,321**
CST	DS	0	1,492,155	0	0	0	**1,492,155**
CST	DIH	0	10,600	0	0	0	**10,600**
Total		**167,321**	**1,502,755**	**0**	**0**	**0**	**1,670,076**
	Prior Years Cost		*Future Years Cost*			*Total Project Cost*	*1,670,076*
Glades Rd. AT Butts Rd. - Proj# 2012503						***Non-SIS***	
Type of Work: INTERSECTION IMPROVEMENT					**Lead Agency: PBC**		
New Project?: Yes							
ROW	IF	100,000	0	0	0	0	**100,000**
CST	IF	0	200,000	0	0	0	**200,000**
Total		**100,000**	**200,000**	**0**	**0**	**0**	**300,000**
	Prior Years Cost	*50,000*	*Future Years Cost*			*Total Project Cost*	*350,000*
Hood Rd. AT Central Blvd. - Proj# 2014502						***Non-SIS***	
Type of Work: INTERSECTION IMPROVEMENT					**Lead Agency: PBC**		
New Project?: Yes							
ENV	IF	0	200,000	0	0	0	**200,000**
CST	IF	0	0	0	1,000,000	0	**1,000,000**
Total		**0**	**200,000**	**0**	**1,000,000**	**0**	**1,200,000**
	Prior Years Cost	*100,000*	*Future Years Cost*			*Total Project Cost*	*1,300,000*
Lake Worth Rd. AT Jog Rd. - Proj# 2012505						***Non-SIS***	
Type of Work: INTERSECTION IMPROVEMENT					**Lead Agency: PBC**		
New Project?: Yes							
CST	IF	0	630,000	0	0	0	**630,000**
Total		**0**	**630,000**	**0**	**0**	**0**	**630,000**
	Prior Years Cost		*Future Years Cost*			*Total Project Cost*	*630,000*

Phase	Fund Source	2015	2016	2017	2018	2019	Total
Linton Blvd. AT Military Tr. - Proj# 2013500						***Non-SIS***	
Type of Work: INTERSECTION IMPROVEMENT					**Lead Agency: PBC**		
New Project?: Yes							
ROW	IF	300,000	0	0	0	0	**300,000**
CST	IF	0	280,000	0	0	0	**280,000**
Total		**300,000**	**280,000**	**0**	**0**	**0**	**580,000**
	Prior Years Cost	*200,000*	*Future Years Cost*			*Total Project Cost*	*780,000*
MILITARY TRL/SR-809 AT AT NORTHLAKE BLVD - Proj# 4316452					**Length: .000 MI**	***Non-SIS***	
Type of Work: ADD TURN LANE(S)					**Lead Agency: FDOT**		
					LRTP#: CH6-T10		
Notes: SEGMENT 1=JPA. CIGP/JPA WITH PALM BEACH COUNTY SEGMENT 2=ROW. FDOT WILL ACQUIRE & ADMINISTER							
ROW	IF	225,195	0	0	0	0	**225,195**
ROW	DIH	22,122	0	0	0	0	**22,122**
ROW	CIGP	225,195	0	0	0	0	**225,195**
CST	IF	0	350,000	0	0	0	**350,000**
CST	CIGP	0	350,000	0	0	0	**350,000**
Total		**472,512**	**700,000**	**0**	**0**	**0**	**1,172,512**
	Prior Years Cost	*127,476*	*Future Years Cost*			*Total Project Cost*	*1,299,988*
PALM BCH CO ITS AT ITS MAINTENANCE - Proj# 4162553						***SIS***	
Type of Work: ITS FREEWAY MANAGEMENT					**Lead Agency: FDOT**		
					LRTP#: CH6-T10		
MSC	D	1,400,000	1,400,000	1,500,000	1,500,000	0	**5,800,000**
Total		**1,400,000**	**1,400,000**	**1,500,000**	**1,500,000**	**0**	**5,800,000**
	Prior Years Cost	*1,200,000*	*Future Years Cost*			*Total Project Cost*	*7,000,000*
PALM BCH CO ITS ITS MAINTENANCE - Proj# 4162555					**Length: .000 MI**	***Non-SIS***	
Type of Work: ITS FREEWAY MANAGEMENT					**Lead Agency: FDOT**		
New Project?: Yes					**LRTP#: CH6-T10**		
MSC	D	0	0	0	0	1,800,000	**1,800,000**
Total		**0**	**0**	**0**	**0**	**1,800,000**	**1,800,000**
	Prior Years Cost		*Future Years Cost*			*Total Project Cost*	*1,800,000*

Phase	Fund Source	2015	2016	2017	2018	2019	Total
PB CO ITS FACILITY O & M JPA - Proj# 4162582					**Length: .000 MI**	***SIS***	
Type of Work: ITS FREEWAY MANAGEMENT					**Lead Agency: FDOT**		
					LRTP#: CH6-T10		
Notes: O & M JPA TO OPERATE FACILITY							
MSC	DDR	50,000	50,000	50,000	50,000	50,000	**250,000**
Total		**50,000**	**50,000**	**50,000**	**50,000**	**50,000**	**250,000**
	Prior Years Cost		*Future Years Cost*			*Total Project Cost*	*250,000*
PGA Blvd. AT Military Tr. - Proj# 2012506						***Non-SIS***	
Type of Work: INTERSECTION IMPROVEMENT					**Lead Agency: PBC**		
New Project?: Yes							
CST	IF	0	150,000	0	0	0	**150,000**
Total		**0**	**150,000**	**0**	**0**	**0**	**150,000**
	Prior Years Cost	*600,000*	*Future Years Cost*			*Total Project Cost*	*750,000*
Purdy Ln. FROM Forest Hill Elem TO E. Major Dr. - Proj# 2013523					**Length: 0.2 MI**	***Non-SIS***	
Type of Work: ADD LANES & RECONSTRUCT					**Lead Agency: PBC**		
New Project?: Yes		**Lanes (Existing/Improve/Addl): 2/ 3/ 1**					
Notes: 0.2 mi, 3 L							
CST	IF	1,100,000	0	0	0	0	**1,100,000**
Total		**1,100,000**	**0**	**0**	**0**	**0**	**1,100,000**
	Prior Years Cost		*Future Years Cost*			*Total Project Cost*	*1,100,000*
Reserve-Intersections AT Countywide - Proj# PBC-INT						***Non-SIS***	
Type of Work: INTERSECTION IMPROVEMENT					**Lead Agency: PBC**		
New Project?: Yes							
Notes: Design, R/W, Mitigation & Construction							
CST	GT	1,200,000	850,000	1,600,000	1,450,000	0	**5,100,000**
Total		**1,200,000**	**850,000**	**1,600,000**	**1,450,000**	**0**	**5,100,000**
	Prior Years Cost	*1,700,000*	*Future Years Cost*			*Total Project Cost*	*6,800,000*

APPENDIX G- Work Program Excerpts

Table 3a
Palm Beach County
Five Year Road Program (Dollar amount in 1,000's)

Description	2014	2015	2016	2017	2018	Total
10th Avenue North - Military Trail Intersection Improvements	$200					$200
60th St. - W of Royal Palm Beach Blvd to E of Royal Palm Beach Blvd.	4,500					4,500
A-1-A (Carlin Park) Bridge Replacement	750					750
Administrative Support and Computer Equipment	370	370	370	370	370	1,850
Annual Contracts - Advertising	10	10	10	10	10	50
Atlantic Ave. - SR 7 to West of Lyons Road	1,260		7,100		5,500	13,860
Atlantic Ave. - Florida's Turnpike Intersection Improvements		500				500
Australian Avenue -7th St. to 15th St.	2,300					2,300
Camino Real Rd/Boca Club over Intracoastal Waterway			6,000			6,000
Church St. to Limestone Creek Rd. to W. of Central Blvd.	100		50		250	400
Commuity Dr. - Military Tr. Intersection Improvements		1,600				1,600
Congress Ave. - N. of Northlake to Alternate A1A	800		2,720		5,000	8,520
CR 880 (Old SR 80) Rehabiltiation/Heavy Maintenance	2,000	1,000	1,000	1,000	1,000	6,000
Ellison Wilson Rd.- Juno Isles Blvd. to Ascot Rd.		1,400				1,400
Flavor Pict. Rd- SR 7 to Lyons		100		4,500		4,600
Glades Rd. - R&R Throughout the Glades	700	700	700	700	700	3,500
Glades Rd. - Butts Rd. Intersection Improvements	50	100	200			350
Glades Rd. - Florida's Turnpike Intersection Improvements		220				220
Hatton Hwy -Bridge over PDD Main Canal 2	3,100					3,100
Haverhill Rd. - Lantana to S of LWDD L-14 Canal			2,100			2,100
Haverhill Rd. - S of LWDD L-14 Canal to Lake Worth Rd			7,600			7,600
Haverhill Rd. - N. of Caribbean Blvd. to Bee Line Hwy.		500		9,000		9,500
Hood Rd. - E. of Florida Turnpike to W. of Central Blvd.		200		6,400		6,600
Hood Rd. - Central Blvd. Intersection Improvements	100		200		1,000	1,300
Indiantown Rd.- Jupiter Farms Rd., to W. of Florida's Turnpike	200		4,700			4,900
Jog Rd. -Glades rd. to Yamato Rd.	700		500		5,600	6,800
Jog Rd. - Roebuck Rd to S of 45th St.					30,000	30,000
Kirk Rd. - Bridge over LWDD L-9 Canal	600					600
Lake Worth Rd - Jog Rd Intersection Improvements			630			630
Linton Blvd - Military Trail Intersection Improvements	200	300	280			780
Lyons Rd. - Lantana Rd. to N of LWDD L-14 Canal				4,000		4,000
Lyons Rd. - N of LWDD L-14 Canal to Lake Worth Rd					3,300	3,300
Lyons Rd. - Lake Worth Rd. to N of LWDD L-10 Canal			1,800		1,700	3,500
Lyons Rd. - Clint Moore Rd. to Atlantic Ave.		2,800		9,700		12,500
Lyons Rd. - Hillsboro Canal to SW. 18th Street		100		2,000		2,100
Northlake Blvd. -E. of Seminole Pratt Whitney Rd. to W. of Hall Blvd.		2,000				2,000
Northlake Blvd. -W. of Hall Blvd. to Coconut Blvd.		2,000		8,500		10,500

APPENDIX G- Work Program Excerpts

Table 3a
Palm Beach County
Five Year Road Program (Dollar amount in 1,000's)

Description	2014	2015	2016	2017	2018	Total
Northlake Blvd. - Military Tr. Intersection Improvements		500	700			1,200
Ocean Avenue Loan Repayment	1,029	1,029	1,029	1,029	1,029	5,145
Old Dixie Hwy. - Yamato Rd. to Linton Blvd.	1,500		2,000		10,500	14,000
Old Dixie Hwy. - Park Ave. to Northlake Blvd.	4,000					4,000
Palmetto Park Rd. - Boca Del Mar Dr. to Palmetto Circle N.	150					150
Palmetto Park Rd. over El Rio Canal	500		2,600			3,100
Pathway Program - Countywide	1,500	1,500	1,500	1,500	1,500	7,500
PGA Blvd. - Military Tr Intersection Improvements	600		150			750
Purdy Ln. - Forrest Hill Elem E. to 54th Tr. S.		1,100				1,100
Recording Fees - Countywide	20	20	20	20	20	100
Bridges - Countywide	3,880	2,990	2,210	3,800	500	13,380
Intersection Program - Countywide	1,700	1,200	850	1,600	1,450	6,800
Plans/Align - Countywide	200	200	200	200	200	1,000
Rights of Way - Countywide	200	200	200	200	200	1,000
Traffic Calming - Countywide	20	20	20	20	20	100
Traffic Signals - Countywide	600	600	600	600	600	3,000
Roebuck Rd. - Jog Rd. to Haverhill Rd.	200	150		3,200		3,550
Roebuck Rd. - SR 7 to Jog Rd					50,000	50,000
Royal Palm Beach Blvd. - M- Canal to Orange Blvd.	500		300		3,700	4,500
S.W. 3rd. St. - S.R. to E. of S.R. 7		1,200				1,200
Sandlefoot Blvd. - S.R. to E. of S.R. 7		1,400				1,400
Seminole Pratt - Orange Blvd to S of Northlake Blvd	6,800					6,800
Seminole Pratt - Northlake Blvd Intersection	3,500					3,500
Silver Beach Rd. - E of Congress Ave to Old Dixie Hwy	3,100					3,100
TOTAL APPROPRIATIONS	**$47,939**	**$26,009**	**$48,339**	**$58,349**	**$124,149**	**$304,785**

State and Federal road projects are included by reference, in the Metropolitan Planning Organization's 2014-2018 Transportation Improvement Program (TIP).

Gavin Jones

From: David Young <DLyoung@pbcgov.org>
Sent: Friday, September 12, 2014 10:53 AM
To: Gavin Jones
Cc: shane.misztal
Subject: RE: Palm Beach County Intersection improvements

Gavin,

See below. Lengths exclude the taper.

David (Dave) L. Young, P.E.
Special Projects Manager
Palm Beach County Engineering & Public Works Dept.
Roadway Production Division
561-684-4149

From: Gavin Jones [mailto:gjones@bcceng.com]
Sent: Friday, September 12, 2014 9:09 AM
To: David Young
Cc: shane.misztal
Subject: Palm Beach County Intersection improvements

Hello Dave, thanks for your time. It didn't take long to realize what I missed.

Do you know or can you point me to the individuals who would know the lengths of the turn lane improvements you mentioned:

- Northlake Blvd. at Military Trail: WBRT; 320'
- PGA at Military Trail: SBRT; 450' and
- Hood Rd at Central Blvd.: SBRT 335', NBRT (TBD – 280' is stnd min), additional SBLT (TBD – 450' is stnd min), additional NBLT (TBD – 450' is stnd min).

Thanks again,

Gavin Jones, PE, AICP
Senior Transportation Planner

BCC Engineering, Inc.
Miami • Orlando • Tampa • Ft. Lauderdale
4901 N.W. 17th Way, Suite 506
Fort Lauderdale, FL 33309
t. (954) 928-1828
f. (954) 928-1551
m. (954) 200-1390
e. gjones@bcceng.com
w. www.bcceng.com

Gavin Jones

From: Dykstra, Lisa <Lisa.Dykstra@dot.state.fl.us>
Sent: Tuesday, September 16, 2014 10:36 AM
To: Gavin Jones
Cc: shane.misztal
Subject: FW: District 4 Intersection Improvements

Gavin,

I believe Julio Delgado is managing the Design-Build project for this interchange FM #429785-1, which had money programmed in FY 2013, 2014 & a little in 2015 to do the design and construction. A portion of the project was funded with CIGP money. Please see Julio Delgado's email below.

Thanks,

Lisa Dykstra, P.E.
SIS and Concept Development Coordinator
Florida Department of Transportation, District Four
Planning and Environmental Management Office
3400 West Commercial Blvd., Ft. Lauderdale, FL 33309
(954) 777-4360
Lisa.Dykstra@dot.state.fl.us

From: Delgado, Julio C.
Sent: Monday, September 15, 2014 3:21 PM
To: shane.misztal@bcceng.com
Cc: Olson, John; Dykstra, Lisa; Martinez, Cesar
Subject: District 4 Intersection Improvements

Shane,

Good afternoon.

Attached are the as-built Signing and Pavement Marking Plans from the last project done on the I-95 interchange at Donald Ross Road prior to the one your team at BCC is working on with Community Asphalt. The concept plans for the I-95 at Donald Ross Road interchange provided with the RFP for the I-95 Interchange Interim Improvements Design-Build projects and the IOAR Cesar Martinez provided you earlier today reflects the improvements Palm Beach County was planning before the FDOT took over the project due to the inclusion of the structural work at the interchange.

Please let me know if you need additional information or if you have any questions.

Thank you and best regards,

Julio C. Delgado, PE
Project Manager
FDOT District Four Design Office
Consultant Management Unit
3400 West Commercial Blvd.
Ft. Lauderdale, FL 33309-3421

District 4 SIS Interstate Plan

MAP ID	FACILITY	DESCRIPTION	2015	2016	2017	2018	2019	TOTAL DISTRICT MANAGED	TOTAL STATE MANAGED	TOTAL LOCAL FUNDS	PD&E	PE	ROW	CON
4111892	I-595/SR-862 E/W CENTRAL BROW TRANSIT ANALYSIS	Project Development & Environme	$1	$0	$0	$0	$0	$1	$0		●			
4208091	I-595/SR-862 FROM E OF I-75 TO W OF I-95	Preliminary Engineering	$343	$125	$125	$125	$125	$218	$625			●		●
4208093	I-595/SR-862/ P3 FROM E. OF I-75 TO W. OF I-95	Add 3 Reversible Use Lanes	$148,995	$175,036	$204,934	$301,780	$90,788	$102,373	$819,158					●
4208092	I-595/SR-862/P3 FROM E. OF I-75 TO W. OF I-95	Preliminary Engineering	$1	$0	$0	$0	$0	$1	$0			●		
4208095	I-595/SR-862/P3/CEI FROM I-75 TO W. OF I-95	Add 2 Reversible Use Lanes	$200	$0	$0	$0	$0	$200	$0					●
4218542	I-595/SR862/P3/R/W FROM I-75 TO W. OF I-95	Right Of Way	$317	$246	$0	$0	$0	$12	$551				●	
4327091	I-75/SR-93 AT GRIFFIN RD.	Modify Interchange	$830	$0	$0	$0	$0	$830	$0			●		
4327101	I-75/SR-93 AT GRIFFIN RD.	Modify Interchange	$0	$30	$0	$0	$0	$30	$0			●		
4347251	I-95 & BROWARD BLVD INTERCHANGE NORTHBOUND OFF-RAMP & TERMINUS	Modify Interchange	$2,223	$0	$0	$0	$0	$328	$1,895			●		●
4347241	I-95 & BROWARD BLVD. INTERCHANGE SOUTHBOUND OFF-RAMP & TERMINUS	Modify Interchange	$4,186	$0	$0	$0	$0	$813	$3,373			●		●
4127332	I-95/SR-9 @ 10TH AVENUE NORTH (INTERIM INTERCHANGE)	Modify Interchange	$13	$0	$0	$0	$0	$13	$0			●		●
4132572	I-95/SR-9 @ HYPOLUXO ROAD (INTERIM INTERCHANGE)	Modify Interchange	$13	$0	$0	$0	$0	$13	$0			●		●
4130482	I-95/SR-9 @ OSLO ROAD INTERCHANGE	New Interchange	$3,401	$0	$0	$0	$0	$1	$3,400		●	●		
4353841	I-95/SR-9 AT LINTON BOULEVARD INTERCHANGE	Modify Interchange	$1,610	$0	$7,106	$0	$12,254	$20,970	$0		●	●	●	●
4093553	I-95/SR-9 FROM NORTH OF YAMATO ROAD TO LINTON BLVD	Ultimate Plan	$2	$0	$0	$0	$0	$2	$0			●		
4093591	I-95/SR-9 FROM OAKLAND PARK BLVD TO PALM BCH C/L	Project Development & Environme	$3	$0	$0	$0	$0	$3	$0		●			
4226811	I-95/SR-9 FROM S OF HIGH MEADOW AVE TO NORTH OF BECKER ROAD	Project Development & Environme	$2	$0	$0	$0	$0	$2	$0		●			
4130491	I-95/SR-9 FROM SR-60/OSCEOLA BLVD TO N. OF CR-512	Add 2 Lanes to build 6 Lanes	$2	$0	$0	$0	$0	$0	$2			●		
4093551	I-95/SR-9/AUX LANES FROM PALM BCH/BROWARD C/L TO S. OF GLADES RD.	Project Development & Environme	$3	$0	$0	$0	$0	$0	$3		●			
4347231	SR-9/I-95 @ BLUE HERON BLVD INTERCHANGE	Add Turn Lane	$2,602	$0	$0	$0	$0	$234	$2,368			●		●
4297851	SR-9/I-95 @ DONALD ROSS ROAD VARIOUS LOCATIONS	Modify Interchange	$24	$0	$0	$0	$0	$24	$0			●		●
2319321	SR-9/I-95 @ GATEWAY BLVD. INTERCHANGE	Modify Interchange	$1,005	$0	$0	$0	$0	$5	$1,000		●			
4358031	SR-9/I-95 @ NORTHLAKE BOULEVARD INTERCHANGE	Project Development & Environme	$1,005	$0	$0	$0	$0	$5	$1,000		●			
4132651	SR-9/I-95 @ PGA BOULEVARD/CENTRAL BOULEVARD	Modify Interchange	$31	$2,525	$0	$0	$0	$2,556	$0		●	●		
4297861	SR-9/I-95 @ SR-76/KANNER HIGHWAY	Modify Interchange	$5,250	$0	$0	$0	$0	$2,625	$0	$2,625				●
4355161	SR-9/I-95 @ SR-80/SOUTHERN BLVD. INTERCHG. ULTIM. IMPRVMT.	Modify Interchange	$2,005	$0	$0	$0	$0	$5	$2,000		●			
4358041	SR-9/I-95 @ SR-804/BOYNTON BEACH BLVD INTERCHANGE	Project Development & Environme	$1,005	$0	$0	$0	$0	$5	$1,000		●			
4347221	SR-9/I-95 @ SR-806/ATLANTIC AVENUE INTERCHANGE	Modify Interchange	$69	$0	$500	$7,793	$0	$713	$7,649			●		●
4124204	SR-9/I-95 @ SR-808/GLADES ROAD	Modify Interchange	$4,525	$0	$0	$0	$0	$25	$4,500			●		
4353371	SR-9/I-95 AT ST. LUCIE WEST BLVD.	Modify Interchange	$1,550	$0	$0	$0	$0	$1,550	$0			●		
4132541	SR-9/I-95 F. S OF CR-708/BRIDGE RD. TO HIGH MEADOW	Add 2 Lanes to build 8 Lanes	$1	$0	$0	$0	$0	$0	$1		●			
4309321	SR-9/I-95 FR N. OF SW 10TH ST TO S. OF HILLSBORO BLVD.	Add 2 Auxiliary Lanes	$74	$0	$0	$0	$0	$74	$0			●		●
4331081	SR-9/I-95 FROM ATLANTIC AVE. TO BROWARD/PALM BEACH COUNTY LINE	Preliminary Engineering	$5,002	$3,500	$2,000	$1,000	$224,288	$40,002	$195,788			●		●
4331091	SR-9/I-95 FROM BROW/PALM BCH CO LIN TO LINTON BLVD.	Preliminary Engineering	$1,004	$500	$500	$0	$127,462	$54,704	$74,763			●		●
4331092	SR-9/I-95 FROM LINTON BLVD. TO INDIANTOWN RD.	Preliminary Engineering	$5	$0	$0	$0	$0	$5	$0			●		
4259281	SR-9/I-95 FROM MIAMI-DADE/BROWARD TO SR-842/BROWARD BLVD	Project Development & Environme	$0	$0	$0	$4,890	$0	$4,890	$0		●			
4331084	SR-9/I-95 FROM N. OF STIRLING RD TO PALM BEACH CO LINE	Managed Lanes	$160,650	$12,494	$6,400	$4,978	$0	$78,170	$106,352			●		●
4124202	SR-9/I-95 FROM S. OF GLADES RD TO N. OF YAMATO	Add 2 Auxiliary Lanes	$201	$0	$0	$0	$0	$201	$0			●		
4358081	SR-9/I-95 FROM S. OF SR-870/COMMERCIAL BLVD. TO N. OF CYPRESS CREEK R	Project Development & Environme	$0	$2,010	$0	$0	$0	$2,010	$0		●			

All Values in Thousands of "As Programmed" Dollars

PD&E - Project Development & Environmental;
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ROW - Right-of-Way;
CON - Construction & Support (may Include Grants);

Turnpike Enterprise SIS Plan

MAP ID	FACILITY	DESCRIPTION	2015	2016	2017	2018	2019	TOTAL DISTRICT MANAGED	TOTAL STATE MANAGED	TOTAL LOCAL FUNDS	PD&E	PE	ROW	CON
4293291	BIRD RD INTERSECTION IMPROVEMENTS (HEFT MP 23)	Modify Interchange	$3	$0	$0	$0	$0	$3	$0		●	●		●
4354621	CONSTRUCT NEW RAMP FROM CAMPBELL DR TO NB OF HEFT (TPK SR821) (MP	Modify Interchange	$1	$0	$0	$285	$3,700	$3,985	$0			●		●
4233732	GOLDEN GLADES INTCH. IMPROVEMENTS (MAINLINE SPUR MP 0X)	Modify Interchange	$12	$6,743	$61,706	$0	$0	$68,461	$0			●	●	●
2519381	H.E.F.T. (SR821) / I-75 INTCHG (MP 39)	Modify Interchange	$1	$0	$0	$0	$0	$1	$0		●			
4338303	HANCOCK RD EXTENSION AT MINNEOLA INTERCHANGE	Modify Interchange	$2	$0	$0	$0	$0	$2	$0			●		●
4233712	HEFT/NW 57TH AVENUE INTERCHANGE IMPROVEMENT (MP 43.2)	Modify Interchange	$1	$0	$0	$5,169	$0	$5,170	$0			●		●
4060991	HOLLYWOOD BLVD / TPK (SR820 / SR91) INTCHG MODIFICATION (MP 49)	Modify Interchange	$1	$0	$0	$0	$0	$1	$0		●			
4061101	I-75/TPK INTCHG MODIFICATION (NORTHERN TERMINUS) (MP 309)	Modify Interchange	$106,831	$0	$0	$0	$0	$106,831	$0			●	●	●
4061102	I-75/TURNPIKE INTERC HANGE (I-75 WIDENING 4 TO 6 LANES, MP 20.8-SR44)	Add 2 Lanes to build 8 Lanes	$37,288	$0	$0	$0	$0	$25,288	$12,000					●
4354611	IMPROVE INTERCHANGE AT SAWGRASS XWAY & CORAL RIDGE DR (MP 14)	Modify Interchange	$2	$0	$0	$390	$5,072	$5,463	$0			●		●
4276891	KENDALL DRIVE RAMP INTERSECTION MODIFICATION (HEFT MP 20)	Modify Interchange	$2	$0	$0	$0	$0	$2	$0			●		●
4338301	MINNEOLA INTERCHANGE (TPK MP 279)	Modify Interchange	$34,696	$1,430	$0	$0	$0	$36,126	$0			●		●
4233721	PD&E WIDEN HEFT FROM CAMPBELL DRIVE TO US 1 (MP 2 - 13)	Project Development & Environme	$1	$0	$0	$0	$0	$1	$0		●			
4233751	PD&E WIDEN TPK FROM SR 50 (CLERMONT) TO I-75, MP 272 - 309	Project Development & Environme	$4	$0	$0	$0	$0	$4	$0		●			
4233731	PD&E WIDEN TPK SPUR& HEFT (GOLDEN GLADES-HEFT) & (NW 57TH AVE -MAI	Project Development & Environme	$7	$0	$0	$0	$0	$7	$0		●	●		
4293341	PGA BLVD / TPK INTERCHANGE IMPROVEMENTS (MP 109)	Modify Interchange	$3	$1,121	$0	$0	$0	$1,123	$0			●		●
2589581	RIDGE RD / SUNCOAST PKWY (SR 589) INTERCHANGE (MP 24.7)	New Interchange	$2	$0	$0	$0	$0	$2	$0		●	●		
2430171	SR417/TPK INTCHG (SR417 / SR91), (MP 251)	New Interchange	$34,942	$1,600	$0	$0	$0	$33,626	$2,916			●		●
4061031	SUNRISE BLVD / TPK INTERCHANGE MODIFICATION (SR 838 / SR 91) (MP 58)	Modify Interchange	$58,087	$0	$0	$0	$0	$58,087	$0		●	●	●	●
4193361	TPK RAMPS FROM I-595 TO GRIFFIN ROAD SB WORK	Modify Interchange	$321	$0	$0	$0	$0	$7	$314			●	●	●
4193381	TURNPIKE AUX LANES NB FROM I-595 TO SO. OF PETERS RD. MP55.9 - 56.4	Add 2 Auxiliary Lanes	$2	$0	$0	$0	$0	$2	$0			●		●
4060905	WIDEN BEACHLINE (SR 528), FROM I-4 TO TPK (MP 0 - 4.3) (4TO6 LANES)	Add 2 Lanes to build 6 Lanes	$92,893	$0	$690	$0	$0	$93,583	$0			●		●
4150511	WIDEN HEFT - S OF KILLIAN PKWY TO N OF SW72ST (19.4-21.87)INC EXP LANE	Add 2 Lanes to build 8 Lanes	$5,768	$3,264	$0	$0	$0	$9,032	$0			●		●
4293281	WIDEN HEFT FROM NW 57TH AVE TO MIRAMAR TOLL PLAZA (MP 43-47)	Add 2 Auxiliary Lanes	$1,977	$0	$0	$57,388	$0	$59,365	$0			●		●
4271461	WIDEN HEFT N OF SW72 ST TO BIRD RD(MP21.873 TO 23.8)(6TO10)(INC EXP LN	Add 2 Auxiliary Lanes	$956	$0	$0	$0	$0	$956	$0			●		●
4355421	WIDEN HEFT- NW 106TH ST TO I-75 (MP34 TO MP39) (6TO10 LANES W EXP LANE	Add 2 Lanes to build 6 Lanes	$0	$7,407	$0	$93,501	$0	$100,908	$0			●		●
4355451	WIDEN HEFT- SR836 TO NW 74TH ST (MP26 TO MP31) (4TO8&6TO10)(INC EXP L	Add 2 Lanes to build 6 Lanes	$1	$14,258	$0	$179,964	$0	$194,222	$0			●		●
4150514	WIDEN HEFT,BIRD RD - SR836(MP23.8-26) (6 TO 10 LANES) INC. EXPRESS LAN	Add 4 Lanes to build 10 Lanes	$155,649	$0	$690	$0	$0	$156,339	$0			●		●
4233722	WIDEN HEFT-SW 288 ST TO SW216 ST (MP5-11.8) 4 TO6 LNS INC. EXPRESS LNS	Add 2 Lanes to build 6 Lanes	$79,086	$0	$1,642	$0	$0	$80,728	$0			●		●
4175451	WIDEN SEMINOLE XWAY ORANGE/SEMINOLE CNTY LINE TO SR 434 (MP 38 - 44)	Add 2 Lanes to build 6 Lanes	$2	$0	$0	$0	$3,500	$3,502	$0			●		
4357891	WIDEN TPK FROM CR468 INTCHG TO I-75 INTCHG (MP 301.4 - 308.9)	Add 2 Lanes to build 6 Lanes	$3	$0	$0	$0	$0	$3	$0		●	●		
4357881	WIDEN TPK FROM LAKE/ SUMTER C/L TO CR 468 INTCHG (MP 297.9 - 301.4)	Add 2 Lanes to build 6 Lanes	$3	$0	$0	$0	$0	$3	$0		●	●		
4157481	WIDEN TPK FROM OKEECHOBEE BLVD TO PGA BLVD (MP 99-109) (4TO6)	Add 2 Lanes to build 6 Lanes	$0	$0	$0	$0	$1,000	$1,000	$0			●		
4114064	WIDEN TPK FROM S OF OSCEOLA PKWY TO OSCEOLA COUNTY LINE (248.5-249	Add 4 Lanes to build 8 Lanes	$2	$0	$0	$0	$6	$7	$0					●
4357841	WIDEN TPK FROM SR 50 (CLERMONT) TO ORANGE/LAKE C/L (MP 273.0 - 274.2)	Add 2 Lanes to build 6 Lanes	$3	$0	$0	$0	$0	$3	$0		●	●		
4357871	WIDEN TPK- LEESBURG NORTH INTCHG TO LAKE/SUMT ER C/L (MP 289.3 - 297.	Add 2 Lanes to build 6 Lanes	$3	$0	$0	$0	$0	$3	$0		●	●		
4357861	WIDEN TPK- MINNEOLA INTCHG TO LEESBURG NORTH INTCHG (MP 279 - 289.3)	Add 2 Lanes to build 6 Lanes	$3	$0	$0	$0	$0	$3	$0		●	●		
4357851	WIDEN TPK- ORANGE / LAKE C/L TO MINNEOLA INTCHG (MP 274.2 - 279)	Add 2 Lanes to build 6 Lanes	$3	$0	$0	$0	$0	$3	$0		●	●		
4060951	WIDEN TPK(SR91) FROM H.E.F.T. (SR821) TO N OF JOHNSON ST (6TO8 LANES)	Add 2 Lanes to build 8 Lanes	$28	$0	$0	$0	$0	$28	$0			●		●

All Values in Thousands of "As Programmed" Dollars

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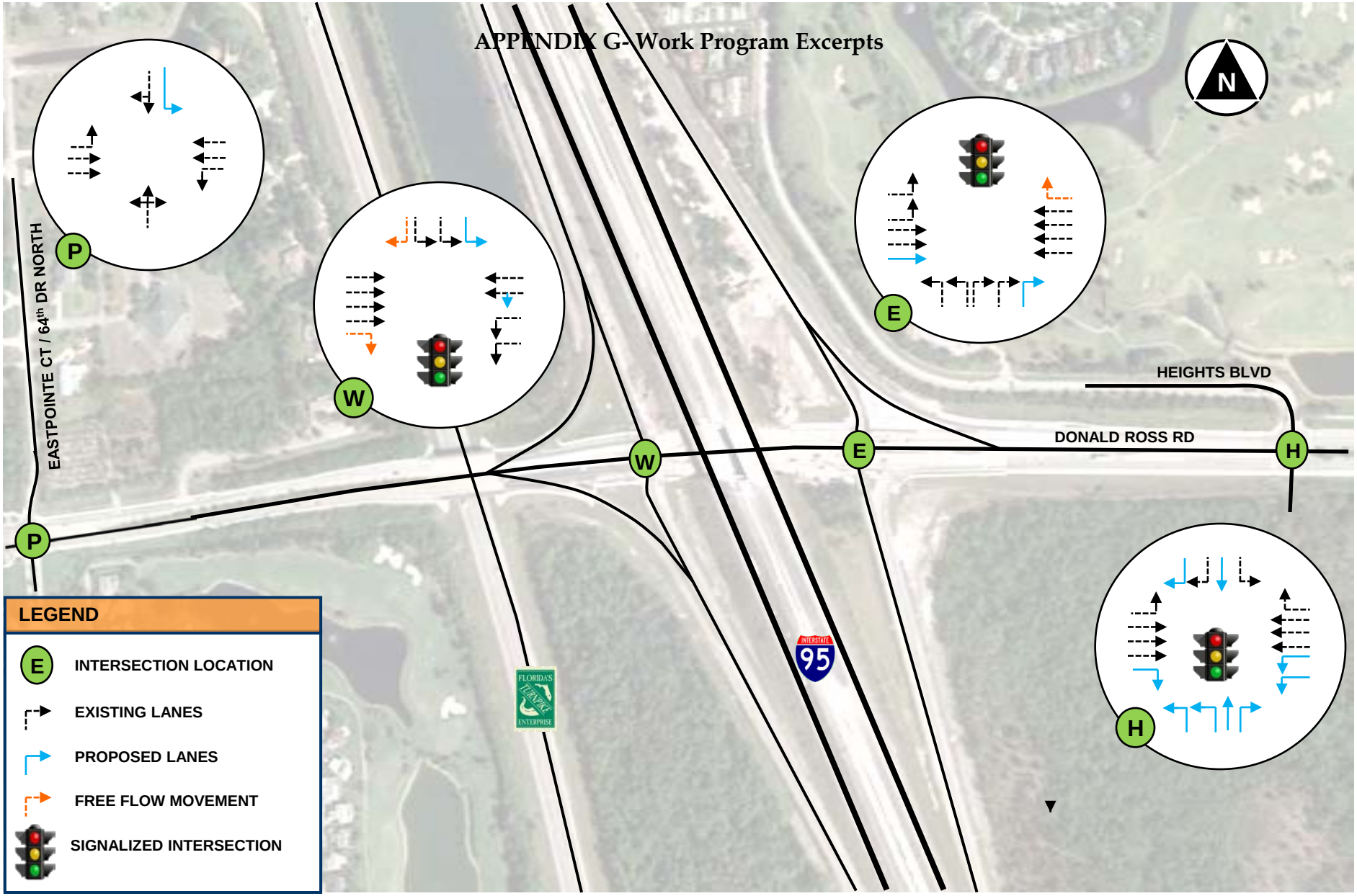
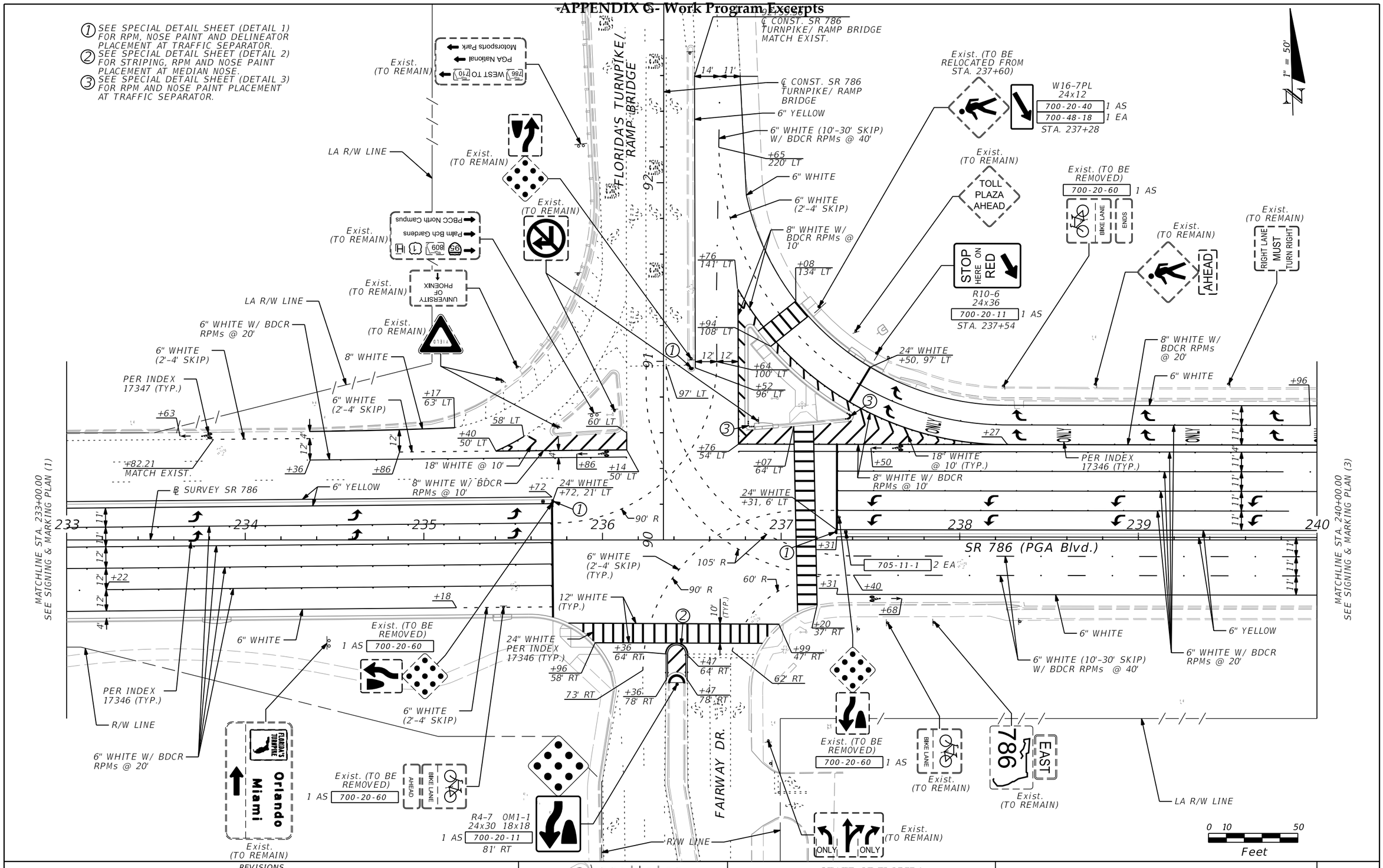


FUTURE LANE CONFIGURATION

ALTERNATIVE 3

FIGURE 10



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

protelan design group
CERTIFICATE OF AUTHORIZATION NUMBER 7865
100 EAST PINE STREET, SUITE 600
ORLANDO FLORIDA 32801
PHONE (407) 246-0044
SCOTT G. HORLANDER, P.E. NO. 46624

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
786	PALM BEACH	429334-1-52-01

SIGNING & MARKING PLAN (2)

SHEET NO. S-5

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APPENDIX H

SYNCHRO REPORTS

NO BUILD 2020 AM

CENTRAL BOULEVARD CORRIDOR

Arterial Level of Service: NB Central Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
PGA Blvd	II	45	11.9	114.2	126.1	0.11	3.1	F
117th Ct	II	45	61.9	10.0	71.9	0.77	38.7	A
Hood Rd	II	45	101.8	26.8	128.6	1.27	35.6	A
Donald Ross	II	45	100.8	43.0	143.8	1.26	31.5	B
Total	II		276.4	194.0	470.4	3.41	26.1	C

Arterial Level of Service: SB Central Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Donald Ross	II	45	22.2	44.2	66.4	0.20	11.1	F
Hood Rd	II	45	100.8	22.9	123.7	1.26	36.7	A
117th Ct	II	45	101.8	6.9	108.7	1.27	42.1	A
PGA Blvd	II	45	61.9	84.4	146.3	0.77	19.0	D
Total	II		286.7	158.4	445.1	3.51	28.4	B

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	245	131	727	209	51	836
Number	3	18	2	12	1	6
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	258	138	765	220	54	880
Adj No. of Lanes	1	1	2	1	1	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	319	285	2153	963	438	2456
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.18	0.18	0.61	0.61	0.04	0.69
Ln Grp Delay, s/veh	36.1	30.5	8.2	7.6	5.4	5.3
Ln Grp LOS	D	C	A	A	A	A
Approach Vol, veh/h	396		985			934
Approach Delay, s/veh	34.1		8.1			5.3
Approach LOS	C		A			A

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	8			6		
Case No	1.2	7.0	9.0			4.0		
Phs Duration (G+Y+Rc), s	6.8	53.2	19.3			60.0		
Change Period (Y+Rc), s	4.0	5.0	5.0			5.0		
Max Green (Gmax), s	5.0	46.0	60.0			55.0		
Max Allow Headway (MAH), s	3.7	4.8	3.8			4.8		
Max Q Clear (g_c+I1), s	2.8	10.6	13.1			10.0		
Green Ext Time (g_e), s	0.0	15.4	1.2			16.7		
Prob of Phs Call (p_c)	0.70	1.00	1.00			1.00		
Prob of Max Out (p_x)	1.00	0.00	0.00			0.00		
Left-Turn Movement Data								
Assigned Mvmt	1	5	3					
Mvmt Sat Flow, veh/h	1774	0	1774					
Through Movement Data								
Assigned Mvmt		2	8			6		
Mvmt Sat Flow, veh/h		3632	0			3632		
Right-Turn Movement Data								
Assigned Mvmt		12	18			16		
Mvmt Sat Flow, veh/h		1583	1583			0		
Left Lane Group Data								
Assigned Mvmt	1	5	3	0	0	0	0	0
Lane Assignment	(Pr/Pm)							
Lanes in Grp	1	0	1	0	0	0	0	0

Grp Vol (v), veh/h	54	0	258	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1774	0	1774	0	0	0	0	0
Q Serve Time (g_s), s	0.8	0.0	11.1	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.8	0.0	11.1	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	569	0	1774	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	50.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	39.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	48.2	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	438	0	319	0	0	0	0	0
V/C Ratio (X)	0.12	0.00	0.81	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	488	0	1343	0	0	0	0	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	5.3	0.0	31.2	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	4.9	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	5.4	0.0	36.1	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.4	0.0	5.4	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	1.00	1.68	0.00	0.00	0.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.7	0.0	9.8	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.05	0.00	0.52	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	0	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	765	0	0	0	880	0	0
Grp Sat Flow (s), veh/h/ln	0	1770	0	0	0	1770	0	0
Q Serve Time (g_s), s	0.0	8.6	0.0	0.0	0.0	8.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	8.6	0.0	0.0	0.0	8.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	2153	0	0	0	2456	0	0
V/C Ratio (X)	0.00	0.36	0.00	0.00	0.00	0.36	0.00	0.00
Avail Cap (c_a), veh/h	0	2153	0	0	0	2456	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	7.8	0.0	0.0	0.0	4.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.5	0.0	0.0	0.0	0.4	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	8.2	0.0	0.0	0.0	5.3	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	4.1	0.0	0.0	0.0	3.9	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.79	1.00	0.00	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	7.7	0.0	0.0	0.0	7.3	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.34	0.00	0.00	0.00	0.37	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	18	0	0	16	0	0
Lane Assignment		R	R					
Lanes in Grp	0	1	1	0	0	0	0	0
Grp Vol (v), veh/h	0	220	138	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1583	1583	0	0	0	0	0
Q Serve Time (g_s), s	0.0	5.0	6.2	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	5.0	6.2	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	963	285	0	0	0	0	0
V/C Ratio (X)	0.00	0.23	0.48	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	963	1199	0	0	0	0	0
Upstream Filter (I)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	7.1	29.2	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.6	1.3	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	7.6	30.5	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	2.1	2.7	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	1.80	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	4.1	5.1	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.28	0.46	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		11.4						
HCM 2010 LOS		B						

Intersection	
Int Delay, s/veh	189

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	112	13	10	52	12	348	20	730	59	169	825	36
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	0	-	336	280	-	-	350	-	350
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	118	14	11	55	13	366	21	768	62	178	868	38

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1657	2097	434	1639	2066	415	868	0	0	831	0	0
Stage 1	1224	1224	-	842	842	-	-	-	-	-	-	-
Stage 2	433	873	-	797	1224	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	~ 64	51	570	66	54	586	772	-	-	797	-	-
Stage 1	190	250	-	325	378	-	-	-	-	-	-	-
Stage 2	571	366	-	346	250	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 15	39	570	~ 39	41	586	772	-	-	797	-	-
Mov Cap-2 Maneuver	~ 15	39	-	~ 39	41	-	-	-	-	-	-	-
Stage 1	185	194	-	316	368	-	-	-	-	-	-	-
Stage 2	201	356	-	245	194	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	$ 2990	110.2	0.2	1.8
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	772	-	-	15	66	39	406	797	-	-
HCM Lane V/C Ratio	0.027	-	-	7.86	0.367	1.404	0.933	0.223	-	-
HCM Control Delay (s)	9.8	-	-	$ 3585.9	88.3	$ 446.1	61.7	10.8	-	-
HCM Lane LOS	A	-	-	F	F	F	F	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	15.7	1.4	5.6	10.3	0.9	-	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

DONALD ROSS CORRIDOR

Arterial Level of Service: EB Donald Ross

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
West Ramp	II	45	46.0	26.4	72.4	0.52	26.0	C
East Ramp	II	45	15.7	48.7	64.4	0.14	8.0	F
Parkside Dr	II	45	42.7	33.5	76.2	0.53	25.2	C
Central Blvd	II	45	52.1	56.6	108.7	0.65	21.6	D
Military Trail	II	45	32.9	45.5	78.4	0.34	15.7	E
Total	II		189.4	210.7	400.1	2.19	19.7	D

Arterial Level of Service: WB Donald Ross

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Military Trail	II	45	21.4	63.2	84.6	0.20	8.3	F
Central Blvd	II	45	32.9	35.6	68.5	0.34	18.0	D
Parkside Dr	II	45	52.1	29.9	82.0	0.65	28.6	B
East Ramp	II	45	42.7	10.1	52.8	0.53	36.4	A
West Ramp	II	45	15.7	39.2	54.9	0.14	9.4	F
Total	II		164.8	178.0	342.8	1.87	19.6	D

HCM 2010 methodology does not support clustered intersections.

HCM 2010 methodology does not support clustered intersections.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	591	1263	572	366	646	46	325	89	456	75	140	649
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	622	1329	602	385	680	48	342	94	480	79	147	683
Adj No. of Lanes	2	3	1	2	3	1	2	1	1	1	1	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	457	1451	528	333	1021	512	422	420	567	327	383	842
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.13	0.29	0.29	0.10	0.20	0.20	0.12	0.23	0.23	0.05	0.21	0.21
Ln Grp Delay, s/veh	211.5	39.2	111.2	136.5	32.0	19.6	45.3	26.4	35.9	24.5	29.0	32.7
Ln Grp LOS	F	D	F	F	C	B	D	C	D	C	C	C
Approach Vol, veh/h		2553			1113			916			909	
Approach Delay, s/veh		98.1			67.6			38.4			31.4	
Approach LOS		F			E			D			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	1.1	3.0
Phs Duration (G+Y+Rc), s	19.0	25.1	14.1	24.5	12.0	32.1	12.5	26.1
Change Period (Y+Rc), s	8.0	* 8.5	4.0	* 7.5	4.0	8.5	8.5	7.5
Max Green (Gmax), s	11.0	* 18	11.0	* 17	8.0	23.5	4.0	16.0
Max Allow Headway (MAH), s	3.7	4.7	3.7	4.1	3.7	4.7	3.7	4.1
Max Q Clear (g_c+I1), s	13.0	12.2	10.0	19.0	10.0	25.6	4.9	20.6
Green Ext Time (g_e), s	0.0	4.4	0.1	0.0	0.0	0.0	0.0	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	0.84	1.00
Prob of Max Out (p_x)	1.00	0.99	1.00	1.00	1.00	0.00	1.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3442		3442		3442		1774	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		5085		1863		5085		1863

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		2787		1583		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Pr/Pm)	
Lanes in Grp	2	0	2	0	2	0	1	0

Grp Vol (v), veh/h	622	0	342	0	385	0	79	0
Grp Sat Flow (s), veh/h/ln	1721	0	1721	0	1721	0	1774	0
Q Serve Time (g_s), s	11.0	0.0	8.0	0.0	8.0	0.0	2.9	0.0
Cycle Q Clear Time (g_c), s	11.0	0.0	8.0	0.0	8.0	0.0	2.9	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	835	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	17.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	15.2	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	457	0	422	0	333	0	327	0
V/C Ratio (X)	1.36	0.00	0.81	0.00	1.16	0.00	0.24	0.00
Avail Cap (c_a), veh/h	457	0	457	0	333	0	327	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	35.9	0.0	35.4	0.0	37.4	0.0	24.1	0.0
Incr Delay (d2), s/veh	175.6	0.0	9.9	0.0	99.2	0.0	0.4	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	211.5	0.0	45.3	0.0	136.5	0.0	24.5	0.0
1st-Term Q (Q1), veh/ln	5.1	0.0	3.8	0.0	3.7	0.0	1.4	0.0
2nd-Term Q (Q2), veh/ln	11.2	0.0	0.6	0.0	4.6	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (-26165%), veh/ln	16.3	0.0	4.4	0.0	8.3	0.0	1.4	0.0
%ile Storage Ratio (RQ%)	0.77	0.00	0.32	0.00	0.68	0.00	0.24	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	41.1	0.0	0.0	0.0	13.1	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.3	0.0	0.0	0.0	0.3	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	1	0	3	0	1
Grp Vol (v), veh/h	0	680	0	147	0	1329	0	94
Grp Sat Flow (s), veh/h/ln	0	1695	0	1863	0	1695	0	1863
Q Serve Time (g_s), s	0.0	10.2	0.0	5.6	0.0	20.9	0.0	3.4
Cycle Q Clear Time (g_c), s	0.0	10.2	0.0	5.6	0.0	20.9	0.0	3.4
Lane Grp Cap (c), veh/h	0	1021	0	383	0	1451	0	420
V/C Ratio (X)	0.00	0.67	0.00	0.38	0.00	0.92	0.00	0.22
Avail Cap (c_a), veh/h	0	1075	0	383	0	1451	0	420
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	30.5	0.0	28.4	0.0	28.6	0.0	26.2
Incr Delay (d2), s/veh	0.0	1.5	0.0	0.6	0.0	10.5	0.0	0.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	32.0	0.0	29.0	0.0	39.2	0.0	26.4
1st-Term Q (Q1), veh/ln	0.0	4.8	0.0	2.9	0.0	9.7	0.0	1.7
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.1	0.0	1.4	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (-26165%), veh/ln	0.0	4.9	0.0	3.0	0.0	11.1	0.0	1.8
%ile Storage Ratio (RQ%)	0.00	0.04	0.00	0.13	0.00	0.10	0.00	0.06
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	2	0	1	0	1
Grp Vol (v), veh/h	0	48	0	683	0	602	0	480
Grp Sat Flow (s), veh/h/ln	0	1583	0	1393	0	1583	0	1583
Q Serve Time (g_s), s	0.0	1.8	0.0	17.0	0.0	23.6	0.0	18.6
Cycle Q Clear Time (g_c), s	0.0	1.8	0.0	17.0	0.0	23.6	0.0	18.6
Prot RT Sat Flow (s_R), veh/h/ln	0.0	1583.3	0.0	1393.3	0.0	1583.3	0.0	1583.3
Prot RT Eff Green (g_R), s	0.0	10.1	0.0	8.0	0.0	4.0	0.0	11.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	512	0	842	0	528	0	567
V/C Ratio (X)	0.00	0.09	0.00	0.81	0.00	1.14	0.00	0.85
Avail Cap (c_a), veh/h	0	529	0	842	0	528	0	567
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	19.5	0.0	26.7	0.0	27.6	0.0	24.5
Incr Delay (d2), s/veh	0.0	0.1	0.0	6.0	0.0	83.6	0.0	11.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	19.6	0.0	32.7	0.0	111.2	0.0	35.9
1st-Term Q (Q1), veh/ln	0.0	0.8	0.0	7.2	0.0	12.1	0.0	10.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.7	0.0	12.3	0.0	1.8
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (-26165%), veh/ln	0.0	0.8	0.0	7.9	0.0	24.3	0.0	11.8
%ile Storage Ratio (RQ%)	0.00	0.04	0.00	0.67	0.00	1.24	0.00	0.67
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	18.4	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	70.9
HCM 2010 LOS	E

Notes

User approved ignoring U-Turning movement.

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	375	1156	461	150	636	178	199	447	56	183	446	176
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	395	1217	485	158	669	187	209	471	59	193	469	185
Adj No. of Lanes	2	3	1	2	3	1	2	2	1	2	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	350	1292	402	175	1034	322	309	654	292	292	659	295
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.10	0.25	0.25	0.05	0.20	0.20	0.09	0.18	0.18	0.08	0.19	0.19
Ln Grp Delay, s/veh	123.3	42.3	143.2	78.8	31.9	35.8	37.3	33.1	27.5	37.5	32.7	32.4
Ln Grp LOS	F	D	F	E	C	D	D	C	C	D	C	C
Approach Vol, veh/h		2097			1014			739			847	
Approach Delay, s/veh		80.9			39.9			33.9			33.7	
Approach LOS		F			D			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	17.0	24.0	15.7	22.0	13.0	28.0	15.6	22.2
Change Period (Y+Rc), s	9.0	8.0	9.0	7.5	9.0	8.0	8.5	7.5
Max Green (Gmax), s	8.0	16.0	16.0	16.5	4.0	20.0	16.0	17.0
Max Allow Headway (MAH), s	3.7	4.6	3.7	4.7	3.7	4.6	3.7	4.7
Max Q Clear (g_c+I1), s	10.0	11.5	6.3	11.9	5.6	22.0	6.6	11.8
Green Ext Time (g_e), s	0.0	4.0	0.4	2.6	0.0	0.0	0.4	2.9
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	0.97	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	0.00	1.00	1.00	1.00	0.01	0.94

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3442		3442		3442		3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		5085		3539		5085		3539

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		1583		1583		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	
Lanes in Grp	2	0	2	0	2	0	2	0

Grp Vol (v), veh/h	395	0	193	0	158	0	209	0
Grp Sat Flow (s), veh/h/ln	1721	0	1721	0	1721	0	1721	0
Q Serve Time (g_s), s	8.0	0.0	4.3	0.0	3.6	0.0	4.6	0.0
Cycle Q Clear Time (g_c), s	8.0	0.0	4.3	0.0	3.6	0.0	4.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	350	0	292	0	175	0	309	0
V/C Ratio (X)	1.13	0.00	0.66	0.00	0.90	0.00	0.68	0.00
Avail Cap (c_a), veh/h	350	0	700	0	175	0	700	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	35.4	0.0	34.9	0.0	37.2	0.0	34.7	0.0
Incr Delay (d2), s/veh	87.9	0.0	2.6	0.0	41.7	0.0	2.6	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	123.3	0.0	37.5	0.0	78.8	0.0	37.3	0.0
1st-Term Q (Q1), veh/ln	3.7	0.0	2.0	0.0	1.7	0.0	2.2	0.0
2nd-Term Q (Q2), veh/ln	4.3	0.0	0.1	0.0	1.0	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (-26165%), veh/ln	8.0	0.0	2.1	0.0	2.7	0.0	2.3	0.0
%ile Storage Ratio (RQ%)	0.38	0.00	0.11	0.00	0.13	0.00	0.11	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	11.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	2	0	3	0	2
Grp Vol (v), veh/h	0	669	0	471	0	1217	0	469
Grp Sat Flow (s), veh/h/ln	0	1695	0	1770	0	1695	0	1770
Q Serve Time (g_s), s	0.0	9.5	0.0	9.9	0.0	18.5	0.0	9.8
Cycle Q Clear Time (g_c), s	0.0	9.5	0.0	9.9	0.0	18.5	0.0	9.8
Lane Grp Cap (c), veh/h	0	1034	0	654	0	1292	0	659
V/C Ratio (X)	0.00	0.65	0.00	0.72	0.00	0.94	0.00	0.71
Avail Cap (c_a), veh/h	0	1034	0	742	0	1292	0	764
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	28.8	0.0	30.2	0.0	28.8	0.0	30.1
Incr Delay (d2), s/veh	0.0	3.1	0.0	3.0	0.0	13.5	0.0	2.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	31.9	0.0	33.1	0.0	42.3	0.0	32.7
1st-Term Q (Q1), veh/ln	0.0	4.5	0.0	4.8	0.0	8.6	0.0	4.8
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.3	0.0	1.6	0.0	0.2

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (-26165%), veh/ln	0.0	4.8	0.0	5.0	0.0	10.2	0.0	5.0
%ile Storage Ratio (RQ%)	0.00	0.07	0.00	0.22	0.00	0.08	0.00	0.18
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	187	0	59	0	485	0	185
Grp Sat Flow (s), veh/h/ln	0	1583	0	1583	0	1583	0	1583
Q Serve Time (g_s), s	0.0	8.4	0.0	2.5	0.0	20.0	0.0	8.5
Cycle Q Clear Time (g_c), s	0.0	8.4	0.0	2.5	0.0	20.0	0.0	8.5
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	322	0	292	0	402	0	295
V/C Ratio (X)	0.00	0.58	0.00	0.20	0.00	1.21	0.00	0.63
Avail Cap (c_a), veh/h	0	322	0	332	0	402	0	342
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	28.3	0.0	27.2	0.0	29.4	0.0	29.5
Incr Delay (d2), s/veh	0.0	7.5	0.0	0.3	0.0	113.8	0.0	2.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	35.8	0.0	27.5	0.0	143.2	0.0	32.4
1st-Term Q (Q1), veh/ln	0.0	3.7	0.0	1.1	0.0	8.7	0.0	3.7
2nd-Term Q (Q2), veh/ln	0.0	0.7	0.0	0.0	0.0	12.7	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (-26165%), veh/ln	0.0	4.3	0.0	1.1	0.0	21.4	0.0	3.9
%ile Storage Ratio (RQ%)	0.00	0.35	0.00	0.11	0.00	1.84	0.00	0.20
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	20.7	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	56.1
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	416	1204	107	70	756	134	19	923	62	140	1237	318
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	438	1267	113	74	796	141	20	972	65	147	1302	335
Adj No. of Lanes	2	3	1	2	3	1	2	3	1	2	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	476	1396	435	123	874	272	131	1154	359	525	1737	541
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.14	0.27	0.27	0.04	0.17	0.17	0.04	0.23	0.23	0.15	0.34	0.34
Ln Grp Delay, s/veh	67.7	46.9	31.1	54.5	57.9	46.4	49.3	42.8	32.9	40.6	33.6	34.1
Ln Grp LOS	E	D	C	D	E	D	D	D	C	D	C	C
Approach Vol, veh/h		1818			1011			1057			1784	
Approach Delay, s/veh		50.9			56.1			42.3			34.2	
Approach LOS		D			E			D			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	23.0	26.0	24.5	31.3	12.2	36.8	12.5	43.3
Change Period (Y+Rc), s	8.5	8.0	8.5	7.5	8.5	8.0	8.5	7.5
Max Green (Gmax), s	14.5	18.0	16.0	29.0	4.5	28.0	16.5	28.5
Max Allow Headway (MAH), s	3.7	4.8	3.7	4.8	3.7	4.8	3.7	4.8
Max Q Clear (g_c+I1), s	15.2	18.1	6.0	21.1	4.2	27.2	2.6	25.7
Green Ext Time (g_e), s	0.0	0.0	0.3	2.6	0.0	0.7	0.0	2.6
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	0.88	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	0.00	0.94	1.00	0.00	0.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3442		3442		3442		3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		5085		5085		5085		5085

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		1583		1583		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	
Lanes in Grp	2	0	2	0	2	0	2	0

Grp Vol (v), veh/h	438	0	147	0	74	0	20	0
Grp Sat Flow (s), veh/h/ln	1721	0	1721	0	1721	0	1721	0
Q Serve Time (g_s), s	13.2	0.0	4.0	0.0	2.2	0.0	0.6	0.0
Cycle Q Clear Time (g_c), s	13.2	0.0	4.0	0.0	2.2	0.0	0.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	476	0	525	0	123	0	131	0
V/C Ratio (X)	0.92	0.00	0.28	0.00	0.60	0.00	0.15	0.00
Avail Cap (c_a), veh/h	476	0	525	0	148	0	542	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	44.6	0.0	39.3	0.0	49.8	0.0	48.8	0.0
Incr Delay (d2), s/veh	23.1	0.0	1.3	0.0	4.7	0.0	0.5	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	67.7	0.0	40.6	0.0	54.5	0.0	49.3	0.0
1st-Term Q (Q1), veh/ln	6.3	0.0	1.9	0.0	1.1	0.0	0.3	0.0
2nd-Term Q (Q2), veh/ln	1.5	0.0	0.1	0.0	0.1	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (-26165%), veh/ln	7.8	0.0	2.0	0.0	1.1	0.0	0.3	0.0
%ile Storage Ratio (RQ%)	0.33	0.00	0.10	0.00	0.05	0.00	0.01	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	3	0	3	0	3
Grp Vol (v), veh/h	0	796	0	972	0	1267	0	1302
Grp Sat Flow (s), veh/h/ln	0	1695	0	1695	0	1695	0	1695
Q Serve Time (g_s), s	0.0	16.1	0.0	19.1	0.0	25.2	0.0	23.7
Cycle Q Clear Time (g_c), s	0.0	16.1	0.0	19.1	0.0	25.2	0.0	23.7
Lane Grp Cap (c), veh/h	0	874	0	1154	0	1396	0	1737
V/C Ratio (X)	0.00	0.91	0.00	0.84	0.00	0.91	0.00	0.75
Avail Cap (c_a), veh/h	0	874	0	1407	0	1396	0	1737
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	42.6	0.0	38.7	0.0	36.7	0.0	30.5
Incr Delay (d2), s/veh	0.0	15.3	0.0	4.0	0.0	10.2	0.0	3.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	57.9	0.0	42.8	0.0	46.9	0.0	33.6
1st-Term Q (Q1), veh/ln	0.0	7.5	0.0	8.9	0.0	11.8	0.0	11.1
2nd-Term Q (Q2), veh/ln	0.0	1.2	0.0	0.4	0.0	1.3	0.0	0.5

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (-26165%), veh/ln	0.0	8.8	0.0	9.3	0.0	13.2	0.0	11.6
%ile Storage Ratio (RQ%)	0.00	0.23	0.00	0.35	0.00	0.20	0.00	0.38
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	141	0	65	0	113	0	335
Grp Sat Flow (s), veh/h/ln	0	1583	0	1583	0	1583	0	1583
Q Serve Time (g_s), s	0.0	8.5	0.0	3.5	0.0	5.8	0.0	18.5
Cycle Q Clear Time (g_c), s	0.0	8.5	0.0	3.5	0.0	5.8	0.0	18.5
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	272	0	359	0	435	0	541
V/C Ratio (X)	0.00	0.52	0.00	0.18	0.00	0.26	0.00	0.62
Avail Cap (c_a), veh/h	0	272	0	438	0	435	0	541
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	39.5	0.0	32.6	0.0	29.7	0.0	28.8
Incr Delay (d2), s/veh	0.0	6.9	0.0	0.2	0.0	1.4	0.0	5.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	46.4	0.0	32.9	0.0	31.1	0.0	34.1
1st-Term Q (Q1), veh/ln	0.0	3.7	0.0	1.5	0.0	2.5	0.0	8.1
2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	0.0	0.0	0.2	0.0	0.8
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (-26165%), veh/ln	0.0	4.2	0.0	1.5	0.0	2.7	0.0	8.9
%ile Storage Ratio (RQ%)	0.00	0.35	0.00	0.07	0.00	0.10	0.00	0.64
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	45.0
HCM 2010 LOS	D

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	3	761	4	13	353	18	1	0	16	60	0	5
Future Vol, veh/h	3	761	4	13	353	18	1	0	16	60	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	325	-	-	289	-	-	-	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	801	4	14	372	19	1	0	17	63	0	5

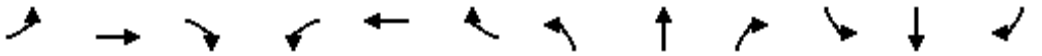
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	391	0	0	805	0	0	1022	1227	403	815	1220	195
Stage 1	-	-	-	-	-	-	809	809	-	408	408	-
Stage 2	-	-	-	-	-	-	213	418	-	407	812	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1164	-	-	815	-	-	190	177	597	269	179	814
Stage 1	-	-	-	-	-	-	340	392	-	591	595	-
Stage 2	-	-	-	-	-	-	769	589	-	592	390	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1164	-	-	815	-	-	186	174	597	257	175	814
Mov Cap-2 Maneuver	-	-	-	-	-	-	186	174	-	257	175	-
Stage 1	-	-	-	-	-	-	339	391	-	589	585	-
Stage 2	-	-	-	-	-	-	751	579	-	574	389	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.3	12.1	22.4
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	528	1164	-	-	815	-	-	257	814
HCM Lane V/C Ratio	0.034	0.003	-	-	0.017	-	-	0.246	0.006
HCM Control Delay (s)	12.1	8.1	-	-	9.5	-	-	23.5	9.5
HCM Lane LOS	B	A	-	-	A	-	-	C	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0.1	-	-	0.9	0

No Build Alternative 2020 AM

2: West Ramp & Donald Ross Corridor: Donald Ross Road

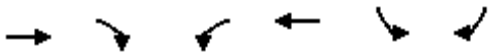


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	709	207	1370	325	0	0	0	0	713	0	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0	4.0	7.0	6.0					6.0		4.0
Lane Util. Factor		0.86	1.00	0.86	0.86					0.94		1.00
Frt		1.00	0.85	1.00	1.00					1.00		0.85
Flt Protected		1.00	1.00	0.95	0.97					0.95		1.00
Satd. Flow (prot)		6408	1583	3044	3113					4990		1583
Flt Permitted		1.00	1.00	0.95	0.55					0.95		1.00
Satd. Flow (perm)		6408	1583	3044	1756					4990		1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	746	218	1442	342	0	0	0	0	751	0	40
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	746	218	966	818	0	0	0	0	751	0	40
Turn Type		NA	Free	Prot	NA					Prot		Free
Protected Phases		6		5	2					3		
Permitted Phases			Free									Free
Actuated Green, G (s)		28.4	91.9	28.0	63.4					16.5		91.9
Effective Green, g (s)		28.4	91.9	28.0	63.4					16.5		91.9
Actuated g/C Ratio		0.31	1.00	0.30	0.69					0.18		1.00
Clearance Time (s)		6.0		7.0	6.0					6.0		
Vehicle Extension (s)		3.0		3.0	3.0					3.0		
Lane Grp Cap (vph)		1980	1583	927	1624					895		1583
v/s Ratio Prot		0.12		c0.32	0.15					c0.15		
v/s Ratio Perm			0.14		c0.19							0.03
v/c Ratio		0.38	0.14	1.04	0.91dl					0.84		0.03
Uniform Delay, d1		24.8	0.0	32.0	6.8					36.4		0.0
Progression Factor		1.00	1.00	1.17	1.15					1.00		1.00
Incremental Delay, d2		0.5	0.2	40.0	0.2					7.0		0.0
Delay (s)		25.4	0.2	77.4	8.0					43.4		0.0
Level of Service		C	A	E	A					D		A
Approach Delay (s)		19.7			45.6			0.0			41.2	
Approach LOS		B			D			A			D	

Intersection Summary			
HCM 2000 Control Delay	37.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	91.9	Sum of lost time (s)	19.0
Intersection Capacity Utilization	61.4%	ICU Level of Service	B
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

c Critical Lane Group



Lane Group	EBT	EBR	WBL	WBT	SBL	SBR
Lane Group Flow (vph)	746	218	966	818	751	40
v/c Ratio	0.40	0.14	1.01	0.91dl	0.82	0.03
Control Delay	26.4	0.2	68.5	39.2	43.3	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	26.4	0.2	68.5	39.2	43.3	0.0
Queue Length 50th (ft)	98	0	~267	208	146	0
Queue Length 95th (ft)	127	0	#443	#273	189	0
Internal Link Dist (ft)	2056			679		
Turn Bay Length (ft)		433				
Base Capacity (vph)	1861	1583	952	1008	947	1583
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.40	0.14	1.01	0.81	0.79	0.03

Intersection Summary

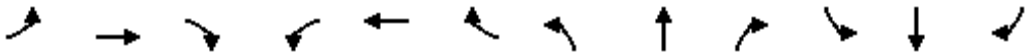
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

No Build Alternative 2020 AM

9: East Ramp & Donald Ross Corridor: Donald Ross Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	36	1386	0	0	1610	434	85	0	1054	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0			6.0	4.0	6.0		6.0			
Lane Util. Factor	0.97	0.91			0.86	1.00	0.97		0.76			
Frt	1.00	1.00			1.00	0.85	1.00		0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (prot)	3433	5085			6408	1583	3433		3610			
Flt Permitted	0.95	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (perm)	3433	5085			6408	1583	3433		3610			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	38	1459	0	0	1695	457	89	0	1109	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	910	0	0	0
Lane Group Flow (vph)	38	1459	0	0	1695	457	89	0	199	0	0	0
Turn Type	Prot	NA			NA	Free	Prot		Prot			
Protected Phases	1	6			2		7		7			
Permitted Phases						Free						
Actuated Green, G (s)	2.4	28.4			55.0	91.9	16.5		16.5			
Effective Green, g (s)	2.4	28.4			55.0	91.9	16.5		16.5			
Actuated g/C Ratio	0.03	0.31			0.60	1.00	0.18		0.18			
Clearance Time (s)	6.0	6.0			6.0		6.0		6.0			
Vehicle Extension (s)	3.0	3.0			3.0		3.0		3.0			
Lane Grp Cap (vph)	89	1571			3835	1583	616		648			
v/s Ratio Prot	0.01	c0.29			c0.26		0.03		0.06			
v/s Ratio Perm						c0.29						
v/c Ratio	0.43	0.93			0.44	0.29	0.14		0.31			
Uniform Delay, d1	44.1	30.8			10.1	0.0	31.8		32.7			
Progression Factor	0.55	0.92			1.00	1.00	1.00		1.00			
Incremental Delay, d2	2.6	9.3			0.4	0.5	0.1		0.3			
Delay (s)	27.1	37.6			10.4	0.5	31.9		33.0			
Level of Service	C	D			B	A	C		C			
Approach Delay (s)		37.4			8.3			32.9			0.0	
Approach LOS		D			A			C			A	

Intersection Summary			
HCM 2000 Control Delay	23.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	91.9	Sum of lost time (s)	19.0
Intersection Capacity Utilization	61.4%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

No Build Alternative 2020 AM

9: East Ramp & Donald Ross Corridor: Donald Ross Road

Lane Group	EBL	EBT	WBT	WBR	NBL	NBR
Lane Group Flow (vph)	38	1459	1695	457	89	1109
v/c Ratio	0.25	0.99	0.43	0.29	0.14	0.71
Control Delay	26.3	48.7	10.1	0.5	31.1	4.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	26.3	48.7	10.1	0.5	31.1	4.9
Queue Length 50th (ft)	9	189	153	0	22	0
Queue Length 95th (ft)	m17	#411	181	0	42	43
Internal Link Dist (ft)		679	2740			
Turn Bay Length (ft)						
Base Capacity (vph)	153	1477	3940	1583	652	1584
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.25	0.99	0.43	0.29	0.14	0.70

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

HOOD ROAD CORRIDOR

Arterial Level of Service: EB Hood Road

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Central Blvd	II	45	133.7	25.2	158.9	1.67	37.8	A
Military Trail	II	45	31.0	34.2	65.2	0.31	17.3	D
Total	II		164.7	59.4	224.1	1.98	31.9	B

Arterial Level of Service: WB Hood Road

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Military Trail	II	45	14.9	27.4	42.3	0.14	11.6	F
Central Blvd	II	45	31.0	20.7	51.7	0.31	21.8	D
Total	II		45.9	48.1	94.0	0.45	17.2	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	149	370	108	340	107	7	114	617	340	311	564	107
Future Volume (veh/h)	149	370	108	340	107	7	114	617	340	311	564	107
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	157	389	114	358	113	7	120	649	358	327	594	113
Adj No. of Lanes	2	2	1	2	2	1	2	2	1	2	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	266	671	300	310	716	320	608	927	415	565	957	428
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.08	0.19	0.19	0.09	0.20	0.20	0.06	0.26	0.26	0.07	0.27	0.27
Ln Grp Delay, s/veh	29.4	23.3	22.4	127.9	20.2	19.5	15.5	24.8	42.0	18.7	22.6	19.0
Ln Grp LOS	C	C	C	F	C	B	B	C	D	B	C	B
Approach Vol, veh/h		660			478			1127			1034	
Approach Delay, s/veh		24.6			100.8			29.3			20.9	
Approach LOS		C			F			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	3.0	2.0	3.0	1.1	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	10.0	22.0	11.5	17.6	9.5	22.5	10.7	18.4
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green (Gmax), s	4.0	16.0	5.5	35.5	4.0	16.0	5.5	36.0
Max Allow Headway (MAH), s	3.7	4.6	3.7	4.7	3.7	4.6	3.7	4.7
Max Q Clear (g_c+I1), s	6.0	15.2	7.5	8.1	3.5	11.0	4.7	3.6
Green Ext Time (g_e), s	0.0	0.7	0.0	3.5	0.0	3.6	0.0	3.6
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	0.87	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3442		3442		3442		3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3539		3539		3539		3539

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		1583		1583		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Pr/Pm)		(Prot)		(Pr/Pm)		(Prot)	

Lanes in Grp	2	0	2	0	2	0	2	0
Grp Vol (v), veh/h	327	0	358	0	120	0	157	0
Grp Sat Flow (s), veh/h/ln	1721	0	1721	0	1721	0	1721	0
Q Serve Time (g_s), s	4.0	0.0	5.5	0.0	1.5	0.0	2.7	0.0
Cycle Q Clear Time (g_c), s	4.0	0.0	5.5	0.0	1.5	0.0	2.7	0.0
Perm LT Sat Flow (s_l), veh/h/ln	541	0	0	0	716	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	16.0	0.0	0.0	0.0	16.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	5.9	0.0	0.0	0.0	7.5	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	5.7	0.0	0.0	0.0	0.8	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	565	0	310	0	608	0	266	0
V/C Ratio (X)	0.58	0.00	1.16	0.00	0.20	0.00	0.59	0.00
Avail Cap (c_a), veh/h	565	0	310	0	638	0	310	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	17.2	0.0	27.8	0.0	15.3	0.0	27.2	0.0
Incr Delay (d2), s/veh	1.5	0.0	100.1	0.0	0.2	0.0	2.2	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	18.7	0.0	127.9	0.0	15.5	0.0	29.4	0.0
1st-Term Q (Q1), veh/ln	0.8	0.0	2.6	0.0	0.7	0.0	1.3	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	4.3	0.0	0.0	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.9	0.0	6.9	0.0	0.7	0.0	1.4	0.0
%ile Storage Ratio (RQ%)	0.08	0.00	0.12	0.00	0.05	0.00	0.06	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	12.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	2	0	2	0	2
Grp Vol (v), veh/h	0	649	0	389	0	594	0	113
Grp Sat Flow (s), veh/h/ln	0	1770	0	1770	0	1770	0	1770
Q Serve Time (g_s), s	0.0	10.1	0.0	6.1	0.0	9.0	0.0	1.6
Cycle Q Clear Time (g_c), s	0.0	10.1	0.0	6.1	0.0	9.0	0.0	1.6
Lane Grp Cap (c), veh/h	0	927	0	671	0	957	0	716
V/C Ratio (X)	0.00	0.70	0.00	0.58	0.00	0.62	0.00	0.16
Avail Cap (c_a), veh/h	0	927	0	2057	0	957	0	2086
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	20.4	0.0	22.5	0.0	19.5	0.0	20.1
Incr Delay (d2), s/veh	0.0	4.4	0.0	0.8	0.0	3.0	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	24.8	0.0	23.3	0.0	22.6	0.0	20.2
1st-Term Q (Q1), veh/ln	0.0	5.0	0.0	3.0	0.0	4.4	0.0	0.8

2nd-Term Q (Q2), veh/ln	0.0	0.6	0.0	0.1	0.0	0.4	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	5.5	0.0	3.0	0.0	4.8	0.0	0.8
%ile Storage Ratio (RQ%)	0.00	0.32	0.00	0.10	0.00	0.13	0.00	0.01
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	358	0	114	0	113	0	7
Grp Sat Flow (s), veh/h/ln	0	1583	0	1583	0	1583	0	1583
Q Serve Time (g_s), s	0.0	13.2	0.0	3.8	0.0	3.4	0.0	0.2
Cycle Q Clear Time (g_c), s	0.0	13.2	0.0	3.8	0.0	3.4	0.0	0.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	415	0	300	0	428	0	320
V/C Ratio (X)	0.00	0.86	0.00	0.38	0.00	0.26	0.00	0.02
Avail Cap (c_a), veh/h	0	415	0	920	0	428	0	933
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	21.5	0.0	21.6	0.0	17.5	0.0	19.5
Incr Delay (d2), s/veh	0.0	20.5	0.0	0.8	0.0	1.5	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	42.0	0.0	22.4	0.0	19.0	0.0	19.5
1st-Term Q (Q1), veh/ln	0.0	5.7	0.0	1.7	0.0	1.5	0.0	0.1
2nd-Term Q (Q2), veh/ln	0.0	2.4	0.0	0.1	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	8.0	0.0	1.7	0.0	1.7	0.0	0.1
%ile Storage Ratio (RQ%)	0.00	0.73	0.00	0.14	0.00	0.13	0.00	0.01
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	36.1
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	184	431	168	264	169	55	2	699	373	236	806	261
Future Volume (veh/h)	184	431	168	264	169	55	2	699	373	236	806	261
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	194	454	177	278	178	58	2	736	393	248	848	275
Adj No. of Lanes	2	2	1	2	2	1	2	3	1	2	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	293	708	317	323	739	331	172	1093	340	293	1271	396
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.09	0.20	0.20	0.09	0.21	0.21	0.05	0.22	0.22	0.09	0.25	0.25
Ln Grp Delay, s/veh	46.8	33.8	35.8	60.6	27.1	27.2	36.2	32.1	129.0	61.2	29.8	36.9
Ln Grp LOS	D	C	D	E	C	C	D	C	F	E	C	D
Approach Vol, veh/h		825			514			1131			1371	
Approach Delay, s/veh		37.3			45.2			65.8			36.9	
Approach LOS		D			D			E			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	12.5	27.5	15.3	24.7	15.3	24.7	16.0	24.0
Change Period (Y+Rc), s	8.5	7.5	8.5	8.0	8.5	7.5	8.5	8.0
Max Green (Gmax), s	4.0	20.0	6.8	16.7	6.8	17.2	7.5	16.0
Max Allow Headway (MAH), s	3.7	4.6	3.7	4.6	3.7	4.6	3.7	4.6
Max Q Clear (g_c+l1), s	2.0	14.6	6.4	5.4	7.7	19.2	8.4	11.4
Green Ext Time (g_e), s	0.0	4.4	0.0	3.5	0.0	0.0	0.0	1.9
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3442		3442		3442		3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		5085		3539		5085		3539

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		1583		1583		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	2	0	2	0
Grp Vol (v), veh/h	2	0	194	0	248	0	278	0
Grp Sat Flow (s), veh/h/ln	1721	0	1721	0	1721	0	1721	0
Q Serve Time (g_s), s	0.0	0.0	4.4	0.0	5.7	0.0	6.4	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	4.4	0.0	5.7	0.0	6.4	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	172	0	293	0	293	0	323	0
V/C Ratio (X)	0.01	0.00	0.66	0.00	0.85	0.00	0.86	0.00
Avail Cap (c_a), veh/h	172	0	293	0	293	0	323	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	36.1	0.0	35.5	0.0	36.1	0.0	35.7	0.0
Incr Delay (d2), s/veh	0.1	0.0	11.3	0.0	25.1	0.0	24.8	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	36.2	0.0	46.8	0.0	61.2	0.0	60.6	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	2.1	0.0	2.7	0.0	3.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.5	0.0	1.0	0.0	1.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	2.5	0.0	3.7	0.0	4.1	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.12	0.00	0.16	0.00	0.20	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	2	0	3	0	2
Grp Vol (v), veh/h	0	848	0	178	0	736	0	454
Grp Sat Flow (s), veh/h/ln	0	1695	0	1770	0	1695	0	1770
Q Serve Time (g_s), s	0.0	12.0	0.0	3.4	0.0	10.6	0.0	9.4
Cycle Q Clear Time (g_c), s	0.0	12.0	0.0	3.4	0.0	10.6	0.0	9.4
Lane Grp Cap (c), veh/h	0	1271	0	739	0	1093	0	708
V/C Ratio (X)	0.00	0.67	0.00	0.24	0.00	0.67	0.00	0.64
Avail Cap (c_a), veh/h	0	1271	0	739	0	1093	0	708
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	27.0	0.0	26.4	0.0	28.8	0.0	29.4
Incr Delay (d2), s/veh	0.0	2.8	0.0	0.8	0.0	3.3	0.0	4.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	29.8	0.0	27.1	0.0	32.1	0.0	33.8
1st-Term Q (Q1), veh/ln	0.0	5.6	0.0	1.6	0.0	5.0	0.0	4.6

2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.1	0.0	0.3	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	5.9	0.0	1.7	0.0	5.3	0.0	5.0
%ile Storage Ratio (RQ%)	0.00	0.16	0.00	0.07	0.00	0.18	0.00	0.08
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	275	0	58	0	393	0	177
Grp Sat Flow (s), veh/h/ln	0	1583	0	1583	0	1583	0	1583
Q Serve Time (g_s), s	0.0	12.6	0.0	2.4	0.0	17.2	0.0	8.1
Cycle Q Clear Time (g_c), s	0.0	12.6	0.0	2.4	0.0	17.2	0.0	8.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	396	0	331	0	340	0	317
V/C Ratio (X)	0.00	0.69	0.00	0.18	0.00	1.15	0.00	0.56
Avail Cap (c_a), veh/h	0	396	0	331	0	340	0	317
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	27.2	0.0	26.0	0.0	31.4	0.0	28.8
Incr Delay (d2), s/veh	0.0	9.7	0.0	1.2	0.0	97.6	0.0	7.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	36.9	0.0	27.2	0.0	129.0	0.0	35.8
1st-Term Q (Q1), veh/ln	0.0	5.5	0.0	1.1	0.0	7.5	0.0	3.5
2nd-Term Q (Q2), veh/ln	0.0	1.1	0.0	0.1	0.0	9.2	0.0	0.6
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	6.6	0.0	1.2	0.0	16.7	0.0	4.1
%ile Storage Ratio (RQ%)	0.00	0.28	0.00	0.09	0.00	1.39	0.00	0.31
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	13.1	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	46.6
HCM 2010 LOS	D

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Traffic Vol, veh/h	22	605	275	53	29	10
Future Vol, veh/h	22	605	275	53	29	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	399	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	23	637	289	56	31	11

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	289	0	-	0	972	289
Stage 1	-	-	-	-	289	-
Stage 2	-	-	-	-	683	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1273	-	-	-	280	750
Stage 1	-	-	-	-	760	-
Stage 2	-	-	-	-	502	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1273	-	-	-	272	750
Mov Cap-2 Maneuver	-	-	-	-	272	-
Stage 1	-	-	-	-	760	-
Stage 2	-	-	-	-	488	-

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	17.7
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1273	-	-	-	325
HCM Lane V/C Ratio	0.018	-	-	-	0.126
HCM Control Delay (s)	7.9	0	-	-	17.7
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.4

MILITARY TRAIL CORRIDOR

Arterial Level of Service: NB N Military Trail

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
PGA Blvd	II	45	18.9	79.1	98.0	0.17	6.4	F
Kyoto Gardens Dr	II	45	43.4	26.5	69.9	0.49	25.4	C
Hood Road	II	45	104.9	28.5	133.4	1.31	35.4	A
Donald Ross	II	45	102.8	34.2	137.0	1.29	33.8	B
Total	II		270.0	168.3	438.3	3.26	26.8	C

Arterial Level of Service: SB N Military Trail

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Donald Ross	II	45	22.3	28.9	51.2	0.20	14.4	E
Hood Road	II	45	102.8	28.7	131.5	1.29	35.2	A
Kyoto Gardens Dr	II	45	104.9	26.7	131.6	1.31	35.9	A
PGA Blvd	II	45	43.4	49.7	93.1	0.49	19.1	D
Total	II		273.4	134.0	407.4	3.29	29.1	B

Movement	WBL	WBR	WBR2	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SER
Lane Configurations											
Traffic Volume (veh/h)	252	66	47	37	1058	171	91	1047	1	0	0
Future Volume (veh/h)	252	66	47	37	1058	171	91	1047	1	0	0
Number	7	14	14	1	6	16	5	2	12		
Initial Q, veh	0	0	0	0	0	0	0	0	0		
Ped-Bike Adj (A_pbT)	1.00	1.00	1.00	1.00		1.00	1.00		1.00		
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900		
Adj Flow Rate, veh/h	265	49	49	39	1114	180	96	1102	1		
Adj No. of Lanes	2	1	1	1	3	1	1	3	0		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2		
Opposing Right Turn Influence	Yes			Yes			Yes				
Cap, veh/h	918	422	422	118	1373	428	127	1399	1		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Prop Arrive On Green	0.27	0.27	0.27	0.07	0.27	0.27	0.07	0.27	0.27		
Ln Grp Delay, s/veh	18.3	17.2	17.2	34.0	25.8	21.1	60.8	27.3	32.4		
Ln Grp LOS	B	B	B	C	C	C	E	C	C		

Approach Vol, veh/h	314				1333			1199			Timer:
Approach Delay, s/veh	18.1				25.4			31.6			Assigned Phs
Approach LOS	B				C			C			Case No
Phs Duration (G+Y+Rc), s		12.0	24.0		24.0	11.8	24.2				
Change Period (Y+Rc), s		8.0	8.0		8.0	7.5	8.0				
Max Green (Gmax), s		4.0	16.0		16.0	4.3	16.2				
Max Allow Headway (MAH), s		3.7	4.8		3.7	3.7	4.8				
Max Q Clear (g_c+I1), s		3.3	13.7		5.7	5.2	14.3				
Green Ext Time (g_e), s		0.0	2.1		0.7	0.0	1.7				
Prob of Phs Call (p_c)		1.00	1.00		1.00	1.00	1.00				
Prob of Max Out (p_x)		0.00	0.00		0.00	0.00	0.00				

Left-Turn Movement Data											
Assigned Mvmt		1			7	5					
Mvmt Sat Flow, veh/h		1774			3442	1774					

Through Movement Data											
Assigned Mvmt			2		4		6				
Mvmt Sat Flow, veh/h			5247		0		5085				

Right-Turn Movement Data											
Assigned Mvmt			12		14		16				
Mvmt Sat Flow, veh/h			5		1583		1583				

Left Lane Group Data											
Assigned Mvmt		1	0	0	7	5	0	0	0		
Lane Assignment		(Prot)				(Prot)					
Lanes in Grp		1	0	0	2	1	0	0	0		
Grp Vol (v), veh/h		39	0	0	265	96	0	0	0		
Grp Sat Flow (s), veh/h/ln		1774	0	0	1721	1774	0	0	0		

Q Serve Time (g_s), s	1.3	0.0	0.0	3.7	3.2	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	1.3	0.0	0.0	3.7	3.2	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1721	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	118	0	0	918	127	0	0	0
V/C Ratio (X)	0.33	0.00	0.00	0.29	0.76	0.00	0.00	0.00
Avail Cap (c_a), veh/h	118	0	0	918	127	0	0	0
Upstream Filter (I)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	26.7	0.0	0.0	17.5	27.3	0.0	0.0	0.0
Incr Delay (d2), s/veh	7.3	0.0	0.0	0.8	33.5	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	34.0	0.0	0.0	18.3	60.8	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.6	0.0	0.0	1.7	1.5	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.2	0.0	0.0	0.1	1.2	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.9	0.0	0.0	1.8	2.7	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.07	0.00	0.00	0.06	0.18	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	3	0	0
Grp Vol (v), veh/h	0	712	0	0	0	1114	0	0
Grp Sat Flow (s), veh/h/ln	0	1695	0	0	0	1695	0	0
Q Serve Time (g_s), s	0.0	11.7	0.0	0.0	0.0	12.3	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	11.7	0.0	0.0	0.0	12.3	0.0	0.0
Lane Grp Cap (c), veh/h	0	904	0	0	0	1373	0	0
V/C Ratio (X)	0.00	0.79	0.00	0.00	0.00	0.81	0.00	0.00
Avail Cap (c_a), veh/h	0	904	0	0	0	1373	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	20.4	0.0	0.0	0.0	20.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	6.9	0.0	0.0	0.0	5.3	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	27.3	0.0	0.0	0.0	25.8	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	5.4	0.0	0.0	0.0	5.7	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.9	0.0	0.0	0.0	0.7	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00

%ile Back of Q (50%), veh/ln	0.0	6.3	0.0	0.0	0.0	6.3	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.02	0.00	0.00	0.00	0.40	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment		T+R		R		R		
Lanes in Grp	0	1	0	1	0	1	0	0
Grp Vol (v), veh/h	0	391	0	49	0	180	0	0
Grp Sat Flow (s), veh/h/ln	0	1862	0	1583	0	1583	0	0
Q Serve Time (g_s), s	0.0	11.7	0.0	1.4	0.0	5.6	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	11.7	0.0	1.4	0.0	5.6	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	497	0	422	0	428	0	0
V/C Ratio (X)	0.00	0.79	0.00	0.12	0.00	0.42	0.00	0.00
Avail Cap (c_a), veh/h	0	497	0	422	0	428	0	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	20.4	0.0	16.6	0.0	18.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	11.9	0.0	0.6	0.0	3.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	32.4	0.0	17.2	0.0	21.1	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	6.0	0.0	1.4	0.0	2.5	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	1.6	0.0	0.1	0.0	0.4	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	7.6	0.0	1.5	0.0	2.8	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.03	0.00	0.05	0.00	0.24	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	27.2
HCM 2010 LOS	C

NORTHLAKE BOULEVARD CORRIDOR

Arterial Level of Service: EB Northlake Blvd

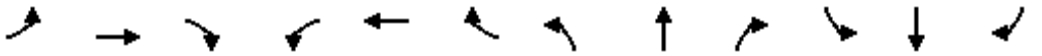
Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Keating Dr	II	45	17.3	47.3	64.6	0.16	8.9	F
West Ramps	II	45	12.7	30.8	43.5	0.12	9.6	F
East Ramps	II	45	11.1	28.8	39.9	0.10	9.2	F
Roan Ln	II	45	8.8	0.2	9.0	0.08	32.4	B
Sandtree Dr	II	45	13.5	23.4	36.9	0.12	12.1	F
Total	II		63.4	130.5	193.9	0.58	10.8	F

Arterial Level of Service: WB Northlake Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Sunrise Dr	II	45	15.3	20.1	35.4	0.14	14.3	E
Roan Ln	II	45	13.5	5.2	18.7	0.12	23.9	C
East Ramps	II	45	8.8	25.3	34.1	0.08	8.6	F
West Ramps	II	45	11.1	18.0	29.1	0.10	12.6	F
Keating Dr	II	45	12.7	9.3	22.0	0.12	19.0	D
Total	II		61.4	77.9	139.3	0.56	14.6	E

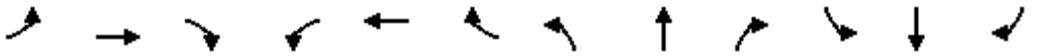
No Build Alternative 2020 AM

3: Keating Dr & Northlake Blvd Corridor: Northlake Boulevard



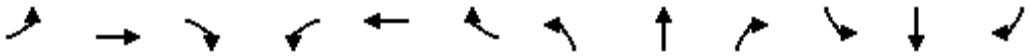
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	2100	89	234	1192	82	82	0	117	182	3	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0	4.0	5.0	5.0	6.0	6.0	6.0		6.0	
Lane Util. Factor		0.91	1.00	1.00	0.91	1.00	0.95	0.95	1.00		0.95	
Frt		1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85		1.00	
Flt Protected		1.00	1.00	0.95	1.00	1.00	0.95	0.95	1.00		0.95	
Satd. Flow (prot)		5085	1583	1770	5085	1583	1681	1681	1583		3373	
Flt Permitted		1.00	1.00	0.95	1.00	1.00	0.95	0.46	1.00		0.72	
Satd. Flow (perm)		5085	1583	1770	5085	1583	1681	811	1583		2545	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	2211	94	246	1255	86	86	0	123	192	3	0
RTOR Reduction (vph)	0	0	55	0	0	34	0	0	89	0	0	0
Lane Group Flow (vph)	0	2211	39	246	1255	52	43	43	34	0	195	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6			2			4			
Actuated Green, G (s)		37.2	37.2	12.0	53.2	53.2	2.3	24.4	24.4		16.1	
Effective Green, g (s)		37.2	37.2	12.0	53.2	53.2	2.3	24.4	24.4		16.1	
Actuated g/C Ratio		0.42	0.42	0.14	0.60	0.60	0.03	0.28	0.28		0.18	
Clearance Time (s)		5.0	5.0	4.0	5.0	5.0	6.0	6.0	6.0		6.0	
Vehicle Extension (s)		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)		2135	664	239	3053	950	43	245	435		462	
v/s Ratio Prot		c0.43		c0.14	0.25		c0.03	0.00				
v/s Ratio Perm			0.02			0.03		0.04	0.02		c0.08	
v/c Ratio		1.04	0.06	1.03	0.41	0.05	1.00	0.18	0.08		0.42	
Uniform Delay, d1		25.7	15.3	38.3	9.4	7.3	43.1	24.4	23.8		32.1	
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	
Incremental Delay, d2		29.4	0.2	66.0	0.4	0.1	137.2	0.3	0.1		0.6	
Delay (s)		55.1	15.5	104.3	9.8	7.4	180.4	24.8	23.8		32.8	
Level of Service		E	B	F	A	A	F	C	C		C	
Approach Delay (s)		53.5			24.3			56.2			32.8	
Approach LOS		D			C			E			C	

Intersection Summary			
HCM 2000 Control Delay	41.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	88.6	Sum of lost time (s)	21.0
Intersection Capacity Utilization	82.8%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



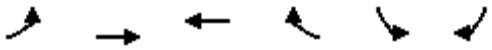
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1472	718	951	919	0	0	0	0	552	0	439
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0	4.0	7.0	6.5					6.0		6.0
Lane Util. Factor		0.81	1.00	0.97	0.91					0.97		0.88
Frt		1.00	0.85	1.00	1.00					1.00		0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (prot)		7544	1583	3433	5085					3433		2787
Flt Permitted		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (perm)		7544	1583	3433	5085					3433		2787
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	1549	756	1001	967	0	0	0	0	581	0	462
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	329
Lane Group Flow (vph)	0	1549	756	1001	967	0	0	0	0	581	0	133
Turn Type		NA	Free	Prot	NA					Prot		Perm
Protected Phases		6		5	2					3		
Permitted Phases			Free									6
Actuated Green, G (s)		26.0	90.0	27.2	30.0					17.8		26.0
Effective Green, g (s)		26.0	90.0	27.2	30.0					17.8		26.0
Actuated g/C Ratio		0.29	1.00	0.30	0.33					0.20		0.29
Clearance Time (s)		6.0		7.0	6.5					6.0		6.0
Vehicle Extension (s)		3.0		3.0	3.0					3.0		3.0
Lane Grp Cap (vph)		2179	1583	1037	1695					678		805
v/s Ratio Prot		c0.21		c0.29	0.19					c0.17		
v/s Ratio Perm			c0.48									0.05
v/c Ratio		0.71	0.48	0.97	0.57					0.86		0.17
Uniform Delay, d1		28.6	0.0	30.9	24.7					34.9		23.9
Progression Factor		1.00	1.00	1.44	0.68					1.00		1.00
Incremental Delay, d2		2.0	1.0	16.4	1.0					10.4		0.4
Delay (s)		30.6	1.0	60.9	17.7					45.3		24.3
Level of Service		C	A	E	B					D		C
Approach Delay (s)		20.9			39.7			0.0			36.0	
Approach LOS		C			D			A			D	

Intersection Summary			
HCM 2000 Control Delay	30.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	75.8%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	718	1306	0	0	1260	460	610	0	977	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	6.0			6.5	4.0	6.0		6.5			
Lane Util. Factor	0.97	0.91			0.81	1.00	0.97		0.88			
Frt	1.00	1.00			1.00	0.85	1.00		0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (prot)	3433	5085			7544	1583	3433		2787			
Flt Permitted	0.95	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (perm)	3433	5085			7544	1583	3433		2787			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	756	1375	0	0	1326	484	642	0	1028	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	685	0	0	0
Lane Group Flow (vph)	756	1375	0	0	1326	484	642	0	343	0	0	0
Turn Type	Prot	NA			NA	Free	Prot		Perm			
Protected Phases	1	6			2		7					
Permitted Phases						Free			2			
Actuated Green, G (s)	22.7	26.0			30.0	90.0	17.8		30.0			
Effective Green, g (s)	22.7	26.0			30.0	90.0	17.8		30.0			
Actuated g/C Ratio	0.25	0.29			0.33	1.00	0.20		0.33			
Clearance Time (s)	7.0	6.0			6.5		6.0		6.5			
Vehicle Extension (s)	3.0	3.0			3.0		3.0		3.0			
Lane Grp Cap (vph)	865	1469			2514	1583	678		929			
v/s Ratio Prot	c0.22	c0.27			0.18		c0.19					
v/s Ratio Perm						c0.31			0.12			
v/c Ratio	0.87	0.94			0.53	0.31	0.95		0.37			
Uniform Delay, d1	32.3	31.2			24.3	0.0	35.6		22.8			
Progression Factor	1.23	0.60			1.00	1.00	1.00		1.00			
Incremental Delay, d2	6.6	8.8			0.8	0.5	22.2		1.1			
Delay (s)	46.3	27.5			25.1	0.5	57.8		23.9			
Level of Service	D	C			C	A	E		C			
Approach Delay (s)		34.2			18.5			37.0			0.0	
Approach LOS		C			B			D			A	

Intersection Summary			
HCM 2000 Control Delay	30.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	75.8%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

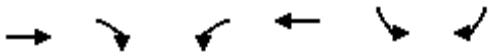


Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	88	1972	1490	79	0	176
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	8.0	6.5	6.5	4.0		4.0
Lane Util. Factor	1.00	0.91	0.76	1.00		1.00
Frt	1.00	1.00	1.00	0.85		0.86
Flt Protected	0.95	1.00	1.00	1.00		1.00
Satd. Flow (prot)	1770	5085	8494	1583		1611
Flt Permitted	0.95	1.00	1.00	1.00		1.00
Satd. Flow (perm)	1770	5085	8494	1583		1611
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	93	2076	1568	83	0	185
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	93	2076	1568	83	0	185
Turn Type	Prot	NA	NA	Free		Free
Protected Phases	1	6	2			
Permitted Phases				Free		Free
Actuated Green, G (s)	3.7	38.5	20.3	38.5		38.5
Effective Green, g (s)	3.7	38.5	20.3	38.5		38.5
Actuated g/C Ratio	0.10	1.00	0.53	1.00		1.00
Clearance Time (s)	8.0	6.5	6.5			
Vehicle Extension (s)	3.0	3.0	3.0			
Lane Grp Cap (vph)	170	5085	4478	1583		1611
v/s Ratio Prot	0.05	c0.41	0.18			
v/s Ratio Perm				0.05		0.11
v/c Ratio	0.55	0.41	0.35	0.05		0.11
Uniform Delay, d1	16.6	0.0	5.3	0.0		0.0
Progression Factor	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	3.6	0.1	0.0	0.1		0.1
Delay (s)	20.2	0.1	5.3	0.1		0.1
Level of Service	C	A	A	A		A
Approach Delay (s)		0.9	5.1		0.1	
Approach LOS		A	A		A	

Intersection Summary			
HCM 2000 Control Delay	2.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	38.5	Sum of lost time (s)	14.5
Intersection Capacity Utilization	43.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	85	1665	222	95	1194	57	259	1	84	82	1	116
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.5	7.5	7.0	7.5		6.0	6.5	6.5	6.0	6.5	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91		0.97	0.95	0.95	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.85	0.85	1.00	0.85	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1583	3433	5051		3433	1510	1504	1770	1586	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1583	3433	5051		3433	1510	1504	1770	1586	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	89	1753	234	100	1257	60	273	1	88	86	1	122
RTOR Reduction (vph)	0	0	139	0	6	0	0	40	40	0	113	0
Lane Group Flow (vph)	89	1753	95	100	1311	0	273	5	4	86	10	0
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6						4			
Actuated Green, G (s)	4.5	28.4	28.4	3.0	26.9		6.1	6.9	6.9	4.5	5.3	
Effective Green, g (s)	4.5	28.4	28.4	3.0	26.9		6.1	6.9	6.9	4.5	5.3	
Actuated g/C Ratio	0.06	0.41	0.41	0.04	0.39		0.09	0.10	0.10	0.06	0.08	
Clearance Time (s)	7.0	7.5	7.5	7.0	7.5		6.0	6.5	6.5	6.0	6.5	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	114	2068	644	147	1946		300	149	148	114	120	
v/s Ratio Prot	c0.05	c0.34		0.03	0.26		c0.08	0.00		0.05	c0.01	
v/s Ratio Perm			0.06						0.00			
v/c Ratio	0.78	0.85	0.15	0.68	0.67		0.91	0.04	0.03	0.75	0.09	
Uniform Delay, d1	32.2	18.7	13.1	32.9	17.8		31.6	28.4	28.4	32.1	30.0	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	28.4	4.5	0.5	12.2	1.9		29.9	0.1	0.1	24.3	0.3	
Delay (s)	60.6	23.3	13.5	45.1	19.7		61.5	28.5	28.5	56.4	30.3	
Level of Service	E	C	B	D	B		E	C	C	E	C	
Approach Delay (s)		23.8			21.5			53.4			41.0	
Approach LOS		C			C			D			D	

Intersection Summary			
HCM 2000 Control Delay	26.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	69.8	Sum of lost time (s)	27.0
Intersection Capacity Utilization	67.1%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Lane Group	EBT	EBR	WBL	WBT	SBL	SBR
Lane Group Flow (vph)	1549	756	1001	967	581	462
v/c Ratio	0.71	0.48	0.97	0.57	0.86	0.41
Control Delay	30.8	1.0	61.8	18.0	48.9	3.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.8	1.0	61.8	18.0	48.9	3.7
Queue Length 50th (ft)	194	0	322	86	165	0
Queue Length 95th (ft)	228	0	m#408	m99	#252	37
Internal Link Dist (ft)	533			458		
Turn Bay Length (ft)						
Base Capacity (vph)	2179	1583	1037	1697	678	1133
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.71	0.48	0.97	0.57	0.86	0.41

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

No Build Alternative 2020 AM

9: East Ramps & Northlake Blvd Corridor: Northlake Boulevard

Lane Group	EBL	EBT	WBT	WBR	NBL	NBR
Lane Group Flow (vph)	756	1375	1326	484	642	1028
v/c Ratio	0.88	0.94	0.53	0.31	0.95	0.64
Control Delay	48.2	28.8	25.3	0.5	60.7	3.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	48.2	28.8	25.3	0.5	60.7	3.6
Queue Length 50th (ft)	243	106	151	0	187	0
Queue Length 95th (ft)	m#304	#342	181	0	#292	46
Internal Link Dist (ft)		458	348			
Turn Bay Length (ft)				400		
Base Capacity (vph)	900	1469	2518	1583	678	1614
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.84	0.94	0.53	0.31	0.95	0.64

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

PGA BOULEVARD CORRIDOR

Arterial Level of Service: EB PGA Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Fairway Dr	II	45	16.8	54.5	71.3	0.15	7.8	F
Central Blvd	II	45	36.7	25.7	62.4	0.39	22.5	C
N Military Trail	II	45	81.7	65.8	147.5	1.02	24.9	C
West Ramps	II	45	20.5	19.2	39.7	0.19	17.1	D
East Ramps	II	45	6.3	117.9	124.2	0.06	1.7	F
Lake Victoria Gnds	II	45	56.6	31.7	88.3	0.71	28.8	B
Total	II		218.6	314.8	533.4	2.52	17.0	E

Arterial Level of Service: WB PGA Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Lake Victoria Gnds	II	45	13.7	47.3	61.0	0.13	7.4	F
East Ramps	II	45	56.6	29.3	85.9	0.71	29.6	B
West Ramps	II	45	6.3	34.8	41.1	0.06	5.1	F
N Military Trail	II	45	20.5	45.8	66.3	0.19	10.2	F
Central Blvd	II	45	25.0	69.1	94.1	0.24	9.2	F
FL Turnpike	II	45	36.7	67.4	104.1	0.39	13.5	E
Total	II		158.8	293.7	452.5	1.71	13.6	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	279	1250	852	320	322	633	484	820	19	835	651	131
Future Volume (veh/h)	279	1250	852	320	322	633	484	820	19	835	651	131
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	294	1316	0	337	339	0	509	863	0	879	685	138
Adj No. of Lanes	2	3	1	2	3	1	2	3	1	2	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	349	1407	438	321	1400	436	582	831	259	860	1259	392
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.10	0.28	0.00	0.09	0.28	0.00	0.17	0.16	0.00	0.25	0.25	0.25
Ln Grp Delay, s/veh	73.8	65.8	0.0	131.7	42.6	0.0	65.1	104.5	0.0	92.5	49.6	47.1
Ln Grp LOS	E	E		F	D		E	F		F	D	D
Approach Vol, veh/h		1610			676			1372			1702	
Approach Delay, s/veh		67.3			87.0			89.9			71.5	
Approach LOS		E			F			F			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	23.2	48.8	46.0	32.0	23.0	49.0	33.4	44.6
Change Period (Y+Rc), s	8.0	7.5	8.5	7.5	9.0	7.5	8.0	7.5
Max Green (Gmax), s	23.0	33.5	37.5	24.5	14.0	41.5	46.0	16.5
Max Allow Headway (MAH), s	3.7	4.9	3.7	4.8	3.7	4.9	3.7	4.8
Max Q Clear (g_c+I1), s	14.6	9.8	39.5	26.5	16.0	39.9	23.6	19.6
Green Ext Time (g_e), s	0.6	12.1	0.0	0.0	0.0	1.3	1.7	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	0.03	0.00	1.00	1.00	1.00	0.00	0.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3442		3442		3442		3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		5085		5085		5085		5085

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		1583		1583		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

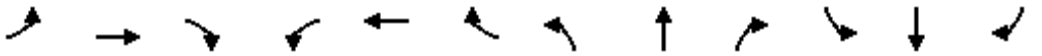
Lanes in Grp	2	0	2	0	2	0	2	0
Grp Vol (v), veh/h	294	0	879	0	337	0	509	0
Grp Sat Flow (s), veh/h/ln	1721	0	1721	0	1721	0	1721	0
Q Serve Time (g_s), s	12.6	0.0	37.5	0.0	14.0	0.0	21.6	0.0
Cycle Q Clear Time (g_c), s	12.6	0.0	37.5	0.0	14.0	0.0	21.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	349	0	860	0	321	0	582	0
V/C Ratio (X)	0.84	0.00	1.02	0.00	1.05	0.00	0.87	0.00
Avail Cap (c_a), veh/h	528	0	860	0	321	0	1055	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	66.2	0.0	56.3	0.0	68.0	0.0	60.8	0.0
Incr Delay (d2), s/veh	7.6	0.0	36.3	0.0	63.7	0.0	4.3	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	73.8	0.0	92.5	0.0	131.7	0.0	65.1	0.0
1st-Term Q (Q1), veh/ln	6.0	0.0	17.8	0.0	6.6	0.0	10.3	0.0
2nd-Term Q (Q2), veh/ln	0.4	0.0	4.3	0.0	2.8	0.0	0.3	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.65	0.00	1.80	0.00	1.80	0.00	1.50	0.00
%ile Back of Q (95%), veh/ln	10.5	0.0	39.8	0.0	17.1	0.0	16.0	0.0
%ile Storage Ratio (RQ%)	0.58	0.00	2.24	0.00	0.87	0.00	0.93	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	4.6	0.0	3.9	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.3	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	3	0	3	0	3
Grp Vol (v), veh/h	0	339	0	863	0	1316	0	685
Grp Sat Flow (s), veh/h/ln	0	1695	0	1695	0	1695	0	1695
Q Serve Time (g_s), s	0.0	7.8	0.0	24.5	0.0	37.9	0.0	17.6
Cycle Q Clear Time (g_c), s	0.0	7.8	0.0	24.5	0.0	37.9	0.0	17.6
Lane Grp Cap (c), veh/h	0	1400	0	831	0	1407	0	1259
V/C Ratio (X)	0.00	0.24	0.00	1.04	0.00	0.94	0.00	0.54
Avail Cap (c_a), veh/h	0	1400	0	831	0	1407	0	1259
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	42.2	0.0	62.7	0.0	52.9	0.0	49.1
Incr Delay (d2), s/veh	0.0	0.4	0.0	41.8	0.0	12.8	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	42.6	0.0	104.5	0.0	65.8	0.0	49.6
1st-Term Q (Q1), veh/ln	0.0	3.6	0.0	11.5	0.0	17.8	0.0	8.2

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	3.2	0.0	1.7	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.37	0.00	1.57
%ile Back of Q (95%), veh/ln	0.0	6.6	0.0	26.4	0.0	26.7	0.0	13.0
%ile Storage Ratio (RQ%)	0.00	0.41	0.00	0.90	0.00	0.64	0.00	0.38
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	8.1	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	0	0	0	0	138
Grp Sat Flow (s), veh/h/ln	0	1583	0	1583	0	1583	0	1583
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.8
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.8
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	436	0	259	0	438	0	392
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35
Avail Cap (c_a), veh/h	0	436	0	259	0	438	0	392
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	46.5
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47.1
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.7
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.75
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.4
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.47
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

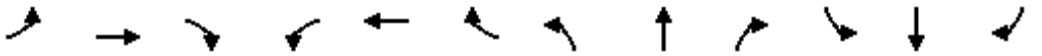
Intersection Summary	
HCM 2010 Ctrl Delay	76.9
HCM 2010 LOS	E



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	46	867	32	240	983	433	44	75	470	1128	159	133
Future Volume (vph)	46	867	32	240	983	433	44	75	470	1128	159	133
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.5		7.5	8.0	8.0	7.5	7.5	7.5	7.5	7.5	4.0
Lane Util. Factor	0.97	0.91		0.97	0.95	0.88	1.00	0.95	0.95	0.91	0.91	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	0.89	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.97	1.00
Satd. Flow (prot)	3433	5058		3433	3539	2787	1770	1576	1504	3221	1643	1583
Flt Permitted	0.15	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.15	1.00
Satd. Flow (perm)	533	5058		3433	3539	2787	1770	1576	1504	3221	259	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	48	913	34	253	1035	456	46	79	495	1187	167	140
RTOR Reduction (vph)	0	3	0	0	0	324	0	79	236	0	0	0
Lane Group Flow (vph)	48	944	0	253	1035	132	46	213	46	902	452	140
Turn Type	pm+pt	NA		Prot	NA	Perm	Prot	NA	Prot	Prot	NA	Free
Protected Phases	7	4		3	8		5	2	2	1	6	
Permitted Phases	4					8						Free
Actuated Green, G (s)	30.3	27.1		11.4	35.3	35.3	6.6	20.1	20.1	33.5	61.1	122.1
Effective Green, g (s)	30.3	27.1		11.4	35.3	35.3	6.6	20.1	20.1	33.5	61.1	122.1
Actuated g/C Ratio	0.25	0.22		0.09	0.29	0.29	0.05	0.16	0.16	0.27	0.50	1.00
Clearance Time (s)	7.0	7.5		7.5	8.0	8.0	7.5	7.5	7.5	7.5	7.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	208	1122		320	1023	805	95	259	247	883	509	1583
v/s Ratio Prot	0.01	0.19		c0.07	c0.29		0.03	0.14	0.03	c0.28	0.24	
v/s Ratio Perm	0.05					0.05					c0.20	0.09
v/c Ratio	0.23	0.84		0.79	1.01	0.16	0.48	0.82	0.19	1.02	0.89	0.09
Uniform Delay, d1	36.8	45.4		54.2	43.4	32.4	56.1	49.3	44.0	44.3	27.4	0.0
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.6	5.8		12.5	31.1	0.1	3.8	24.8	1.7	35.8	17.0	0.1
Delay (s)	37.4	51.3		66.7	74.5	32.5	59.9	74.1	45.6	80.1	44.4	0.1
Level of Service	D	D		E	E	C	E	E	D	F	D	A
Approach Delay (s)		50.6			62.4			60.1			61.8	
Approach LOS		D			E			E			E	

Intersection Summary			
HCM 2000 Control Delay	59.5	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.04		
Actuated Cycle Length (s)	122.1	Sum of lost time (s)	30.0
Intersection Capacity Utilization	92.7%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	723	1467	32	122	1048	276	35	39	150	252	25	752
Future Volume (vph)	723	1467	32	122	1048	276	35	39	150	252	25	752
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.5	8.5		7.0	8.0	8.0		8.5	8.5	8.5	8.5	7.5
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00		1.00	1.00	0.95	0.95	1.00
Frt	1.00	1.00		1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.98	1.00	0.95	0.96	1.00
Satd. Flow (prot)	3433	5069		1770	5085	1583		1820	1583	1681	1700	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.98	1.00	0.95	0.96	1.00
Satd. Flow (perm)	3433	5069		1770	5085	1583		1820	1583	1681	1700	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	761	1544	34	128	1103	291	37	41	158	265	26	792
RTOR Reduction (vph)	0	2	0	0	0	228	0	0	150	0	0	78
Lane Group Flow (vph)	761	1576	0	128	1103	63	0	78	8	146	145	714
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	pm+ov
Protected Phases	1	6		5	2		4	4		3	3	1
Permitted Phases						2			4			3
Actuated Green, G (s)	36.5	50.0		10.5	24.0	24.0		5.5	5.5	11.5	11.5	48.0
Effective Green, g (s)	36.5	50.0		10.5	24.0	24.0		5.5	5.5	11.5	11.5	48.0
Actuated g/C Ratio	0.33	0.45		0.10	0.22	0.22		0.05	0.05	0.10	0.10	0.44
Clearance Time (s)	7.5	8.5		7.0	8.0	8.0		8.5	8.5	8.5	8.5	7.5
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	1139	2304		168	1109	345		91	79	175	177	690
v/s Ratio Prot	0.22	0.31		0.07	c0.22			c0.04		0.09	0.09	c0.34
v/s Ratio Perm						0.04			0.00			0.11
v/c Ratio	0.67	0.68		0.76	0.99	0.18		0.86	0.10	0.83	0.82	1.03
Uniform Delay, d1	31.6	23.7		48.5	42.9	35.0		51.9	49.9	48.3	48.2	31.0
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.5	1.7		18.3	25.8	1.2		50.5	0.6	35.2	32.8	43.4
Delay (s)	33.0	25.4		66.8	68.7	36.2		102.4	50.4	83.5	81.1	74.4
Level of Service	C	C		E	E	D		F	D	F	F	E
Approach Delay (s)		27.9			62.3			67.6			76.5	
Approach LOS		C			E			E			E	

Intersection Summary			
HCM 2000 Control Delay	50.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.01		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	32.5
Intersection Capacity Utilization	90.8%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	0	0	0	386	0	302	0	825	1250	0	1585	0
Future Volume (vph)	0	0	0	386	0	302	0	825	1250	0	1585	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0		6.0		6.0	4.0		6.0	
Lane Util. Factor				0.97		0.88		0.91	1.00		0.86	
Frt				1.00		0.85		1.00	0.85		1.00	
Flt Protected				0.95		1.00		1.00	1.00		1.00	
Satd. Flow (prot)				3433		2787		5085	1583		6408	
Flt Permitted				0.95		1.00		1.00	1.00		1.00	
Satd. Flow (perm)				3433		2787		5085	1583		6408	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	406	0	318	0	868	1316	0	1668	0
RTOR Reduction (vph)	0	0	0	0	0	282	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	406	0	36	0	868	1316	0	1668	0
Turn Type				Prot		Prot		NA	Free		NA	
Protected Phases				3		3		6			2	
Permitted Phases									Free			
Actuated Green, G (s)				16.0		16.0		74.0	140.0		74.0	
Effective Green, g (s)				16.0		16.0		74.0	140.0		74.0	
Actuated g/C Ratio				0.11		0.11		0.53	1.00		0.53	
Clearance Time (s)				6.0		6.0		6.0			6.0	
Vehicle Extension (s)				3.0		3.0		3.0			3.0	
Lane Grp Cap (vph)				392		318		2687	1583		3387	
v/s Ratio Prot				0.12		0.01		0.17			0.26	
v/s Ratio Perm									c0.83			
v/c Ratio				1.04		0.11		0.32	0.83		0.49	
Uniform Delay, d1				62.0		55.6		18.8	0.0		21.0	
Progression Factor				1.00		1.00		1.00	1.00		1.62	
Incremental Delay, d2				55.0		0.2		0.3	5.2		0.5	
Delay (s)				117.0		55.8		19.1	5.2		34.6	
Level of Service				F		E		B	A		C	
Approach Delay (s)		0.0			90.1			10.7			34.6	
Approach LOS		A			F			B			C	

Intersection Summary			
HCM 2000 Control Delay	32.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.95		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	89.5%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	NBL	NBR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	0	2405	1211	0	0	547
Future Volume (vph)	0	2405	1211	0	0	547
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0	6.0			6.0
Lane Util. Factor		0.76	0.91			0.86
Frt		0.85	1.00			1.00
Flt Protected		1.00	1.00			1.00
Satd. Flow (prot)		3610	5085			6408
Flt Permitted		1.00	1.00			1.00
Satd. Flow (perm)		3610	5085			6408
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	2532	1275	0	0	576
RTOR Reduction (vph)	0	391	0	0	0	0
Lane Group Flow (vph)	0	2141	1275	0	0	576
Turn Type		Perm	NA			NA
Protected Phases			4			
Permitted Phases		2				8
Actuated Green, G (s)		74.0	32.0			54.0
Effective Green, g (s)		74.0	32.0			54.0
Actuated g/C Ratio		0.53	0.23			0.39
Clearance Time (s)		6.0	6.0			6.0
Vehicle Extension (s)		3.0	3.0			3.0
Lane Grp Cap (vph)		1908	1162			2471
v/s Ratio Prot			c0.25			
v/s Ratio Perm		c0.59				c0.09
v/c Ratio		1.12	1.10			0.23
Uniform Delay, d1		33.0	54.0			29.0
Progression Factor		1.00	1.30			1.00
Incremental Delay, d2		62.5	55.4			0.0
Delay (s)		95.5	125.5			29.1
Level of Service		F	F			C
Approach Delay (s)	95.5		125.5			29.1
Approach LOS	F		F			C

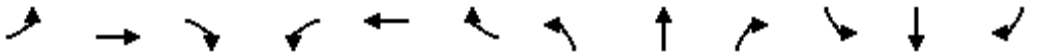
Intersection Summary			
HCM 2000 Control Delay	95.5	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.01		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	89.5%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	533	2330	466	0	1153	0	215	0	86	0	0	11
Future Volume (vph)	533	2330	466	0	1153	0	215	0	86	0	0	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0		6.0		6.0	6.0	6.0			7.0
Lane Util. Factor	0.97	0.91	1.00		0.91		0.91	0.86	0.95			1.00
Frt	1.00	1.00	0.85		1.00		1.00	0.97	0.85			0.86
Flt Protected	0.95	1.00	1.00		1.00		0.95	0.96	1.00			1.00
Satd. Flow (prot)	3433	5085	1583		5085		3221	1492	1504			1611
Flt Permitted	0.95	1.00	1.00		1.00		0.95	0.96	1.00			1.00
Satd. Flow (perm)	3433	5085	1583		5085		3221	1492	1504			1611
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	561	2453	491	0	1214	0	226	0	91	0	0	12
RTOR Reduction (vph)	0	0	246	0	0	0	0	52	48	0	0	10
Lane Group Flow (vph)	561	2453	246	0	1214	0	163	28	26	0	0	2
Turn Type	Prot	NA	Perm		NA		Prot	NA	Perm			Perm
Protected Phases	7	4			8		5	2				
Permitted Phases			4						2			6
Actuated Green, G (s)	14.0	40.0	40.0		20.0		5.0	28.0	28.0			16.0
Effective Green, g (s)	14.0	40.0	40.0		20.0		5.0	28.0	28.0			16.0
Actuated g/C Ratio	0.18	0.50	0.50		0.25		0.06	0.35	0.35			0.20
Clearance Time (s)	6.0	6.0	6.0		6.0		6.0	6.0	6.0			7.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0	3.0			3.0
Lane Grp Cap (vph)	600	2542	791		1271		201	522	526			322
v/s Ratio Prot	0.16	c0.48			0.24		c0.05	c0.00				
v/s Ratio Perm			0.16					0.02	0.02			0.00
v/c Ratio	0.94	0.96	0.31		0.96		0.81	0.05	0.05			0.01
Uniform Delay, d1	32.6	19.3	11.8		29.6		37.0	17.2	17.2			25.6
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00	1.00			1.00
Incremental Delay, d2	21.9	10.8	0.2		15.6		21.4	0.0	0.2			0.0
Delay (s)	54.5	30.2	12.1		45.2		58.4	17.3	17.4			25.7
Level of Service	D	C	B		D		E	B	B			C
Approach Delay (s)		31.5			45.2			38.4			25.7	
Approach LOS		C			D			D			C	

Intersection Summary			
HCM 2000 Control Delay	35.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	25.0
Intersection Capacity Utilization	59.6%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	38	93	0	349	0	0	11	61
Future Volume (vph)	0	0	0	0	38	93	0	349	0	0	11	61
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					6.0	6.0		6.0			7.0	7.0
Lane Util. Factor					1.00	1.00		0.95			1.00	1.00
Frt					1.00	0.85		1.00			1.00	0.85
Flt Protected					1.00	1.00		1.00			1.00	1.00
Satd. Flow (prot)					1863	1583		3539			1863	1583
Flt Permitted					1.00	1.00		1.00			1.00	1.00
Satd. Flow (perm)					1863	1583		3539			1863	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	0	40	98	0	367	0	0	12	64
RTOR Reduction (vph)	0	0	0	0	0	74	0	0	0	0	0	51
Lane Group Flow (vph)	0	0	0	0	40	25	0	367	0	0	12	13
Turn Type					NA	Perm		NA			NA	Perm
Protected Phases					8			7			6	
Permitted Phases						8						6
Actuated Green, G (s)					20.0	20.0		14.0			16.0	16.0
Effective Green, g (s)					20.0	20.0		14.0			16.0	16.0
Actuated g/C Ratio					0.25	0.25		0.18			0.20	0.20
Clearance Time (s)					6.0	6.0		6.0			7.0	7.0
Vehicle Extension (s)					3.0	3.0		3.0			3.0	3.0
Lane Grp Cap (vph)					465	395		619			372	316
v/s Ratio Prot					c0.02			c0.10			0.01	
v/s Ratio Perm						0.02						c0.01
v/c Ratio					0.09	0.06		0.59			0.03	0.04
Uniform Delay, d1					23.0	22.9		30.4			25.8	25.8
Progression Factor					1.00	1.00		0.22			1.00	1.00
Incremental Delay, d2					0.1	0.1		0.5			0.2	0.2
Delay (s)					23.1	22.9		7.2			25.9	26.0
Level of Service					C	C		A			C	C
Approach Delay (s)		0.0			23.0			7.2			26.0	
Approach LOS		A			C			A			C	

Intersection Summary			
HCM 2000 Control Delay	13.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.19		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	25.0
Intersection Capacity Utilization	25.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	SBL	SBR	NET	NER	SWT
Lane Group Flow (vph)	406	318	868	1316	1668
v/c Ratio	1.04	0.53	0.32	0.83	0.49
Control Delay	114.2	9.2	19.2	5.2	34.8
Queue Delay	640.4	0.0	0.4	0.0	48.8
Total Delay	754.5	9.2	19.6	5.2	83.7
Queue Length 50th (ft)	~204	0	159	0	355
Queue Length 95th (ft)	#312	49	190	0	392
Internal Link Dist (ft)			215		227
Turn Bay Length (ft)					
Base Capacity (vph)	392	600	2687	1583	3387
Starvation Cap Reductn	0	0	0	0	2020
Spillback Cap Reductn	392	0	1228	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	406.00	0.53	0.59	0.83	1.22

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	NBR	NET	SWT
Lane Group Flow (vph)	2532	1275	576
v/c Ratio	1.10	1.10	0.23
Control Delay	75.3	117.9	29.3
Queue Delay	0.0	3.9	0.1
Total Delay	75.3	121.8	29.4
Queue Length 50th (ft)	~981	~494	102
Queue Length 95th (ft)	#1086	m#552	126
Internal Link Dist (ft)		227	250
Turn Bay Length (ft)			
Base Capacity (vph)	2299	1162	2471
Starvation Cap Reductn	0	468	0
Spillback Cap Reductn	0	0	758
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	1.10	1.84	0.34

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (veh/h)	0	62	2935	1044	128	637
Future Volume (Veh/h)	0	62	2935	1044	128	637
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	0	65	3089	1099	135	671
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			1299			
pX, platoon unblocked	0.82	0.82			0.82	
vC, conflicting volume	4132	1322			4188	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	3732	320			3800	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	0	88			0	
cM capacity (veh/h)	0	556			44	

Direction, Lane #	NW 1	NE 1	NE 2	NE 3	NE 4	SW 1	SW 2	SW 3	SW 4
Volume Total	65	883	883	883	1540	135	224	224	224
Volume Left	0	0	0	0	0	135	0	0	0
Volume Right	65	0	0	0	1099	0	0	0	0
cSH	556	1700	1700	1700	1700	44	1700	1700	1700
Volume to Capacity	0.12	0.52	0.52	0.52	0.91	3.08	0.13	0.13	0.13
Queue Length 95th (ft)	10	0	0	0	0	Err	0	0	0
Control Delay (s)	12.3	0.0	0.0	0.0	0.0	1133.2	0.0	0.0	0.0
Lane LOS	B					F			
Approach Delay (s)	12.3	0.0				189.8			
Approach LOS	B								

Intersection Summary			
Average Delay	30.4		
Intersection Capacity Utilization	73.8%	ICU Level of Service	D
Analysis Period (min)	15		

Lane Group	SBL	SBR	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	0	0	6	3610	547	0
Future Volume (vph)	0	0	6	3610	547	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	500			0
Storage Lanes	0	0	1			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.86	0.91	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	6408	5085	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	6408	5085	0
Link Speed (mph)	45			45	45	
Link Distance (ft)	247			189	328	
Travel Time (s)	3.7			2.9	5.0	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	6	3800	576	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	6	3800	576	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 81.5%		ICU Level of Service D	
Analysis Period (min) 15			

APPENDIX I

SYNCHRO REPORTS

NO BUILD 2020 PM

CENTRAL BOULEVARD CORRIDOR

Arterial Level of Service: NB Central Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
PGA Blvd	II	45	11.9	173.8	185.7	0.11	2.1	F
117th Ct	II	45	61.9	11.4	73.3	0.77	38.0	A
Hood Rd	II	45	101.7	32.0	133.7	1.27	34.2	B
Donald Ross	II	45	100.8	45.6	146.4	1.26	31.0	B
Total	II		276.3	262.8	539.1	3.41	22.8	C

Arterial Level of Service: SB Central Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Donald Ross	II	45	22.2	36.0	58.2	0.20	12.6	F
Hood Rd	II	45	100.8	20.8	121.6	1.26	37.3	A
117th Ct	II	45	101.7	7.0	108.7	1.27	42.0	A
PGA Blvd	II	45	61.9	60.5	122.4	0.77	22.8	C
Total	II		286.6	124.3	410.9	3.51	30.7	B

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	256	116	674	104	76	782
Number	3	18	2	12	1	6
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	269	122	709	109	80	823
Adj No. of Lanes	1	1	2	1	1	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	329	293	2115	946	495	2440
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.19	0.19	0.60	0.60	0.04	0.69
Ln Grp Delay, s/veh	36.2	29.6	8.5	7.2	5.6	5.4
Ln Grp LOS	D	C	A	A	A	A
Approach Vol, veh/h	391		818			903
Approach Delay, s/veh	34.2		8.3			5.4
Approach LOS	C		A			A

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	8			6		
Case No	1.2	7.0	9.0			4.0		
Phs Duration (G+Y+Rc), s	7.3	52.7	19.8			60.0		
Change Period (Y+Rc), s	4.0	5.0	5.0			5.0		
Max Green (Gmax), s	6.0	45.0	60.0			55.0		
Max Allow Headway (MAH), s	3.7	4.8	3.8			4.8		
Max Q Clear (g_c+I1), s	3.3	10.0	13.6			9.5		
Green Ext Time (g_e), s	0.0	13.2	1.2			14.3		
Prob of Phs Call (p_c)	0.83	1.00	1.00			1.00		
Prob of Max Out (p_x)	1.00	0.00	0.00			0.00		

Left-Turn Movement Data								
Assigned Mvmt	1	5	3					
Mvmt Sat Flow, veh/h	1774	0	1774					

Through Movement Data								
Assigned Mvmt		2	8			6		
Mvmt Sat Flow, veh/h		3632	0			3632		

Right-Turn Movement Data								
Assigned Mvmt		12	18			16		
Mvmt Sat Flow, veh/h		1583	1583			0		

Left Lane Group Data								
Assigned Mvmt	1	5	3	0	0	0	0	0
Lane Assignment	(Pr/Pm)							
Lanes in Grp	1	0	1	0	0	0	0	0

Grp Vol (v), veh/h	80	0	269	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1774	0	1774	0	0	0	0	0
Q Serve Time (g_s), s	1.3	0.0	11.6	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	1.3	0.0	11.6	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	666	0	1774	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	49.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	39.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	47.7	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	495	0	329	0	0	0	0	0
V/C Ratio (X)	0.16	0.00	0.82	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	554	0	1334	0	0	0	0	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	5.4	0.0	31.2	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.0	5.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	5.6	0.0	36.2	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.6	0.0	5.7	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	1.00	1.66	0.00	0.00	0.00	0.00	0.00
%ile Back of Q (95%), veh/ln	1.1	0.0	10.2	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.08	0.00	0.54	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	0	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	709	0	0	0	823	0	0
Grp Sat Flow (s), veh/h/ln	0	1770	0	0	0	1770	0	0
Q Serve Time (g_s), s	0.0	8.0	0.0	0.0	0.0	7.5	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	8.0	0.0	0.0	0.0	7.5	0.0	0.0
Lane Grp Cap (c), veh/h	0	2115	0	0	0	2440	0	0
V/C Ratio (X)	0.00	0.34	0.00	0.00	0.00	0.34	0.00	0.00
Avail Cap (c_a), veh/h	0	2115	0	0	0	2440	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	8.1	0.0	0.0	0.0	5.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.4	0.0	0.0	0.0	0.4	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	8.5	0.0	0.0	0.0	5.4	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	3.9	0.0	0.0	0.0	3.7	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	1.00	0.00	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	7.3	0.0	0.0	0.0	6.8	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.32	0.00	0.00	0.00	0.34	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	18	0	0	16	0	0
Lane Assignment		R	R					
Lanes in Grp	0	1	1	0	0	0	0	0
Grp Vol (v), veh/h	0	109	122	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1583	1583	0	0	0	0	0
Q Serve Time (g_s), s	0.0	2.4	5.4	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	2.4	5.4	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	946	293	0	0	0	0	0
V/C Ratio (X)	0.00	0.12	0.42	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	946	1191	0	0	0	0	0
Upstream Filter (I)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	6.9	28.7	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.9	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	7.2	29.6	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	1.0	2.4	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	1.80	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	2.0	4.4	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.13	0.40	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		11.9						
HCM 2010 LOS		B						

Intersection	
Int Delay, s/veh	1611.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	272	29	23	120	29	439	28	716	47	146	715	80
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	0	-	336	280	-	-	350	-	350
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	286	31	24	126	31	462	29	754	49	154	753	84

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1511	1922	376	1536	1897	402	753	0	0	803	0	0
Stage 1	1060	1060	-	837	837	-	-	-	-	-	-	-
Stage 2	451	862	-	699	1060	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	~ 83	66	622	~ 79	69	598	853	-	-	817	-	-
Stage 1	~ 239	299	-	327	380	-	-	-	-	-	-	-
Stage 2	557	370	-	397	299	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 9	52	622	~ 35	54	598	853	-	-	817	-	-
Mov Cap-2 Maneuver	~ 9	52	-	~ 35	54	-	-	-	-	-	-	-
Stage 1	~ 231	243	-	316	367	-	-	-	-	-	-	-
Stage 2	~ 112	357	-	271	243	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	$ 12333.4	$ 446.3	0.3	1.6
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	853	-	-	9	87	35	368	817	-	-
HCM Lane V/C Ratio	0.035	-	-	31.813	0.629	3.609	1.339	0.188	-	-
HCM Control Delay (s)	9.4	-	$ 14672.2	99.$	$ 1410.2	199.1	10.4	-	-	
HCM Lane LOS	A	-	-	F	F	F	F	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	37.5	2.9	14.6	23.5	0.7	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

DONALD ROSS CORRIDOR

Arterial Level of Service: EB Donald Ross

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
West Ramp	II	45	46.0	25.3	71.3	0.52	26.4	C
East Ramp	II	45	15.7	25.6	41.3	0.14	12.5	F
Parkside Dr	II	45	42.7	36.5	79.2	0.53	24.3	C
Central Blvd	II	45	52.1	37.6	89.7	0.65	26.1	C
Military Trail	II	45	32.9	59.9	92.8	0.34	13.3	E
Total	II		189.4	184.9	374.3	2.19	21.1	D

Arterial Level of Service: WB Donald Ross

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Military Trail	II	45	21.4	79.1	100.5	0.20	7.0	F
Central Blvd	II	45	32.9	72.3	105.2	0.34	11.7	F
Parkside Dr	II	45	52.1	45.0	97.1	0.65	24.1	C
East Ramp	II	45	42.7	9.5	52.2	0.53	36.8	A
West Ramp	II	45	15.7	26.4	42.1	0.14	12.3	F
Total	II		164.8	232.3	397.1	1.87	16.9	E

HCM 2010 methodology does not support clustered intersections.

HCM 2010 methodology does not support clustered intersections.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	406	989	277	535	1199	119	609	147	636	68	112	547
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	427	1041	292	563	1262	125	641	155	669	72	118	576
Adj No. of Lanes	2	3	1	2	3	1	2	1	1	1	1	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	401	1265	467	546	1265	662	583	456	572	270	315	914
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.12	0.25	0.25	0.16	0.25	0.25	0.17	0.24	0.24	0.05	0.17	0.17
Ln Grp Delay, s/veh	105.3	39.7	35.0	86.3	60.3	17.5	106.9	29.8	124.2	30.8	35.5	28.3
Ln Grp LOS	F	D	D	F	E	B	F	C	F	C	D	C
Approach Vol, veh/h		1760			1950			1465			766	
Approach Delay, s/veh		54.8			65.0			106.6			29.6	
Approach LOS		D			E			F			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	1.1	3.0
Phs Duration (G+Y+Rc), s	19.0	32.0	20.0	23.5	19.0	32.0	12.9	30.6
Change Period (Y+Rc), s	8.0	* 8.5	4.0	* 7.5	4.0	8.5	8.5	7.5
Max Green (Gmax), s	11.0	* 24	16.0	* 16	15.0	22.5	5.9	18.1
Max Allow Headway (MAH), s	3.7	4.8	3.7	4.1	3.7	4.8	3.7	4.1
Max Q Clear (g_c+I1), s	13.0	25.4	18.0	18.0	17.0	20.3	5.1	25.1
Green Ext Time (g_e), s	0.0	0.0	0.0	0.0	0.0	2.1	0.0	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	0.85	1.00
Prob of Max Out (p_x)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3442		3442		3442		1774	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		5085		1863		5085		1863

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		2787		1583		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Pr/Pm)	
Lanes in Grp	2	0	2	0	2	0	1	0

Grp Vol (v), veh/h	427	0	641	0	563	0	72	0
Grp Sat Flow (s), veh/h/ln	1721	0	1721	0	1721	0	1774	0
Q Serve Time (g_s), s	11.0	0.0	16.0	0.0	15.0	0.0	3.1	0.0
Cycle Q Clear Time (g_c), s	11.0	0.0	16.0	0.0	15.0	0.0	3.1	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	662	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	16.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	16.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	401	0	583	0	546	0	270	0
V/C Ratio (X)	1.07	0.00	1.10	0.00	1.03	0.00	0.27	0.00
Avail Cap (c_a), veh/h	401	0	583	0	546	0	299	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	41.8	0.0	39.3	0.0	39.7	0.0	30.3	0.0
Incr Delay (d2), s/veh	63.5	0.0	67.6	0.0	46.6	0.0	0.5	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	105.3	0.0	106.9	0.0	86.3	0.0	30.8	0.0
1st-Term Q (Q1), veh/ln	5.2	0.0	7.5	0.0	7.1	0.0	1.5	0.0
2nd-Term Q (Q2), veh/ln	3.5	0.0	5.5	0.0	3.5	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (-26165%), veh/ln	8.7	0.0	13.0	0.0	10.6	0.0	1.6	0.0
%ile Storage Ratio (RQ%)	0.41	0.00	0.94	0.00	0.87	0.00	0.26	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	6.6	0.0	14.6	0.0	4.2	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.3	0.0	0.3	0.0	0.3	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	1	0	3	0	1
Grp Vol (v), veh/h	0	1262	0	118	0	1041	0	155
Grp Sat Flow (s), veh/h/ln	0	1695	0	1863	0	1695	0	1863
Q Serve Time (g_s), s	0.0	23.4	0.0	5.3	0.0	18.3	0.0	6.5
Cycle Q Clear Time (g_c), s	0.0	23.4	0.0	5.3	0.0	18.3	0.0	6.5
Lane Grp Cap (c), veh/h	0	1265	0	315	0	1265	0	456
V/C Ratio (X)	0.00	1.00	0.00	0.37	0.00	0.82	0.00	0.34
Avail Cap (c_a), veh/h	0	1265	0	315	0	1265	0	456
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	35.5	0.0	34.8	0.0	33.5	0.0	29.4
Incr Delay (d2), s/veh	0.0	24.8	0.0	0.7	0.0	6.2	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	60.3	0.0	35.5	0.0	39.7	0.0	29.8
1st-Term Q (Q1), veh/ln	0.0	10.9	0.0	2.7	0.0	8.6	0.0	3.3
2nd-Term Q (Q2), veh/ln	0.0	2.9	0.0	0.1	0.0	0.7	0.0	0.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (-26165%), veh/ln	0.0	13.8	0.0	2.8	0.0	9.3	0.0	3.4
%ile Storage Ratio (RQ%)	0.00	0.11	0.00	0.12	0.00	0.09	0.00	0.11
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	2	0	1	0	1
Grp Vol (v), veh/h	0	125	0	576	0	292	0	669
Grp Sat Flow (s), veh/h/ln	0	1583	0	1393	0	1583	0	1583
Q Serve Time (g_s), s	0.0	4.7	0.0	16.0	0.0	15.1	0.0	23.1
Cycle Q Clear Time (g_c), s	0.0	4.7	0.0	16.0	0.0	15.1	0.0	23.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	1583.3	0.0	1393.3	0.0	1583.3	0.0	1583.3
Prot RT Eff Green (g_R), s	0.0	16.0	0.0	15.0	0.0	4.4	0.0	11.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	662	0	914	0	467	0	572
V/C Ratio (X)	0.00	0.19	0.00	0.63	0.00	0.63	0.00	1.17
Avail Cap (c_a), veh/h	0	662	0	914	0	467	0	572
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	17.4	0.0	26.9	0.0	28.8	0.0	30.2
Incr Delay (d2), s/veh	0.0	0.1	0.0	1.4	0.0	6.2	0.0	94.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	17.5	0.0	28.3	0.0	35.0	0.0	124.2
1st-Term Q (Q1), veh/ln	0.0	2.0	0.0	6.4	0.0	6.5	0.0	14.8
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.2	0.0	0.8	0.0	14.9
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (-26165%), veh/ln	0.0	2.1	0.0	6.5	0.0	7.3	0.0	29.8
%ile Storage Ratio (RQ%)	0.00	0.11	0.00	0.55	0.00	0.37	0.00	1.68
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.3
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3

Intersection Summary	
HCM 2010 Ctrl Delay	67.7
HCM 2010 LOS	E

Notes

User approved ignoring U-Turning movement.

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	372	791	361	260	1175	139	288	452	205	326	291	249
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	392	833	380	274	1237	146	303	476	216	343	306	262
Adj No. of Lanes	2	3	1	2	3	1	2	2	1	2	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	400	1317	410	346	1236	385	387	576	258	426	634	284
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.12	0.26	0.26	0.10	0.24	0.24	0.11	0.16	0.16	0.12	0.18	0.18
Ln Grp Delay, s/veh	81.1	32.1	61.2	50.7	61.5	32.7	44.4	46.9	57.3	46.2	35.5	72.2
Ln Grp LOS	F	C	E	D	F	C	D	D	E	D	D	E
Approach Vol, veh/h		1605			1657			995			911	
Approach Delay, s/veh		50.9			57.2			48.4			50.1	
Approach LOS		D			E			D			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	20.0	31.0	20.7	22.9	18.5	32.5	19.1	24.4
Change Period (Y+Rc), s	9.0	8.0	9.0	7.5	9.0	8.0	8.5	7.5
Max Green (Gmax), s	11.0	23.0	16.0	16.5	11.0	23.0	16.5	16.5
Max Allow Headway (MAH), s	3.7	4.7	3.7	4.5	3.7	4.7	3.7	4.5
Max Q Clear (g_c+I1), s	12.7	25.0	11.2	14.5	9.4	24.1	10.1	17.4
Green Ext Time (g_e), s	0.0	0.0	0.5	0.9	0.2	0.0	0.5	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	0.48	1.00	1.00	1.00	0.15	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3442		3442		3442		3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		5085		3539		5085		3539

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		1583		1583		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	
Lanes in Grp	2	0	2	0	2	0	2	0

Grp Vol (v), veh/h	392	0	343	0	274	0	303	0
Grp Sat Flow (s), veh/h/ln	1721	0	1721	0	1721	0	1721	0
Q Serve Time (g_s), s	10.7	0.0	9.2	0.0	7.4	0.0	8.1	0.0
Cycle Q Clear Time (g_c), s	10.7	0.0	9.2	0.0	7.4	0.0	8.1	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	400	0	426	0	346	0	387	0
V/C Ratio (X)	0.98	0.00	0.81	0.00	0.79	0.00	0.78	0.00
Avail Cap (c_a), veh/h	400	0	582	0	400	0	600	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	41.7	0.0	40.3	0.0	41.6	0.0	40.8	0.0
Incr Delay (d2), s/veh	39.4	0.0	5.8	0.0	9.1	0.0	3.6	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	81.1	0.0	46.2	0.0	50.7	0.0	44.4	0.0
1st-Term Q (Q1), veh/ln	5.1	0.0	4.3	0.0	3.5	0.0	3.9	0.0
2nd-Term Q (Q2), veh/ln	2.2	0.0	0.3	0.0	0.4	0.0	0.2	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (-26165%), veh/ln	7.3	0.0	4.7	0.0	3.9	0.0	4.1	0.0
%ile Storage Ratio (RQ%)	0.35	0.00	0.23	0.00	0.20	0.00	0.19	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	2	0	3	0	2
Grp Vol (v), veh/h	0	1237	0	476	0	833	0	306
Grp Sat Flow (s), veh/h/ln	0	1695	0	1770	0	1695	0	1770
Q Serve Time (g_s), s	0.0	23.0	0.0	12.3	0.0	13.7	0.0	7.3
Cycle Q Clear Time (g_c), s	0.0	23.0	0.0	12.3	0.0	13.7	0.0	7.3
Lane Grp Cap (c), veh/h	0	1236	0	576	0	1317	0	634
V/C Ratio (X)	0.00	1.00	0.00	0.83	0.00	0.63	0.00	0.48
Avail Cap (c_a), veh/h	0	1236	0	617	0	1317	0	634
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	35.8	0.0	38.3	0.0	31.1	0.0	34.9
Incr Delay (d2), s/veh	0.0	25.7	0.0	8.6	0.0	1.0	0.0	0.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	61.5	0.0	46.9	0.0	32.1	0.0	35.5
1st-Term Q (Q1), veh/ln	0.0	10.6	0.0	6.0	0.0	6.4	0.0	3.6
2nd-Term Q (Q2), veh/ln	0.0	2.9	0.0	0.7	0.0	0.1	0.0	0.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (-26165%), veh/ln	0.0	13.6	0.0	6.7	0.0	6.5	0.0	3.6
%ile Storage Ratio (RQ%)	0.00	0.21	0.00	0.29	0.00	0.05	0.00	0.13
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	146	0	216	0	380	0	262
Grp Sat Flow (s), veh/h/ln	0	1583	0	1583	0	1583	0	1583
Q Serve Time (g_s), s	0.0	7.3	0.0	12.5	0.0	22.1	0.0	15.4
Cycle Q Clear Time (g_c), s	0.0	7.3	0.0	12.5	0.0	22.1	0.0	15.4
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	385	0	258	0	410	0	284
V/C Ratio (X)	0.00	0.38	0.00	0.84	0.00	0.93	0.00	0.92
Avail Cap (c_a), veh/h	0	385	0	276	0	410	0	284
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	29.8	0.0	38.4	0.0	34.2	0.0	38.2
Incr Delay (d2), s/veh	0.0	2.8	0.0	18.9	0.0	27.1	0.0	34.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	32.7	0.0	57.3	0.0	61.2	0.0	72.2
1st-Term Q (Q1), veh/ln	0.0	3.2	0.0	5.5	0.0	9.6	0.0	6.7
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	1.4	0.0	3.1	0.0	2.7
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (-26165%), veh/ln	0.0	3.5	0.0	6.8	0.0	12.7	0.0	9.4
%ile Storage Ratio (RQ%)	0.00	0.29	0.00	0.67	0.00	1.09	0.00	0.47
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	52.3
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	527	704	38	522	944	138	42	885	105	328	939	488
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	555	741	40	549	994	145	44	932	111	345	988	514
Adj No. of Lanes	2	3	1	2	3	1	2	3	1	2	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	550	878	273	616	976	304	126	1020	318	519	1601	498
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.16	0.17	0.17	0.18	0.19	0.19	0.04	0.20	0.20	0.15	0.31	0.31
Ln Grp Delay, s/veh	86.5	53.6	39.6	57.1	77.9	44.6	53.1	54.7	38.3	50.5	33.7	86.0
Ln Grp LOS	F	D	D	E	F	D	D	D	D	D	C	F
Approach Vol, veh/h		1336			1688			1087			1847	
Approach Delay, s/veh		66.9			68.3			52.9			51.4	
Approach LOS		E			E			D			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	26.0	29.0	25.0	29.5	28.1	26.9	12.5	42.0
Change Period (Y+Rc), s	8.5	8.0	8.5	7.5	8.5	8.0	8.5	7.5
Max Green (Gmax), s	17.5	21.0	16.5	22.5	21.5	17.0	17.5	21.5
Max Allow Headway (MAH), s	3.7	4.8	3.7	4.7	3.7	4.8	3.7	4.7
Max Q Clear (g_c+I1), s	19.5	23.0	12.4	21.6	19.1	17.4	3.4	36.5
Green Ext Time (g_e), s	0.0	0.0	0.5	0.3	0.6	0.0	0.1	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3442		3442		3442		3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		5085		5085		5085		5085

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		1583		1583		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	
Lanes in Grp	2	0	2	0	2	0	2	0

Grp Vol (v), veh/h	555	0	345	0	549	0	44	0
Grp Sat Flow (s), veh/h/ln	1721	0	1721	0	1721	0	1721	0
Q Serve Time (g_s), s	17.5	0.0	10.4	0.0	17.1	0.0	1.4	0.0
Cycle Q Clear Time (g_c), s	17.5	0.0	10.4	0.0	17.1	0.0	1.4	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	550	0	519	0	616	0	126	0
V/C Ratio (X)	1.01	0.00	0.67	0.00	0.89	0.00	0.35	0.00
Avail Cap (c_a), veh/h	550	0	519	0	676	0	550	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	46.0	0.0	43.9	0.0	43.9	0.0	51.5	0.0
Incr Delay (d2), s/veh	40.5	0.0	6.6	0.0	13.2	0.0	1.7	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	86.5	0.0	50.5	0.0	57.1	0.0	53.1	0.0
1st-Term Q (Q1), veh/ln	8.3	0.0	4.9	0.0	8.1	0.0	0.6	0.0
2nd-Term Q (Q2), veh/ln	3.1	0.0	0.5	0.0	1.1	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (-26165%), veh/ln	11.4	0.0	5.4	0.0	9.2	0.0	0.7	0.0
%ile Storage Ratio (RQ%)	0.48	0.00	0.29	0.00	0.42	0.00	0.03	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	3	0	3	0	3
Grp Vol (v), veh/h	0	994	0	932	0	741	0	988
Grp Sat Flow (s), veh/h/ln	0	1695	0	1695	0	1695	0	1695
Q Serve Time (g_s), s	0.0	21.0	0.0	19.6	0.0	15.4	0.0	18.1
Cycle Q Clear Time (g_c), s	0.0	21.0	0.0	19.6	0.0	15.4	0.0	18.1
Lane Grp Cap (c), veh/h	0	976	0	1020	0	878	0	1601
V/C Ratio (X)	0.00	1.02	0.00	0.91	0.00	0.84	0.00	0.62
Avail Cap (c_a), veh/h	0	976	0	1045	0	878	0	1601
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	44.2	0.0	42.8	0.0	43.9	0.0	31.9
Incr Delay (d2), s/veh	0.0	33.6	0.0	11.9	0.0	9.8	0.0	1.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	77.9	0.0	54.7	0.0	53.6	0.0	33.7
1st-Term Q (Q1), veh/ln	0.0	9.8	0.0	9.1	0.0	7.2	0.0	8.4
2nd-Term Q (Q2), veh/ln	0.0	3.0	0.0	1.1	0.0	0.8	0.0	0.3

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (-26165%), veh/ln	0.0	12.8	0.0	10.3	0.0	8.0	0.0	8.7
%ile Storage Ratio (RQ%)	0.00	0.34	0.00	0.39	0.00	0.12	0.00	0.28
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	4.6	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	145	0	111	0	40	0	514
Grp Sat Flow (s), veh/h/ln	0	1583	0	1583	0	1583	0	1583
Q Serve Time (g_s), s	0.0	8.9	0.0	6.6	0.0	2.3	0.0	34.5
Cycle Q Clear Time (g_c), s	0.0	8.9	0.0	6.6	0.0	2.3	0.0	34.5
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	304	0	318	0	273	0	498
V/C Ratio (X)	0.00	0.48	0.00	0.35	0.00	0.15	0.00	1.03
Avail Cap (c_a), veh/h	0	304	0	325	0	273	0	498
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	39.3	0.0	37.6	0.0	38.4	0.0	37.5
Incr Delay (d2), s/veh	0.0	5.3	0.0	0.7	0.0	1.1	0.0	48.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	44.6	0.0	38.3	0.0	39.6	0.0	86.0
1st-Term Q (Q1), veh/ln	0.0	3.9	0.0	2.9	0.0	1.0	0.0	15.1
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.1	0.0	0.1	0.0	6.7
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (-26165%), veh/ln	0.0	4.3	0.0	2.9	0.0	1.1	0.0	21.8
%ile Storage Ratio (RQ%)	0.00	0.35	0.00	0.14	0.00	0.04	0.00	0.71
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.9
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3

Intersection Summary	
HCM 2010 Ctrl Delay	59.9
HCM 2010 LOS	E

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	3	531	0	42	702	48	6	0	30	28	0	0
Future Vol, veh/h	3	531	0	42	702	48	6	0	30	28	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	325	-	-	289	-	-	-	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	559	0	44	739	51	6	0	32	29	0	0

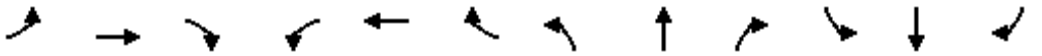
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	789	0	0	559	0	0	1023	1443	279	1139	1418	395
Stage 1	-	-	-	-	-	-	565	565	-	853	853	-
Stage 2	-	-	-	-	-	-	458	878	-	286	565	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	827	-	-	1008	-	-	190	131	718	156	136	604
Stage 1	-	-	-	-	-	-	477	506	-	320	374	-
Stage 2	-	-	-	-	-	-	552	364	-	697	506	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	827	-	-	1008	-	-	183	125	718	144	130	604
Mov Cap-2 Maneuver	-	-	-	-	-	-	183	125	-	144	130	-
Stage 1	-	-	-	-	-	-	475	504	-	319	358	-
Stage 2	-	-	-	-	-	-	528	348	-	664	504	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.5	13.1	36.3
HCM LOS			B	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	483	827	-	-	1008	-	-	144	-
HCM Lane V/C Ratio	0.078	0.004	-	-	0.044	-	-	0.205	-
HCM Control Delay (s)	13.1	9.4	-	-	8.7	-	-	36.3	0
HCM Lane LOS	B	A	-	-	A	-	-	E	A
HCM 95th %tile Q(veh)	0.3	0	-	-	0.1	-	-	0.7	-

No Build Alternative 2020 PM

2: West Ramp & Donald Ross Corridor: Donald Ross Road

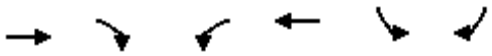


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	525	58	1022	765	0	0	0	0	366	0	42
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0	4.0	7.0	6.0					6.0		4.0
Lane Util. Factor		0.86	1.00	0.86	0.86					0.94		1.00
Frt		1.00	0.85	1.00	1.00					1.00		0.85
Flt Protected		1.00	1.00	0.95	0.99					0.95		1.00
Satd. Flow (prot)		6408	1583	3044	3179					4990		1583
Flt Permitted		1.00	1.00	0.95	0.67					0.95		1.00
Satd. Flow (perm)		6408	1583	3044	2161					4990		1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	553	61	1076	805	0	0	0	0	385	0	44
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	553	61	925	956	0	0	0	0	385	0	44
Turn Type		NA	Free	Prot	NA					Prot		Free
Protected Phases		6		5	2					3		
Permitted Phases			Free									Free
Actuated Green, G (s)		27.5	89.8	28.3	62.8					15.0		89.8
Effective Green, g (s)		27.5	89.8	28.3	62.8					15.0		89.8
Actuated g/C Ratio		0.31	1.00	0.32	0.70					0.17		1.00
Clearance Time (s)		6.0		7.0	6.0					6.0		
Vehicle Extension (s)		3.0		3.0	3.0					3.0		
Lane Grp Cap (vph)		1962	1583	959	1832					833		1583
v/s Ratio Prot		0.09		c0.30	0.16					c0.08		
v/s Ratio Perm			0.04		c0.20							0.03
v/c Ratio		0.28	0.04	0.96	0.52					0.46		0.03
Uniform Delay, d1		23.7	0.0	30.3	6.4					33.8		0.0
Progression Factor		1.00	1.00	1.05	1.07					1.00		1.00
Incremental Delay, d2		0.4	0.0	19.8	0.3					0.4		0.0
Delay (s)		24.0	0.0	51.6	7.1					34.2		0.0
Level of Service		C	A	D	A					C		A
Approach Delay (s)		21.6			29.0			0.0			30.7	
Approach LOS		C			C			A			C	

Intersection Summary			
HCM 2000 Control Delay	27.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	89.8	Sum of lost time (s)	19.0
Intersection Capacity Utilization	57.1%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

No Build Alternative 2020 PM

2: West Ramp & Donald Ross Corridor: Donald Ross Road



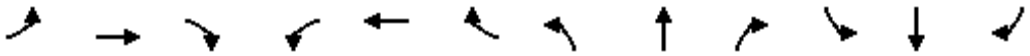
Lane Group	EBT	EBR	WBL	WBT	SBL	SBR
Lane Group Flow (vph)	553	61	925	956	385	44
v/c Ratio	0.30	0.04	0.94	0.80	0.45	0.03
Control Delay	25.3	0.1	48.1	26.4	34.2	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	25.3	0.1	48.1	26.4	34.2	0.0
Queue Length 50th (ft)	71	0	242	191	68	0
Queue Length 95th (ft)	96	0	#405	263	97	0
Internal Link Dist (ft)	2056			679		
Turn Bay Length (ft)		433				
Base Capacity (vph)	1836	1583	1011	1193	972	1583
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.30	0.04	0.91	0.80	0.40	0.03

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

No Build Alternative 2020 PM

9: East Ramp & Donald Ross Corridor: Donald Ross Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	39	852	0	0	1507	909	280	0	1314	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0			6.0	4.0	6.0		6.0			
Lane Util. Factor	0.97	0.91			0.86	1.00	0.97		0.76			
Frt	1.00	1.00			1.00	0.85	1.00		0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (prot)	3433	5085			6408	1583	3433		3610			
Flt Permitted	0.95	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (perm)	3433	5085			6408	1583	3433		3610			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	41	897	0	0	1586	957	295	0	1383	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	1005	0	0	0
Lane Group Flow (vph)	41	897	0	0	1586	957	295	0	378	0	0	0
Turn Type	Prot	NA			NA	Free	Prot		Prot			
Protected Phases	1	6			2		7		7			
Permitted Phases						Free						
Actuated Green, G (s)	2.3	27.5			54.5	89.8	15.0		15.0			
Effective Green, g (s)	2.3	27.5			54.5	89.8	15.0		15.0			
Actuated g/C Ratio	0.03	0.31			0.61	1.00	0.17		0.17			
Clearance Time (s)	6.0	6.0			6.0		6.0		6.0			
Vehicle Extension (s)	3.0	3.0			3.0		3.0		3.0			
Lane Grp Cap (vph)	87	1557			3889	1583	573		603			
v/s Ratio Prot	0.01	0.18			0.25		0.09		0.10			
v/s Ratio Perm						c0.60						
v/c Ratio	0.47	0.58			0.41	0.60	0.51		0.63			
Uniform Delay, d1	43.2	26.2			9.2	0.0	34.1		34.8			
Progression Factor	0.62	0.86			1.00	1.00	1.00		1.00			
Incremental Delay, d2	3.8	1.5			0.3	1.7	0.8		2.0			
Delay (s)	30.4	24.0			9.5	1.7	34.9		36.8			
Level of Service	C	C			A	A	C		D			
Approach Delay (s)		24.2			6.6			36.5			0.0	
Approach LOS		C			A			D			A	

Intersection Summary			
HCM 2000 Control Delay	19.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	89.8	Sum of lost time (s)	19.0
Intersection Capacity Utilization	57.1%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

No Build Alternative 2020 PM

9: East Ramp & Donald Ross Corridor: Donald Ross Road

Lane Group	EBL	EBT	WBT	WBR	NBL	NBR
Lane Group Flow (vph)	41	897	1586	957	295	1383
v/c Ratio	0.26	0.62	0.40	0.60	0.50	0.85
Control Delay	29.5	25.6	9.5	1.7	36.0	11.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.5	25.6	9.5	1.7	36.0	11.1
Queue Length 50th (ft)	12	99	138	0	77	37
Queue Length 95th (ft)	28	121	166	0	117	101
Internal Link Dist (ft)		679	2740			
Turn Bay Length (ft)						
Base Capacity (vph)	157	1457	3995	1583	669	1675
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.26	0.62	0.40	0.60	0.44	0.83

Intersection Summary

HOOD ROAD CORRIDOR

Arterial Level of Service: EB Hood Road

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Central Blvd	II	45	133.7	23.2	156.9	1.67	38.3	A
Military Trail	II	45	31.0	27.4	58.4	0.31	19.3	D
Total	II		164.7	50.6	215.3	1.98	33.2	B

Arterial Level of Service: WB Hood Road

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Military Trail	II	45	14.9	29.1	44.0	0.14	11.2	F
Central Blvd	II	45	31.0	23.0	54.0	0.31	20.9	D
Total	II		45.9	52.1	98.0	0.45	16.5	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	81	153	70	254	213	149	149	691	321	269	524	161
Future Volume (veh/h)	81	153	70	254	213	149	149	691	321	269	524	161
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	85	161	74	267	224	157	157	727	338	283	552	169
Adj No. of Lanes	2	2	1	2	2	1	2	2	1	2	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	234	564	253	292	625	279	677	992	444	575	1010	452
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.07	0.16	0.16	0.08	0.18	0.18	0.06	0.28	0.28	0.07	0.29	0.29
Ln Grp Delay, s/veh	27.2	22.1	22.5	58.0	21.7	23.9	14.0	24.0	31.1	15.7	19.9	19.2
Ln Grp LOS	C	C	C	E	C	C	B	C	C	B	B	B
Approach Vol, veh/h		320			648			1222			1004	
Approach Delay, s/veh		23.5			37.2			24.7			18.6	
Approach LOS		C			D			C			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	3.0	2.0	3.0	1.1	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	10.0	22.5	11.0	15.4	9.7	22.8	10.0	16.4
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green (Gmax), s	4.0	16.5	5.0	35.5	4.0	16.5	5.0	35.5
Max Allow Headway (MAH), s	3.7	4.6	3.7	4.5	3.7	4.6	3.7	4.5
Max Q Clear (g_c+l1), s	5.4	13.5	6.5	4.4	3.8	9.8	3.4	7.3
Green Ext Time (g_e), s	0.0	2.3	0.0	3.1	0.0	4.7	0.0	3.1
Prob of Phs Call (p_c)	0.99	1.00	1.00	1.00	0.92	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3442		3442		3442		3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3539		3539		3539		3539

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		1583		1583		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Pr/Pm)		(Prot)		(Pr/Pm)		(Prot)	

Lanes in Grp	2	0	2	0	2	0	2	0
Grp Vol (v), veh/h	283	0	267	0	157	0	85	0
Grp Sat Flow (s), veh/h/ln	1721	0	1721	0	1721	0	1721	0
Q Serve Time (g_s), s	3.4	0.0	4.5	0.0	1.8	0.0	1.4	0.0
Cycle Q Clear Time (g_c), s	3.4	0.0	4.5	0.0	1.8	0.0	1.4	0.0
Perm LT Sat Flow (s_l), veh/h/ln	512	0	0	0	707	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	16.5	0.0	0.0	0.0	16.5	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	5.5	0.0	0.0	0.0	9.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	4.2	0.0	0.0	0.0	0.9	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	575	0	292	0	677	0	234	0
V/C Ratio (X)	0.49	0.00	0.91	0.00	0.23	0.00	0.36	0.00
Avail Cap (c_a), veh/h	575	0	292	0	695	0	292	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	15.0	0.0	26.7	0.0	13.9	0.0	26.2	0.0
Incr Delay (d2), s/veh	0.7	0.0	31.3	0.0	0.2	0.0	0.9	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	15.7	0.0	58.0	0.0	14.0	0.0	27.2	0.0
1st-Term Q (Q1), veh/ln	1.6	0.0	2.1	0.0	0.9	0.0	0.7	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	1.3	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	1.6	0.0	3.4	0.0	0.9	0.0	0.7	0.0
%ile Storage Ratio (RQ%)	0.14	0.00	0.06	0.00	0.06	0.00	0.03	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	2	0	2	0	2
Grp Vol (v), veh/h	0	727	0	161	0	552	0	224
Grp Sat Flow (s), veh/h/ln	0	1770	0	1770	0	1770	0	1770
Q Serve Time (g_s), s	0.0	11.0	0.0	2.4	0.0	7.8	0.0	3.3
Cycle Q Clear Time (g_c), s	0.0	11.0	0.0	2.4	0.0	7.8	0.0	3.3
Lane Grp Cap (c), veh/h	0	992	0	564	0	1010	0	625
V/C Ratio (X)	0.00	0.73	0.00	0.29	0.00	0.55	0.00	0.36
Avail Cap (c_a), veh/h	0	992	0	2133	0	1010	0	2133
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	19.2	0.0	21.8	0.0	17.8	0.0	21.3
Incr Delay (d2), s/veh	0.0	4.8	0.0	0.3	0.0	2.1	0.0	0.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	24.0	0.0	22.1	0.0	19.9	0.0	21.7
1st-Term Q (Q1), veh/ln	0.0	5.4	0.0	1.1	0.0	3.8	0.0	1.6

2nd-Term Q (Q2), veh/ln	0.0	0.7	0.0	0.0	0.0	0.3	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	6.0	0.0	1.2	0.0	4.1	0.0	1.6
%ile Storage Ratio (RQ%)	0.00	0.35	0.00	0.04	0.00	0.11	0.00	0.03
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	338	0	74	0	169	0	157
Grp Sat Flow (s), veh/h/ln	0	1583	0	1583	0	1583	0	1583
Q Serve Time (g_s), s	0.0	11.5	0.0	2.4	0.0	5.0	0.0	5.3
Cycle Q Clear Time (g_c), s	0.0	11.5	0.0	2.4	0.0	5.0	0.0	5.3
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	444	0	253	0	452	0	279
V/C Ratio (X)	0.00	0.76	0.00	0.29	0.00	0.37	0.00	0.56
Avail Cap (c_a), veh/h	0	444	0	954	0	452	0	954
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	19.4	0.0	21.8	0.0	16.8	0.0	22.2
Incr Delay (d2), s/veh	0.0	11.7	0.0	0.6	0.0	2.4	0.0	1.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	31.1	0.0	22.5	0.0	19.2	0.0	23.9
1st-Term Q (Q1), veh/ln	0.0	5.0	0.0	1.1	0.0	2.2	0.0	2.3
2nd-Term Q (Q2), veh/ln	0.0	1.4	0.0	0.0	0.0	0.3	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	6.5	0.0	1.1	0.0	2.5	0.0	2.5
%ile Storage Ratio (RQ%)	0.00	0.59	0.00	0.09	0.00	0.19	0.00	0.18
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	25.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	139	295	31	293	390	79	130	756	286	93	787	299
Future Volume (veh/h)	139	295	31	293	390	79	130	756	286	93	787	299
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	146	311	33	308	411	83	137	796	301	98	828	315
Adj No. of Lanes	2	2	1	2	2	1	2	3	1	2	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	266	755	338	275	764	342	184	1119	348	184	1119	348
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.08	0.21	0.21	0.08	0.22	0.22	0.05	0.22	0.22	0.05	0.22	0.22
Ln Grp Delay, s/veh	41.2	27.1	24.3	124.5	28.8	26.0	58.9	30.9	51.9	45.3	31.7	57.6
Ln Grp LOS	D	C	C	F	C	C	E	C	D	D	C	E
Approach Vol, veh/h		490			802			1234			1241	
Approach Delay, s/veh		31.1			65.2			39.1			39.3	
Approach LOS		C			E			D			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	12.5	24.0	14.3	24.2	12.5	24.0	14.5	24.0
Change Period (Y+Rc), s	8.5	7.5	8.5	8.0	8.5	7.5	8.5	8.0
Max Green (Gmax), s	4.0	16.5	5.8	16.2	4.0	16.5	6.0	16.0
Max Allow Headway (MAH), s	3.7	4.6	3.7	4.8	3.7	4.6	3.7	4.8
Max Q Clear (g_c+l1), s	4.9	16.5	5.1	9.7	4.1	15.7	8.0	7.7
Green Ext Time (g_e), s	0.0	0.0	0.0	2.5	0.0	0.7	0.0	3.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3442		3442		3442		3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		5085		3539		5085		3539

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		1583		1583		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	2	0	2	0
Grp Vol (v), veh/h	137	0	146	0	98	0	308	0
Grp Sat Flow (s), veh/h/ln	1721	0	1721	0	1721	0	1721	0
Q Serve Time (g_s), s	2.9	0.0	3.1	0.0	2.1	0.0	6.0	0.0
Cycle Q Clear Time (g_c), s	2.9	0.0	3.1	0.0	2.1	0.0	6.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	184	0	266	0	184	0	275	0
V/C Ratio (X)	0.75	0.00	0.55	0.00	0.53	0.00	1.12	0.00
Avail Cap (c_a), veh/h	184	0	266	0	184	0	275	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	35.0	0.0	33.3	0.0	34.6	0.0	34.5	0.0
Incr Delay (d2), s/veh	23.9	0.0	7.9	0.0	10.7	0.0	90.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	58.9	0.0	41.2	0.0	45.3	0.0	124.5	0.0
1st-Term Q (Q1), veh/ln	1.4	0.0	1.5	0.0	1.0	0.0	2.8	0.0
2nd-Term Q (Q2), veh/ln	0.6	0.0	0.3	0.0	0.3	0.0	3.4	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	2.0	0.0	1.8	0.0	1.3	0.0	6.3	0.0
%ile Storage Ratio (RQ%)	0.12	0.00	0.08	0.00	0.05	0.00	0.30	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	8.2	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	2	0	3	0	2
Grp Vol (v), veh/h	0	828	0	411	0	796	0	311
Grp Sat Flow (s), veh/h/ln	0	1695	0	1770	0	1695	0	1770
Q Serve Time (g_s), s	0.0	11.4	0.0	7.7	0.0	10.9	0.0	5.7
Cycle Q Clear Time (g_c), s	0.0	11.4	0.0	7.7	0.0	10.9	0.0	5.7
Lane Grp Cap (c), veh/h	0	1119	0	764	0	1119	0	755
V/C Ratio (X)	0.00	0.74	0.00	0.54	0.00	0.71	0.00	0.41
Avail Cap (c_a), veh/h	0	1119	0	764	0	1119	0	755
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	27.3	0.0	26.1	0.0	27.0	0.0	25.4
Incr Delay (d2), s/veh	0.0	4.4	0.0	2.7	0.0	3.9	0.0	1.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	31.7	0.0	28.8	0.0	30.9	0.0	27.1
1st-Term Q (Q1), veh/ln	0.0	5.3	0.0	3.8	0.0	5.1	0.0	2.8

2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	0.3	0.0	0.4	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	5.7	0.0	4.1	0.0	5.5	0.0	2.9
%ile Storage Ratio (RQ%)	0.00	0.16	0.00	0.16	0.00	0.18	0.00	0.05
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	315	0	83	0	301	0	33
Grp Sat Flow (s), veh/h/ln	0	1583	0	1583	0	1583	0	1583
Q Serve Time (g_s), s	0.0	14.5	0.0	3.3	0.0	13.7	0.0	1.3
Cycle Q Clear Time (g_c), s	0.0	14.5	0.0	3.3	0.0	13.7	0.0	1.3
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	348	0	342	0	348	0	338
V/C Ratio (X)	0.00	0.90	0.00	0.24	0.00	0.86	0.00	0.10
Avail Cap (c_a), veh/h	0	348	0	342	0	348	0	338
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	28.5	0.0	24.3	0.0	28.2	0.0	23.7
Incr Delay (d2), s/veh	0.0	29.1	0.0	1.7	0.0	23.7	0.0	0.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	57.6	0.0	26.0	0.0	51.9	0.0	24.3
1st-Term Q (Q1), veh/ln	0.0	6.3	0.0	1.4	0.0	6.0	0.0	0.5
2nd-Term Q (Q2), veh/ln	0.0	2.8	0.0	0.2	0.0	2.3	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	9.2	0.0	1.6	0.0	8.3	0.0	0.6
%ile Storage Ratio (RQ%)	0.00	0.39	0.00	0.13	0.00	0.69	0.00	0.05
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	43.7
HCM 2010 LOS	D

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Traffic Vol, veh/h	18	285	395	76	44	5
Future Vol, veh/h	18	285	395	76	44	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	399	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	19	300	416	80	46	5

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	416	0	-	0	754	416
Stage 1	-	-	-	-	416	-
Stage 2	-	-	-	-	338	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1143	-	-	-	377	637
Stage 1	-	-	-	-	666	-
Stage 2	-	-	-	-	722	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1143	-	-	-	369	637
Mov Cap-2 Maneuver	-	-	-	-	369	-
Stage 1	-	-	-	-	666	-
Stage 2	-	-	-	-	708	-

Approach	EB	WB	SB
HCM Control Delay, s	0.5	0	15.8
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1143	-	-	-	386
HCM Lane V/C Ratio	0.017	-	-	-	0.134
HCM Control Delay (s)	8.2	0	-	-	15.8
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.5

MILITARY TRAIL CORRIDOR

Arterial Level of Service: NB N Military Trail

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
PGA Blvd	II	45	15.7	107.2	122.9	0.14	4.2	F
Kyoto Gardens Dr	II	45	43.4	24.9	68.3	0.49	26.0	C
Hood Road	II	45	104.9	29.4	134.3	1.31	35.1	A
Donald Ross	II	45	102.8	67.5	170.3	1.29	27.2	C
Total	II		266.8	229.0	495.8	3.23	23.5	C

Arterial Level of Service: SB N Military Trail

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Donald Ross	II	45	20.4	31.5	51.9	0.19	13.0	F
Hood Road	II	45	102.8	30.0	132.8	1.29	34.8	B
Kyoto Gardens Dr	II	45	104.9	29.0	133.9	1.31	35.2	A
PGA Blvd	II	45	43.4	72.6	116.0	0.49	15.3	E
Total	II		271.5	163.1	434.6	3.28	27.1	C

Movement	WBL	WBR	WBR2	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SER
Lane Configurations											
Traffic Volume (veh/h)	298	394	116	92	1168	317	21	1156	53	0	0
Future Volume (veh/h)	298	394	116	92	1168	317	21	1156	53	0	0
Number	7	14	14	1	6	16	5	2	12		
Initial Q, veh	0	0	0	0	0	0	0	0	0		
Ped-Bike Adj (A_pbT)	1.00	1.00	1.00	1.00		1.00	1.00		1.00		
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900		
Adj Flow Rate, veh/h	314	122	122	97	1229	334	22	1217	56		
Adj No. of Lanes	2	1	1	1	3	1	1	3	0		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2		
Opposing Right Turn Influence	Yes			Yes			Yes				
Cap, veh/h	867	399	399	135	1592	496	108	1446	66		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Prop Arrive On Green	0.25	0.25	0.25	0.08	0.31	0.31	0.06	0.29	0.29		
Ln Grp Delay, s/veh	21.3	21.8	21.8	57.1	24.1	26.8	33.4	30.5	36.8		
Ln Grp LOS	C	C	C	E	C	C	C	C	D		

Approach Vol, veh/h	436				1660			1295			Timer:
Approach Delay, s/veh	21.5				26.6			32.7			Assigned Phs
Approach LOS	C				C			C			Case No
Phs Duration (G+Y+Rc), s		13.0	27.5		25.0	11.5	29.0				
Change Period (Y+Rc), s		8.0	* 8.5		8.5	7.5	8.5				
Max Green (Gmax), s		5.0	* 19		16.5	4.0	20.0				
Max Allow Headway (MAH), s		3.7	4.8		3.8	3.7	4.8				
Max Q Clear (g_c+I1), s		5.5	17.0		6.9	2.8	16.3				
Green Ext Time (g_e), s		0.0	1.9		1.1	0.0	3.4				
Prob of Phs Call (p_c)		1.00	1.00		1.00	1.00	1.00				
Prob of Max Out (p_x)		0.00	0.00		0.00	0.00	0.00				

Left-Turn Movement Data											
Assigned Mvmt		1			7	5					
Mvmt Sat Flow, veh/h		1774			3442	1774					

Through Movement Data											
Assigned Mvmt			2		4		6				
Mvmt Sat Flow, veh/h			4983		0		5085				

Right-Turn Movement Data											
Assigned Mvmt			12		14		16				
Mvmt Sat Flow, veh/h			229		1583		1583				

Left Lane Group Data											
Assigned Mvmt		1	0	0	7	5	0	0	0		
Lane Assignment		(Prot)				(Prot)					
Lanes in Grp		1	0	0	2	1	0	0	0		
Grp Vol (v), veh/h		97	0	0	314	22	0	0	0		
Grp Sat Flow (s), veh/h/ln		1774	0	0	1721	1774	0	0	0		

Q Serve Time (g_s), s	3.5	0.0	0.0	4.9	0.8	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	3.5	0.0	0.0	4.9	0.8	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1721	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	135	0	0	867	108	0	0	0
V/C Ratio (X)	0.72	0.00	0.00	0.36	0.20	0.00	0.00	0.00
Avail Cap (c_a), veh/h	135	0	0	867	108	0	0	0
Upstream Filter (I)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	29.6	0.0	0.0	20.2	29.2	0.0	0.0	0.0
Incr Delay (d2), s/veh	27.6	0.0	0.0	1.2	4.2	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	57.1	0.0	0.0	21.3	33.4	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	1.7	0.0	0.0	2.3	0.4	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	1.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	0.00	1.80	1.80	0.00	0.00	0.00
%ile Back of Q (95%), veh/ln	4.9	0.0	0.0	4.4	0.9	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.42	0.00	0.00	0.15	0.06	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	3	0	0
Grp Vol (v), veh/h	0	828	0	0	0	1229	0	0
Grp Sat Flow (s), veh/h/ln	0	1695	0	0	0	1695	0	0
Q Serve Time (g_s), s	0.0	15.0	0.0	0.0	0.0	14.3	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	15.0	0.0	0.0	0.0	14.3	0.0	0.0
Lane Grp Cap (c), veh/h	0	983	0	0	0	1592	0	0
V/C Ratio (X)	0.00	0.84	0.00	0.00	0.00	0.77	0.00	0.00
Avail Cap (c_a), veh/h	0	983	0	0	0	1592	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	21.8	0.0	0.0	0.0	20.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	8.7	0.0	0.0	0.0	3.7	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	30.5	0.0	0.0	0.0	24.1	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	7.0	0.0	0.0	0.0	6.7	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	1.2	0.0	0.0	0.0	0.5	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.57	0.00	1.00	0.00	1.61	0.00	0.00

%ile Back of Q (95%), veh/ln	0.0	12.9	0.0	0.0	0.0	11.7	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.05	0.00	0.00	0.00	0.74	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment		T+R		R		R		
Lanes in Grp	0	1	0	1	0	1	0	0
Grp Vol (v), veh/h	0	445	0	122	0	334	0	0
Grp Sat Flow (s), veh/h/ln	0	1822	0	1583	0	1583	0	0
Q Serve Time (g_s), s	0.0	15.0	0.0	4.1	0.0	12.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	15.0	0.0	4.1	0.0	12.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.13	0.00	1.00	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	529	0	399	0	496	0	0
V/C Ratio (X)	0.00	0.84	0.00	0.31	0.00	0.67	0.00	0.00
Avail Cap (c_a), veh/h	0	529	0	399	0	496	0	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	21.8	0.0	19.9	0.0	19.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	15.0	0.0	2.0	0.0	7.2	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	36.8	0.0	21.8	0.0	26.8	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	7.5	0.0	3.9	0.0	5.2	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	2.2	0.0	0.2	0.0	1.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.53	0.00	1.80	0.00	1.66	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	14.9	0.0	7.3	0.0	10.3	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.06	0.00	0.25	0.00	0.87	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	28.3
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

NORTHLAKE BOULEVARD CORRIDOR

Arterial Level of Service: EB Northlake Blvd

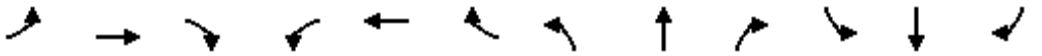
Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Keating Dr	II	45	17.3	22.8	40.1	0.16	14.3	E
West Ramps	II	45	12.7	42.4	55.1	0.12	7.6	F
East Ramps	II	45	11.1	32.1	43.2	0.10	8.5	F
Roan Ln	II	45	8.8	0.2	9.0	0.08	32.4	B
Sandtree Dr	II	45	13.5	20.7	34.2	0.12	13.1	E
Total	II		63.4	118.2	181.6	0.58	11.5	F

Arterial Level of Service: WB Northlake Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Sunrise Dr	II	45	15.3	35.2	50.5	0.14	10.0	F
Roan Ln	II	45	13.5	5.7	19.2	0.12	23.3	C
East Ramps	II	45	8.8	34.2	43.0	0.08	6.8	F
West Ramps	II	45	11.1	56.3	67.4	0.10	5.4	F
Keating Dr	II	45	12.7	15.0	27.7	0.12	15.1	E
Total	II		61.4	146.4	207.8	0.56	9.8	F

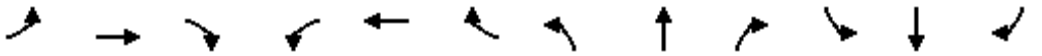
No Build Alternative 2020 PM

3: Keating Dr & Northlake Blvd Corridor: Northlake Boulevard



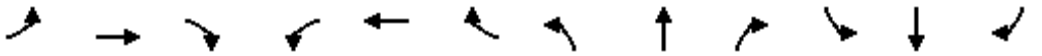
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	20	1685	50	146	1993	133	42	3	204	88	2	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.0	5.0	4.0	5.0	5.0	6.0	6.0	6.0		6.0	
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	0.95	0.95	1.00		0.95	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85		1.00	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.96	1.00		0.95	
Satd. Flow (prot)	1770	5085	1583	1770	5085	1583	1681	1695	1583		3374	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.79	1.00		0.73	
Satd. Flow (perm)	1770	5085	1583	1770	5085	1583	1681	1394	1583		2592	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	21	1774	53	154	2098	140	44	3	215	93	2	0
RTOR Reduction (vph)	0	0	30	0	0	66	0	0	120	0	0	0
Lane Group Flow (vph)	21	1774	23	154	2098	74	23	24	95	0	95	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6			2			4			
Actuated Green, G (s)	0.7	34.6	34.6	8.1	42.0	42.0	1.4	21.3	21.3		13.9	
Effective Green, g (s)	0.7	34.6	34.6	8.1	42.0	42.0	1.4	21.3	21.3		13.9	
Actuated g/C Ratio	0.01	0.44	0.44	0.10	0.53	0.53	0.02	0.27	0.27		0.18	
Clearance Time (s)	4.0	5.0	5.0	4.0	5.0	5.0	6.0	6.0	6.0		6.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)	15	2227	693	181	2703	841	29	381	426		456	
v/s Ratio Prot	0.01	0.35		c0.09	c0.41		0.01	0.00				
v/s Ratio Perm			0.01			0.05		0.02	c0.06		0.04	
v/c Ratio	1.40	0.80	0.03	0.85	0.78	0.09	0.79	0.06	0.22		0.21	
Uniform Delay, d1	39.1	19.2	12.7	34.9	14.8	9.1	38.7	21.4	22.4		27.8	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	
Incremental Delay, d2	379.3	3.1	0.1	29.8	2.3	0.2	83.5	0.1	0.3		0.2	
Delay (s)	418.5	22.2	12.8	64.7	17.0	9.3	122.2	21.5	22.7		28.1	
Level of Service	F	C	B	E	B	A	F	C	C		C	
Approach Delay (s)		26.5			19.6			31.3			28.1	
Approach LOS		C			B			C			C	

Intersection Summary			
HCM 2000 Control Delay	23.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	79.0	Sum of lost time (s)	21.0
Intersection Capacity Utilization	65.9%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



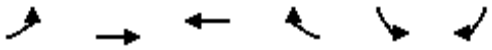
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1482	492	1088	1835	0	0	0	0	425	0	632
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0	4.0	7.0	6.5					6.0		6.0
Lane Util. Factor		0.81	1.00	0.97	0.91					0.97		0.88
Frt		1.00	0.85	1.00	1.00					1.00		0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (prot)		7544	1583	3433	5085					3433		2787
Flt Permitted		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (perm)		7544	1583	3433	5085					3433		2787
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	1560	518	1145	1932	0	0	0	0	447	0	665
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	495
Lane Group Flow (vph)	0	1560	518	1145	1932	0	0	0	0	447	0	170
Turn Type		NA	Free	Prot	NA					Prot		Perm
Protected Phases		6		5	2					3		
Permitted Phases			Free									6
Actuated Green, G (s)		28.1	110.0	35.9	39.5					27.0		28.1
Effective Green, g (s)		28.1	110.0	35.9	39.5					27.0		28.1
Actuated g/C Ratio		0.26	1.00	0.33	0.36					0.25		0.26
Clearance Time (s)		6.0		7.0	6.5					6.0		6.0
Vehicle Extension (s)		3.0		3.0	3.0					3.0		3.0
Lane Grp Cap (vph)		1927	1583	1120	1825					842		711
v/s Ratio Prot		0.21		c0.33	c0.38					c0.13		
v/s Ratio Perm			0.33									0.06
v/c Ratio		0.81	0.33	1.02	1.06					0.53		0.24
Uniform Delay, d1		38.4	0.0	37.0	35.2					36.0		32.5
Progression Factor		1.00	1.00	1.62	0.63					1.00		1.00
Incremental Delay, d2		3.8	0.6	23.6	32.6					0.6		0.8
Delay (s)		42.2	0.6	83.6	55.0					36.7		33.3
Level of Service		D	A	F	D					D		C
Approach Delay (s)		31.8			65.6			0.0			34.6	
Approach LOS		C			E			A			C	

Intersection Summary			
HCM 2000 Control Delay	48.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	88.0%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



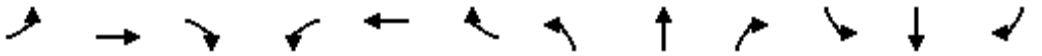
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	798	1109	0	0	2032	682	891	0	1058	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	6.0			6.5	4.0	6.0		6.5			
Lane Util. Factor	0.97	0.91			0.81	1.00	0.97		0.88			
Frt	1.00	1.00			1.00	0.85	1.00		0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (prot)	3433	5085			7544	1583	3433		2787			
Flt Permitted	0.95	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (perm)	3433	5085			7544	1583	3433		2787			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	840	1167	0	0	2139	718	938	0	1114	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	714	0	0	0
Lane Group Flow (vph)	840	1167	0	0	2139	718	938	0	400	0	0	0
Turn Type	Prot	NA			NA	Free	Prot		Perm			
Protected Phases	1	6			2		7					
Permitted Phases						Free			2			
Actuated Green, G (s)	24.0	28.1			39.5	110.0	27.0		39.5			
Effective Green, g (s)	24.0	28.1			39.5	110.0	27.0		39.5			
Actuated g/C Ratio	0.22	0.26			0.36	1.00	0.25		0.36			
Clearance Time (s)	7.0	6.0			6.5		6.0		6.5			
Vehicle Extension (s)	3.0	3.0			3.0		3.0		3.0			
Lane Grp Cap (vph)	749	1298			2708	1583	842		1000			
v/s Ratio Prot	c0.24	c0.23			c0.28		c0.27					
v/s Ratio Perm						0.45			0.14			
v/c Ratio	1.12	0.90			0.79	0.45	1.11		0.40			
Uniform Delay, d1	43.0	39.6			31.5	0.0	41.5		26.4			
Progression Factor	1.22	0.62			1.00	1.00	1.00		1.00			
Incremental Delay, d2	66.4	6.9			2.4	0.9	67.2		1.2			
Delay (s)	119.0	31.4			34.0	0.9	108.7		27.6			
Level of Service	F	C			C	A	F		C			
Approach Delay (s)		68.1			25.7			64.7			0.0	
Approach LOS		E			C			E			A	

Intersection Summary			
HCM 2000 Control Delay	49.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	88.0%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	113	1955	2588	86	0	103
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	8.0	6.5	6.5	4.0		4.0
Lane Util. Factor	1.00	0.91	0.76	1.00		1.00
Frt	1.00	1.00	1.00	0.85		0.86
Flt Protected	0.95	1.00	1.00	1.00		1.00
Satd. Flow (prot)	1770	5085	8494	1583		1611
Flt Permitted	0.95	1.00	1.00	1.00		1.00
Satd. Flow (perm)	1770	5085	8494	1583		1611
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	119	2058	2724	91	0	108
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	119	2058	2724	91	0	108
Turn Type	Prot	NA	NA	Free		Free
Protected Phases	1	6	2			
Permitted Phases				Free		Free
Actuated Green, G (s)	3.2	38.9	21.2	38.9		38.9
Effective Green, g (s)	3.2	38.9	21.2	38.9		38.9
Actuated g/C Ratio	0.08	1.00	0.54	1.00		1.00
Clearance Time (s)	8.0	6.5	6.5			
Vehicle Extension (s)	3.0	3.0	3.0			
Lane Grp Cap (vph)	145	5085	4629	1583		1611
v/s Ratio Prot	0.07	c0.40	c0.32			
v/s Ratio Perm				0.06		0.07
v/c Ratio	0.82	0.40	0.59	0.06		0.07
Uniform Delay, d1	17.6	0.0	5.9	0.0		0.0
Progression Factor	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	29.6	0.1	0.2	0.1		0.1
Delay (s)	47.2	0.1	6.1	0.1		0.1
Level of Service	D	A	A	A		A
Approach Delay (s)		2.6	5.9		0.1	
Approach LOS		A	A		A	

Intersection Summary			
HCM 2000 Control Delay	4.4	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	38.9	Sum of lost time (s)	14.5
Intersection Capacity Utilization	43.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

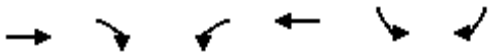


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	134	1561	260	105	2207	124	337	1	108	42	1	130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.5	7.5	7.0	7.5		6.0	6.5	6.5	6.0	6.5	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91		0.97	0.95	0.95	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.85	0.85	1.00	0.85	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1583	3433	5045		3433	1509	1504	1770	1585	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1583	3433	5045		3433	1509	1504	1770	1585	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	141	1643	274	111	2323	131	355	1	114	44	1	137
RTOR Reduction (vph)	0	0	127	0	4	0	0	49	49	0	102	0
Lane Group Flow (vph)	141	1643	147	111	2450	0	355	9	8	44	36	0
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6						4			
Actuated Green, G (s)	10.0	66.2	66.2	7.8	64.0		13.0	16.6	16.6	6.2	9.8	
Effective Green, g (s)	10.0	66.2	66.2	7.8	64.0		13.0	16.6	16.6	6.2	9.8	
Actuated g/C Ratio	0.08	0.53	0.53	0.06	0.52		0.11	0.13	0.13	0.05	0.08	
Clearance Time (s)	7.0	7.5	7.5	7.0	7.5		6.0	6.5	6.5	6.0	6.5	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	142	2719	846	216	2608		360	202	201	88	125	
v/s Ratio Prot	c0.08	0.32		0.03	c0.49		c0.10	0.01		0.02	c0.02	
v/s Ratio Perm			0.09						0.01			
v/c Ratio	0.99	0.60	0.17	0.51	0.94		0.99	0.04	0.04	0.50	0.29	
Uniform Delay, d1	56.9	19.8	14.8	56.2	28.1		55.3	46.7	46.7	57.3	53.7	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	73.1	1.0	0.4	2.1	8.2		43.3	0.1	0.1	4.4	1.3	
Delay (s)	130.0	20.8	15.2	58.2	36.3		98.6	46.8	46.7	61.7	55.0	
Level of Service	F	C	B	E	D		F	D	D	E	D	
Approach Delay (s)		27.5			37.2			85.9			56.6	
Approach LOS		C			D			F			E	

Intersection Summary			
HCM 2000 Control Delay	38.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	123.8	Sum of lost time (s)	27.0
Intersection Capacity Utilization	93.0%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

No Build Alternative 2020 PM

6: West Ramps & Northlake Blvd Corridor: Northlake Boulevard



Lane Group	EBT	EBR	WBL	WBT	SBL	SBR
Lane Group Flow (vph)	1560	518	1145	1932	447	665
v/c Ratio	0.81	0.33	1.02	1.06	0.53	0.55
Control Delay	42.4	0.6	81.1	56.3	38.7	4.4
Queue Delay	0.0	0.0	0.0	0.9	0.0	0.0
Total Delay	42.4	0.6	81.1	57.2	38.7	4.4
Queue Length 50th (ft)	256	0	~460	~552	141	0
Queue Length 95th (ft)	294	0	m#527	m#564	192	48
Internal Link Dist (ft)	533			458		
Turn Bay Length (ft)						
Base Capacity (vph)	1927	1583	1120	1825	842	1207
Starvation Cap Reductn	0	0	0	4	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.81	0.33	1.02	1.06	0.53	0.55

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

No Build Alternative 2020 PM

9: East Ramps & Northlake Blvd Corridor: Northlake Boulevard

Lane Group	EBL	EBT	WBT	WBR	NBL	NBR
Lane Group Flow (vph)	840	1167	2139	718	938	1114
v/c Ratio	1.12	0.90	0.79	0.45	1.11	0.65
Control Delay	113.9	32.1	34.2	0.9	106.4	3.5
Queue Delay	0.0	0.0	2.1	0.0	0.4	0.0
Total Delay	113.9	32.1	36.3	0.9	106.8	3.5
Queue Length 50th (ft)	~367	104	329	0	~392	0
Queue Length 95th (ft)	#494	#171	370	0	#517	46
Internal Link Dist (ft)		458	348			
Turn Bay Length (ft)				400		
Base Capacity (vph)	749	1298	2708	1583	842	1714
Starvation Cap Reductn	0	0	408	0	0	0
Spillback Cap Reductn	0	0	272	0	57	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.12	0.90	0.93	0.45	1.19	0.65

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

PGA BOULEVARD CORRIDOR

Arterial Level of Service: EB PGA Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
FL Turnpike	II	45	16.8	48.4	65.2	0.15	8.5	F
Central Blvd	II	45	36.7	35.5	72.2	0.39	19.5	D
N Military Trail	II	45	81.7	101.8	183.5	1.02	20.0	D
West Ramps	II	45	20.5	16.8	37.3	0.19	18.2	D
East Ramps	II	45	6.3	39.6	45.9	0.06	4.6	F
Lake Victoria Garden	II	45	56.6	19.6	76.2	0.71	33.4	B
Total	II		218.6	261.7	480.3	2.52	18.9	D

Arterial Level of Service: WB PGA Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Lake Victoria Garden	II	45	13.7	142.1	155.8	0.13	2.9	F
East Ramps	II	45	56.6	12.3	68.9	0.71	36.9	A
West Ramps	II	45	6.3	30.4	36.7	0.06	5.7	F
N Military Trail	II	45	20.5	41.0	61.5	0.19	11.0	F
Central Blvd	II	45	25.0	56.8	81.8	0.24	10.6	F
FL Turnpike	II	45	36.7	109.7	146.4	0.39	9.6	F
Total	II		158.8	392.3	551.1	1.71	11.2	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	173	1015	681	503	702	969	753	725	516	913	642	158
Future Volume (veh/h)	173	1015	681	503	702	969	753	725	516	913	642	158
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	182	1068	0	529	739	0	793	763	0	961	676	166
Adj No. of Lanes	2	3	1	2	3	1	2	3	1	2	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	172	1042	325	516	1587	494	873	847	264	848	828	258
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.05	0.20	0.00	0.15	0.31	0.00	0.25	0.17	0.00	0.25	0.16	0.16
Ln Grp Delay, s/veh	151.2	90.0	0.0	105.5	39.7	0.0	60.7	69.1	0.0	127.2	63.0	60.2
Ln Grp LOS	F	F		F	D		E	E		F	E	E
Approach Vol, veh/h		1250			1268			1556			1803	
Approach Delay, s/veh		98.9			67.2			64.8			96.9	
Approach LOS		F			E			E			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	15.0	51.2	43.0	30.8	30.0	36.2	43.5	30.3
Change Period (Y+Rc), s	8.0	7.5	8.5	7.5	9.0	7.5	8.0	7.5
Max Green (Gmax), s	7.0	42.5	34.5	24.5	21.0	27.5	43.0	16.5
Max Allow Headway (MAH), s	3.7	4.9	3.7	4.8	3.7	4.9	3.7	4.8
Max Q Clear (g_c+I1), s	9.0	18.4	36.5	22.6	23.0	30.7	33.3	20.0
Green Ext Time (g_e), s	0.0	13.1	0.0	0.7	0.0	0.0	2.2	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	1.00	1.00	0.00	0.13	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3442		3442		3442		3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		5085		5085		5085		5085

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		1583		1583		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	2	0	2	0
Grp Vol (v), veh/h	182	0	961	0	529	0	793	0
Grp Sat Flow (s), veh/h/ln	1721	0	1721	0	1721	0	1721	0
Q Serve Time (g_s), s	7.0	0.0	34.5	0.0	21.0	0.0	31.3	0.0
Cycle Q Clear Time (g_c), s	7.0	0.0	34.5	0.0	21.0	0.0	31.3	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	172	0	848	0	516	0	873	0
V/C Ratio (X)	1.06	0.00	1.13	0.00	1.02	0.00	0.91	0.00
Avail Cap (c_a), veh/h	172	0	848	0	516	0	1057	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	66.5	0.0	52.8	0.0	59.5	0.0	50.7	0.0
Incr Delay (d2), s/veh	84.7	0.0	74.4	0.0	46.0	0.0	10.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	151.2	0.0	127.2	0.0	105.5	0.0	60.7	0.0
1st-Term Q (Q1), veh/ln	3.3	0.0	16.4	0.0	10.0	0.0	14.9	0.0
2nd-Term Q (Q2), veh/ln	2.0	0.0	8.8	0.0	3.3	0.0	1.2	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	1.80	0.00	1.80	0.00	1.41	0.00
%ile Back of Q (95%), veh/ln	9.6	0.0	45.3	0.0	23.9	0.0	22.7	0.0
%ile Storage Ratio (RQ%)	0.53	0.00	2.54	0.00	1.21	0.00	1.31	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	2.5	0.0	28.2	0.0	3.2	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.3	0.0	0.3	0.0	0.3	0.0	0.0	0.0

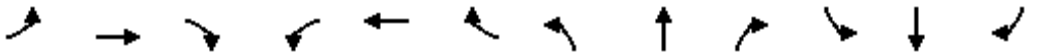
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	3	0	3	0	3
Grp Vol (v), veh/h	0	739	0	763	0	1068	0	676
Grp Sat Flow (s), veh/h/ln	0	1695	0	1695	0	1695	0	1695
Q Serve Time (g_s), s	0.0	16.4	0.0	20.6	0.0	28.7	0.0	18.0
Cycle Q Clear Time (g_c), s	0.0	16.4	0.0	20.6	0.0	28.7	0.0	18.0
Lane Grp Cap (c), veh/h	0	1587	0	847	0	1042	0	828
V/C Ratio (X)	0.00	0.47	0.00	0.90	0.00	1.02	0.00	0.82
Avail Cap (c_a), veh/h	0	1587	0	890	0	1042	0	828
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	38.8	0.0	57.2	0.0	55.7	0.0	56.6
Incr Delay (d2), s/veh	0.0	1.0	0.0	11.9	0.0	34.3	0.0	6.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	39.7	0.0	69.1	0.0	90.0	0.0	63.0
1st-Term Q (Q1), veh/ln	0.0	7.7	0.0	9.7	0.0	13.4	0.0	8.5

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.9	0.0	3.3	0.0	0.5
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.59	0.00	1.50	0.00	1.80	0.00	1.55
%ile Back of Q (95%), veh/ln	0.0	12.4	0.0	16.0	0.0	30.1	0.0	13.8
%ile Storage Ratio (RQ%)	0.00	0.77	0.00	0.54	0.00	0.72	0.00	0.41
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	6.4	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	0	0	0	0	166
Grp Sat Flow (s), veh/h/ln	0	1583	0	1583	0	1583	0	1583
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.7
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.7
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	494	0	264	0	325	0	258
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.64
Avail Cap (c_a), veh/h	0	494	0	277	0	325	0	258
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	54.8
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.2
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.65
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.5
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.59
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	82.4
HCM 2010 LOS	F

No Build Alternative 2020 PM

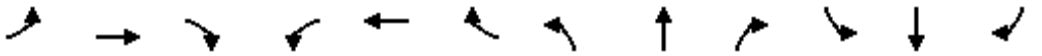
3: FL Turnpike & PGA Blvd Corridor: PGA Boulevard



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	98	629	46	269	1331	657	65	230	695	660	55	102
Future Volume (vph)	98	629	46	269	1331	657	65	230	695	660	55	102
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.5		7.5	8.0	8.0	7.5	7.5	7.5	7.5	7.5	4.0
Lane Util. Factor	0.97	0.91		0.97	0.95	0.88	1.00	0.95	0.95	0.91	0.91	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	0.92	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.96	1.00
Satd. Flow (prot)	3433	5034		3433	3539	2787	1770	1631	1504	3221	1632	1583
Flt Permitted	0.10	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.07	1.00
Satd. Flow (perm)	360	5034		3433	3539	2787	1770	1631	1504	3221	124	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	103	662	48	283	1401	692	68	242	732	695	58	107
RTOR Reduction (vph)	0	5	0	0	0	403	0	26	183	0	0	0
Lane Group Flow (vph)	103	705	0	283	1401	289	68	480	285	500	253	107
Turn Type	pm+pt	NA		Prot	NA	Perm	Prot	NA	Prot	Prot	NA	Free
Protected Phases	7	4		3	8		5	2	2	1	6	
Permitted Phases	4					8						Free
Actuated Green, G (s)	44.1	40.1		16.9	53.0	53.0	9.0	41.0	41.0	23.5	72.0	151.5
Effective Green, g (s)	44.1	40.1		16.9	53.0	53.0	9.0	41.0	41.0	23.5	72.0	151.5
Actuated g/C Ratio	0.29	0.26		0.11	0.35	0.35	0.06	0.27	0.27	0.16	0.48	1.00
Clearance Time (s)	7.0	7.5		7.5	8.0	8.0	7.5	7.5	7.5	7.5	7.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	185	1332		382	1238	974	105	441	407	499	292	1583
v/s Ratio Prot	0.01	0.14		c0.08	c0.40		0.04	c0.29	0.19	c0.16	0.13	
v/s Ratio Perm	0.15					0.10					0.28	0.07
v/c Ratio	0.56	0.53		0.74	1.13	0.30	0.65	1.09	0.70	1.00	0.87	0.07
Uniform Delay, d1	43.7	47.6		65.2	49.2	35.7	69.7	55.2	49.7	64.0	35.5	0.0
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.6	0.4		7.5	69.8	0.2	12.9	68.6	9.6	40.8	22.6	0.1
Delay (s)	47.3	48.0		72.7	119.1	35.9	82.6	123.9	59.4	104.8	58.0	0.1
Level of Service	D	D		E	F	D	F	F	E	F	E	A
Approach Delay (s)		47.9			89.3			92.2			78.0	
Approach LOS		D			F			F			E	

Intersection Summary			
HCM 2000 Control Delay	81.4	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.11		
Actuated Cycle Length (s)	151.5	Sum of lost time (s)	30.0
Intersection Capacity Utilization	104.6%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	960	804	22	220	1230	975	43	48	155	213	27	764
Future Volume (vph)	960	804	22	220	1230	975	43	48	155	213	27	764
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.5	8.5		7.0	8.0	8.0		8.5	8.5	8.5	8.5	7.5
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00		1.00	1.00	0.95	0.95	1.00
Frt	1.00	1.00		1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.98	1.00	0.95	0.96	1.00
Satd. Flow (prot)	3433	5065		1770	5085	1583		1820	1583	1681	1703	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.98	1.00	0.95	0.96	1.00
Satd. Flow (perm)	3433	5065		1770	5085	1583		1820	1583	1681	1703	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1011	846	23	232	1295	1026	45	51	163	224	28	804
RTOR Reduction (vph)	0	2	0	0	0	375	0	0	155	0	0	62
Lane Group Flow (vph)	1011	867	0	232	1295	651	0	96	8	125	127	742
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	pm+ov
Protected Phases	1	6		5	2		4	4		3	3	1
Permitted Phases						2			4			3
Actuated Green, G (s)	33.5	51.1		22.4	40.0	40.0		6.5	6.5	27.5	27.5	61.0
Effective Green, g (s)	33.5	51.1		22.4	40.0	40.0		6.5	6.5	27.5	27.5	61.0
Actuated g/C Ratio	0.24	0.37		0.16	0.29	0.29		0.05	0.05	0.20	0.20	0.44
Clearance Time (s)	7.5	8.5		7.0	8.0	8.0		8.5	8.5	8.5	8.5	7.5
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	821	1848		283	1452	452		84	73	330	334	689
v/s Ratio Prot	c0.29	0.17		0.13	0.25			c0.05		0.07	0.07	c0.26
v/s Ratio Perm						c0.41			0.00			0.21
v/c Ratio	1.23	0.47		0.82	0.89	1.44		1.14	0.10	0.38	0.38	1.08
Uniform Delay, d1	53.2	34.1		56.8	47.9	50.0		66.8	64.0	48.8	48.8	39.5
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	114.7	0.9		16.7	8.7	210.4		141.9	0.6	3.3	3.3	57.1
Delay (s)	168.0	34.9		73.5	56.6	260.4		208.7	64.6	52.1	52.1	96.6
Level of Service	F	C		E	E	F		F	E	D	D	F
Approach Delay (s)		106.5			140.0			118.0			86.0	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM 2000 Control Delay	118.1	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.26		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	32.5
Intersection Capacity Utilization	112.7%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	0	0	0	134	0	133	0	1022	1574	0	1992	0
Future Volume (vph)	0	0	0	134	0	133	0	1022	1574	0	1992	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0		6.0		6.0	4.0		6.0	
Lane Util. Factor				0.97		0.88		0.91	1.00		0.86	
Frt				1.00		0.85		1.00	0.85		1.00	
Flt Protected				0.95		1.00		1.00	1.00		1.00	
Satd. Flow (prot)				3433		2787		5085	1583		6408	
Flt Permitted				0.95		1.00		1.00	1.00		1.00	
Satd. Flow (perm)				3433		2787		5085	1583		6408	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	141	0	140	0	1076	1657	0	2097	0
RTOR Reduction (vph)	0	0	0	0	0	131	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	141	0	9	0	1076	1657	0	2097	0
Turn Type				Prot		Prot		NA	Free		NA	
Protected Phases				3		3		6			2	
Permitted Phases									Free			
Actuated Green, G (s)				4.0		4.0		22.0	60.0		22.0	
Effective Green, g (s)				4.0		4.0		22.0	60.0		22.0	
Actuated g/C Ratio				0.07		0.07		0.37	1.00		0.37	
Clearance Time (s)				6.0		6.0		6.0			6.0	
Vehicle Extension (s)				3.0		3.0		3.0			3.0	
Lane Grp Cap (vph)				228		185		1864	1583		2349	
v/s Ratio Prot				0.04		0.00		0.21			0.33	
v/s Ratio Perm									c1.05			
v/c Ratio				0.62		0.05		0.58	1.05		0.89	
Uniform Delay, d1				27.3		26.2		15.3	30.0		17.9	
Progression Factor				1.00		1.00		1.00	1.00		1.34	
Incremental Delay, d2				4.9		0.1		1.3	35.9		5.6	
Delay (s)				32.2		26.3		16.6	65.9		29.7	
Level of Service				C		C		B	E		C	
Approach Delay (s)		0.0			29.3			46.5			29.7	
Approach LOS		A			C			D			C	

Intersection Summary			
HCM 2000 Control Delay	38.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.50		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	61.7%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	NBL	NBR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	0	1258	1156	0	0	1076
Future Volume (vph)	0	1258	1156	0	0	1076
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0	6.0			6.0
Lane Util. Factor		0.76	0.91			0.86
Frt		0.85	1.00			1.00
Flt Protected		1.00	1.00			1.00
Satd. Flow (prot)		3610	5085			6408
Flt Permitted		1.00	1.00			1.00
Satd. Flow (perm)		3610	5085			6408
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	1324	1217	0	0	1133
RTOR Reduction (vph)	0	317	0	0	0	0
Lane Group Flow (vph)	0	1007	1217	0	0	1133
Turn Type		Perm	NA			NA
Protected Phases			4			
Permitted Phases		2				8
Actuated Green, G (s)		22.0	16.0			26.0
Effective Green, g (s)		22.0	16.0			26.0
Actuated g/C Ratio		0.37	0.27			0.43
Clearance Time (s)		6.0	6.0			6.0
Vehicle Extension (s)		3.0	3.0			3.0
Lane Grp Cap (vph)		1323	1356			2776
v/s Ratio Prot			c0.24			
v/s Ratio Perm		c0.28				c0.18
v/c Ratio		0.76	0.90			0.41
Uniform Delay, d1		16.7	21.2			11.7
Progression Factor		1.00	1.44			1.00
Incremental Delay, d2		4.2	6.8			0.1
Delay (s)		20.9	37.3			11.8
Level of Service		C	D			B
Approach Delay (s)	20.9		37.3			11.8
Approach LOS	C		D			B

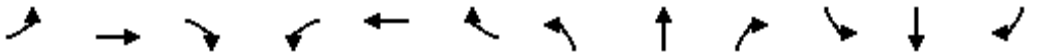
Intersection Summary			
HCM 2000 Control Delay	23.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	61.7%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	606	1708	450	0	2354	0	300	0	129	0	0	47
Future Volume (vph)	606	1708	450	0	2354	0	300	0	129	0	0	47
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0		6.0		6.0	6.0	6.0			7.0
Lane Util. Factor	0.97	0.91	1.00		0.91		0.91	0.86	0.95			1.00
Frt	1.00	1.00	0.85		1.00		1.00	0.96	0.85			0.86
Flt Protected	0.95	1.00	1.00		1.00		0.95	0.96	1.00			1.00
Satd. Flow (prot)	3433	5085	1583		5085		3221	1482	1504			1611
Flt Permitted	0.95	1.00	1.00		1.00		0.95	0.96	1.00			1.00
Satd. Flow (perm)	3433	5085	1583		5085		3221	1482	1504			1611
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	638	1798	474	0	2478	0	316	0	136	0	0	49
RTOR Reduction (vph)	0	0	190	0	0	0	0	77	44	0	0	41
Lane Group Flow (vph)	638	1798	284	0	2478	0	234	36	61	0	0	8
Turn Type	Prot	NA	Perm		NA		Prot	NA	Perm			Perm
Protected Phases	7	4			8		5	2				
Permitted Phases			4						2			6
Actuated Green, G (s)	24.0	90.0	90.0		60.0		16.2	48.0	48.0			24.8
Effective Green, g (s)	24.0	90.0	90.0		60.0		16.2	48.0	48.0			24.8
Actuated g/C Ratio	0.16	0.60	0.60		0.40		0.11	0.32	0.32			0.17
Clearance Time (s)	6.0	6.0	6.0		6.0		6.0	6.0	6.0			7.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0	3.0			3.0
Lane Grp Cap (vph)	549	3051	949		2034		347	474	481			266
v/s Ratio Prot	c0.19	0.35			c0.49		c0.07	0.01				
v/s Ratio Perm			0.18					0.02	c0.04			0.01
v/c Ratio	1.16	0.59	0.30		1.22		0.67	0.08	0.13			0.03
Uniform Delay, d1	63.0	18.6	14.6		45.0		64.4	35.5	36.1			52.5
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00	1.00			1.00
Incremental Delay, d2	91.7	0.3	0.2		102.9		5.1	0.1	0.5			0.2
Delay (s)	154.7	18.9	14.8		147.9		69.5	35.6	36.7			52.7
Level of Service	F	B	B		F		E	D	D			D
Approach Delay (s)		48.0			147.9			53.4			52.7	
Approach LOS		D			F			D			D	

Intersection Summary			
HCM 2000 Control Delay	90.5	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	25.0
Intersection Capacity Utilization	84.2%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	17	236	0	359	0	0	47	230
Future Volume (vph)	0	0	0	0	17	236	0	359	0	0	47	230
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					6.0	6.0		6.0			7.0	7.0
Lane Util. Factor					1.00	1.00		0.95			1.00	1.00
Frt					1.00	0.85		1.00			1.00	0.85
Flt Protected					1.00	1.00		1.00			1.00	1.00
Satd. Flow (prot)					1863	1583		3539			1863	1583
Flt Permitted					1.00	1.00		1.00			1.00	1.00
Satd. Flow (perm)					1863	1583		3539			1863	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	0	18	248	0	378	0	0	49	242
RTOR Reduction (vph)	0	0	0	0	0	149	0	0	0	0	0	202
Lane Group Flow (vph)	0	0	0	0	18	99	0	378	0	0	49	40
Turn Type					NA	Perm		NA			NA	Perm
Protected Phases					8			7			6	
Permitted Phases						8						6
Actuated Green, G (s)					60.0	60.0		24.0			24.8	24.8
Effective Green, g (s)					60.0	60.0		24.0			24.8	24.8
Actuated g/C Ratio					0.40	0.40		0.16			0.17	0.17
Clearance Time (s)					6.0	6.0		6.0			7.0	7.0
Vehicle Extension (s)					3.0	3.0		3.0			3.0	3.0
Lane Grp Cap (vph)					745	633		566			308	261
v/s Ratio Prot					0.01			c0.11			c0.03	
v/s Ratio Perm						c0.06						0.03
v/c Ratio					0.02	0.16		0.67			0.16	0.15
Uniform Delay, d1					27.3	28.8		59.3			53.7	53.6
Progression Factor					1.00	1.00		0.15			1.00	1.00
Incremental Delay, d2					0.0	0.1		0.3			1.1	1.2
Delay (s)					27.3	28.9		9.2			54.8	54.9
Level of Service					C	C		A			D	D
Approach Delay (s)		0.0			28.8			9.2			54.8	
Approach LOS		A			C			A			D	

Intersection Summary			
HCM 2000 Control Delay	29.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.23		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	25.0
Intersection Capacity Utilization	34.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	SBL	SBR	NET	NER	SWT
Lane Group Flow (vph)	141	140	1076	1657	2097
v/c Ratio	0.62	0.41	0.58	1.05	0.89
Control Delay	40.9	8.2	16.8	41.4	30.4
Queue Delay	0.0	0.0	0.0	0.0	2.7
Total Delay	40.9	8.2	16.8	41.4	33.1
Queue Length 50th (ft)	26	0	110	~58	235
Queue Length 95th (ft)	#59	19	149	#292	#290
Internal Link Dist (ft)			215		227
Turn Bay Length (ft)					
Base Capacity (vph)	228	338	1864	1583	2349
Starvation Cap Reductn	0	0	0	0	161
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.62	0.41	0.58	1.05	0.96

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

No Build Alternative 2020 PM

30: PGA Blvd & East Ramps Corridor: PGA Boulevard

Lane Group	NBR	NET	SWT
Lane Group Flow (vph)	1324	1217	1133
v/c Ratio	0.81	0.90	0.41
Control Delay	15.2	39.6	12.3
Queue Delay	0.0	0.0	0.0
Total Delay	15.2	39.6	12.3
Queue Length 50th (ft)	112	185	77
Queue Length 95th (ft)	178	#250	101
Internal Link Dist (ft)		227	250
Turn Bay Length (ft)			
Base Capacity (vph)	1640	1356	2776
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.81	0.90	0.41

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (veh/h)	0	454	2034	476	59	1542
Future Volume (Veh/h)	0	454	2034	476	59	1542
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	0	478	2141	501	62	1623
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			1299			
pX, platoon unblocked	0.93	0.93			0.93	
vC, conflicting volume	3056	786			2642	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2832	388			2386	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	16			67	
cM capacity (veh/h)	9	567			185	

Direction, Lane #	NW 1	NE 1	NE 2	NE 3	NE 4	SW 1	SW 2	SW 3	SW 4
Volume Total	478	612	612	612	807	62	541	541	541
Volume Left	0	0	0	0	0	62	0	0	0
Volume Right	478	0	0	0	501	0	0	0	0
cSH	567	1700	1700	1700	1700	185	1700	1700	1700
Volume to Capacity	0.84	0.36	0.36	0.36	0.47	0.33	0.32	0.32	0.32
Queue Length 95th (ft)	223	0	0	0	0	35	0	0	0
Control Delay (s)	36.4	0.0	0.0	0.0	0.0	33.9	0.0	0.0	0.0
Lane LOS	E					D			
Approach Delay (s)	36.4	0.0				1.2			
Approach LOS	E								

Intersection Summary			
Average Delay	4.1		
Intersection Capacity Utilization	72.2%	ICU Level of Service	C
Analysis Period (min)	15		

Lane Group	SBL	SBR	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	0	0	154	2260	1076	0
Future Volume (vph)	0	0	154	2260	1076	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	500			0
Storage Lanes	0	0	1			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.86	0.91	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	6408	5085	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	6408	5085	0
Link Speed (mph)	45			45	45	
Link Distance (ft)	247			189	328	
Travel Time (s)	3.7			2.9	5.0	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	162	2379	1133	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	162	2379	1133	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Free			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	84.2%	ICU Level of Service	E
Analysis Period (min)	15		

APPENDIX J

SYNCHRO REPORTS

NO BUILD 2030 AM

CENTRAL BOULEVARD CORRIDOR

Arterial Level of Service: NB Central Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
PGA Blvd	II	45	11.9	133.2	145.1	0.11	2.7	F
117th Ct	II	45	61.9	12.8	74.7	0.77	37.3	A
Hood Rd	II	45	101.7	33.3	135.0	1.27	33.9	B
Donald Ross	II	45	100.8	60.7	161.5	1.26	28.1	B
Total	II		276.3	240.0	516.3	3.41	23.8	C

Arterial Level of Service: SB Central Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Donald Ross	II	45	22.2	54.5	76.7	0.20	9.6	F
Hood Rd	II	45	100.8	30.5	131.3	1.26	34.5	B
117th Ct	II	45	101.7	8.1	109.8	1.27	41.6	A
PGA Blvd	II	45	61.9	120.9	182.8	0.77	15.2	E
Total	II		286.6	214.0	500.6	3.51	25.2	C

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	273	146	842	238	58	950
Number	3	18	2	12	1	6
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	287	154	886	251	61	1000
Adj No. of Lanes	1	1	2	1	1	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	348	311	2101	940	380	2407
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.20	0.20	0.59	0.59	0.04	0.68
Ln Grp Delay, s/veh	36.1	30.2	9.5	8.6	6.4	6.3
Ln Grp LOS	D	C	A	A	A	A
Approach Vol, veh/h	441		1137			1061
Approach Delay, s/veh	34.0		9.3			6.3
Approach LOS	C		A			A

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	8			6		
Case No	1.2	7.0	9.0			4.0		
Phs Duration (G+Y+Rc), s	7.0	53.0	20.9			60.0		
Change Period (Y+Rc), s	4.0	5.0	5.0			5.0		
Max Green (Gmax), s	6.0	45.0	60.0			55.0		
Max Allow Headway (MAH), s	3.7	4.8	3.8			4.8		
Max Q Clear (g_c+I1), s	3.0	13.0	14.5			12.2		
Green Ext Time (g_e), s	0.0	17.6	1.3			20.3		
Prob of Phs Call (p_c)	0.75	1.00	1.00			1.00		
Prob of Max Out (p_x)	1.00	0.00	0.00			0.00		

Left-Turn Movement Data								
Assigned Mvmt	1	5	3					
Mvmt Sat Flow, veh/h	1774	0	1774					

Through Movement Data								
Assigned Mvmt		2	8			6		
Mvmt Sat Flow, veh/h		3632	0			3632		

Right-Turn Movement Data								
Assigned Mvmt		12	18			16		
Mvmt Sat Flow, veh/h		1583	1583			0		

Left Lane Group Data								
Assigned Mvmt	1	5	3	0	0	0	0	0
Lane Assignment	(Pr/Pm)							
Lanes in Grp	1	0	1	0	0	0	0	0

Grp Vol (v), veh/h	61	0	287	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1774	0	1774	0	0	0	0	0
Q Serve Time (g_s), s	1.0	0.0	12.5	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	1.0	0.0	12.5	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	493	0	1774	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	37.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	48.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	380	0	348	0	0	0	0	0
V/C Ratio (X)	0.16	0.00	0.82	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	446	0	1316	0	0	0	0	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	6.2	0.0	31.2	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.0	4.9	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	6.4	0.0	36.1	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.5	0.0	6.1	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	1.00	1.64	0.00	0.00	0.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.9	0.0	10.8	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.06	0.00	0.57	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	0	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	886	0	0	0	1000	0	0
Grp Sat Flow (s), veh/h/ln	0	1770	0	0	0	1770	0	0
Q Serve Time (g_s), s	0.0	11.0	0.0	0.0	0.0	10.2	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	11.0	0.0	0.0	0.0	10.2	0.0	0.0
Lane Grp Cap (c), veh/h	0	2101	0	0	0	2407	0	0
V/C Ratio (X)	0.00	0.42	0.00	0.00	0.00	0.42	0.00	0.00
Avail Cap (c_a), veh/h	0	2101	0	0	0	2407	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	8.9	0.0	0.0	0.0	5.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.6	0.0	0.0	0.0	0.5	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	9.5	0.0	0.0	0.0	6.3	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	5.3	0.0	0.0	0.0	4.9	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.0	0.0	0.2	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.70	1.00	0.00	0.00	1.73	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	9.3	0.0	0.0	0.0	8.7	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.41	0.00	0.00	0.00	0.44	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	18	0	0	16	0	0
Lane Assignment		R	R					
Lanes in Grp	0	1	1	0	0	0	0	0
Grp Vol (v), veh/h	0	251	154	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1583	1583	0	0	0	0	0
Q Serve Time (g_s), s	0.0	6.2	7.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	6.2	7.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	940	311	0	0	0	0	0
V/C Ratio (X)	0.00	0.27	0.50	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	940	1174	0	0	0	0	0
Upstream Filter (I)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	7.9	28.9	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.7	1.2	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	8.6	30.2	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	2.6	3.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.1	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	1.80	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	5.1	5.7	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.34	0.51	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		12.2						
HCM 2010 LOS		B						

Intersection	
Int Delay, s/veh	554.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	100	13	10	58	12	408	21	852	68	192	940	36
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	0	-	336	280	-	-	350	-	350
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	105	14	11	61	13	429	22	897	72	202	989	38

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1893	2407	495	1883	2371	484	989	0	0	968	0	0
Stage 1	1394	1394	-	977	977	-	-	-	-	-	-	-
Stage 2	499	1013	-	906	1394	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	~ 43	33	520	~ 43	34	529	695	-	-	707	-	-
Stage 1	149	207	-	269	327	-	-	-	-	-	-	-
Stage 2	522	315	-	297	207	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 4	23	520	~ 17	24	529	695	-	-	707	-	-
Mov Cap-2 Maneuver	~ 4	23	-	~ 17	24	-	-	-	-	-	-	-
Stage 1	144	148	-	260	317	-	-	-	-	-	-	-
Stage 2	~ 91	305	-	189	148	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	$ 10740.5	$ 376.3	0.2	2
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	695	-	-	4	39	17	330	707	-	-
HCM Lane V/C Ratio	0.032	-	-	26.316	0.621	3.591	1.34	0.286	-	-
HCM Control Delay (s)	10.3	-	$	13166.3	193.8	$ 1625.8	203.8	12.1	-	-
HCM Lane LOS	B	-	-	F	F	F	F	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	15.2	2.2	8.3	21.7	1.2	-	-

Notes
~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

DONALD ROSS CORRIDOR

Arterial Level of Service: EB Donald Ross

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
West Ramp	II	45	46.0	28.2	74.2	0.52	25.3	C
East Ramp	II	45	15.7	58.8	74.5	0.14	6.9	F
Parkside Dr	II	45	42.7	46.1	88.8	0.53	21.7	D
Central Blvd	II	45	52.1	117.9	170.0	0.65	13.8	E
Military Trail	II	45	32.9	53.0	85.9	0.34	14.4	E
Total	II		189.4	304.0	493.4	2.19	16.0	E

Arterial Level of Service: WB Donald Ross

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Military Trail	II	45	21.4	66.9	88.3	0.20	8.0	F
Central Blvd	II	45	32.9	41.1	74.0	0.34	16.7	E
Parkside Dr	II	45	52.1	38.7	90.8	0.65	25.8	C
East Ramp	II	45	42.7	9.5	52.2	0.53	36.8	A
West Ramp	II	45	15.7	37.8	53.5	0.14	9.7	F
Total	II		164.8	194.0	358.8	1.87	18.7	D

HCM 2010 methodology does not support clustered intersections.

HCM 2010 methodology does not support clustered intersections.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	701	1518	675	449	794	56	363	99	509	75	156	724
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	738	1598	711	473	836	59	382	104	536	79	164	762
Adj No. of Lanes	2	3	1	2	3	1	2	1	1	1	1	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	698	1592	568	441	995	512	441	389	652	286	326	844
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.20	0.31	0.31	0.13	0.20	0.20	0.13	0.21	0.21	0.05	0.17	0.17
Ln Grp Delay, s/veh	87.8	55.7	157.1	104.9	42.4	22.4	56.6	31.4	32.9	30.3	36.2	44.3
Ln Grp LOS	F	F	F	F	D	C	E	C	C	C	D	D
Approach Vol, veh/h		3047			1368			1022			1005	
Approach Delay, s/veh		87.2			63.1			41.6			41.9	
Approach LOS		F			E			D			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	1.1	3.0
Phs Duration (G+Y+Rc), s	27.0	26.8	16.0	23.9	16.0	37.8	12.8	27.1
Change Period (Y+Rc), s	8.0	* 8.5	4.0	* 7.5	4.0	8.5	8.5	7.5
Max Green (Gmax), s	19.0	* 19	12.0	* 16	12.0	29.1	4.3	16.1
Max Allow Headway (MAH), s	3.7	4.7	3.7	4.1	3.7	4.7	3.7	4.1
Max Q Clear (g_c+I1), s	21.0	16.8	12.2	18.4	14.0	31.3	5.4	21.6
Green Ext Time (g_e), s	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	0.87	1.00
Prob of Max Out (p_x)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3442		3442		3442		1774	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		5085		1863		5085		1863

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		2787		1583		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Pr/Pm)	
Lanes in Grp	2	0	2	0	2	0	1	0

Grp Vol (v), veh/h	738	0	382	0	473	0	79	0
Grp Sat Flow (s), veh/h/ln	1721	0	1721	0	1721	0	1774	0
Q Serve Time (g_s), s	19.0	0.0	10.2	0.0	12.0	0.0	3.4	0.0
Cycle Q Clear Time (g_c), s	19.0	0.0	10.2	0.0	12.0	0.0	3.4	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	786	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	16.4	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	15.2	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	698	0	441	0	441	0	286	0
V/C Ratio (X)	1.06	0.00	0.87	0.00	1.07	0.00	0.28	0.00
Avail Cap (c_a), veh/h	698	0	441	0	441	0	286	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	37.4	0.0	40.1	0.0	40.9	0.0	29.8	0.0
Incr Delay (d2), s/veh	50.4	0.0	16.5	0.0	64.0	0.0	0.5	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	87.8	0.0	56.6	0.0	104.9	0.0	30.3	0.0
1st-Term Q (Q1), veh/ln	8.9	0.0	4.8	0.0	5.6	0.0	1.6	0.0
2nd-Term Q (Q2), veh/ln	4.9	0.0	1.0	0.0	3.9	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (-26165%), veh/ln	13.8	0.0	5.8	0.0	9.5	0.0	1.7	0.0
%ile Storage Ratio (RQ%)	0.65	0.00	0.42	0.00	0.78	0.00	0.29	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	10.1	0.0	0.0	0.0	8.1	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.3	0.0	0.0	0.0	0.3	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	1	0	3	0	1
Grp Vol (v), veh/h	0	836	0	164	0	1598	0	104
Grp Sat Flow (s), veh/h/ln	0	1695	0	1863	0	1695	0	1863
Q Serve Time (g_s), s	0.0	14.8	0.0	7.5	0.0	29.3	0.0	4.4
Cycle Q Clear Time (g_c), s	0.0	14.8	0.0	7.5	0.0	29.3	0.0	4.4
Lane Grp Cap (c), veh/h	0	995	0	326	0	1592	0	389
V/C Ratio (X)	0.00	0.84	0.00	0.50	0.00	1.00	0.00	0.27
Avail Cap (c_a), veh/h	0	1036	0	326	0	1592	0	389
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	36.3	0.0	35.0	0.0	32.2	0.0	31.1
Incr Delay (d2), s/veh	0.0	6.1	0.0	1.2	0.0	23.5	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	42.4	0.0	36.2	0.0	55.7	0.0	31.4
1st-Term Q (Q1), veh/ln	0.0	7.0	0.0	3.8	0.0	13.6	0.0	2.3
2nd-Term Q (Q2), veh/ln	0.0	0.6	0.0	0.1	0.0	3.5	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (-26165%), veh/ln	0.0	7.5	0.0	3.9	0.0	17.0	0.0	2.3
%ile Storage Ratio (RQ%)	0.00	0.06	0.00	0.17	0.00	0.16	0.00	0.10
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	2	0	1	0	1
Grp Vol (v), veh/h	0	59	0	762	0	711	0	536
Grp Sat Flow (s), veh/h/ln	0	1583	0	1393	0	1583	0	1583
Q Serve Time (g_s), s	0.0	2.5	0.0	16.4	0.0	29.3	0.0	19.6
Cycle Q Clear Time (g_c), s	0.0	2.5	0.0	16.4	0.0	29.3	0.0	19.6
Prot RT Sat Flow (s_R), veh/h/ln	0.0	1583.3	0.0	1393.3	0.0	1583.3	0.0	1583.3
Prot RT Eff Green (g_R), s	0.0	12.0	0.0	12.0	0.0	4.3	0.0	19.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	512	0	844	0	568	0	652
V/C Ratio (X)	0.00	0.12	0.00	0.90	0.00	1.25	0.00	0.82
Avail Cap (c_a), veh/h	0	525	0	844	0	568	0	652
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	22.3	0.0	31.3	0.0	30.1	0.0	24.5
Incr Delay (d2), s/veh	0.0	0.1	0.0	12.9	0.0	127.1	0.0	8.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	22.4	0.0	44.3	0.0	157.1	0.0	32.9
1st-Term Q (Q1), veh/ln	0.0	1.1	0.0	9.5	0.0	14.7	0.0	12.2
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	1.5	0.0	20.1	0.0	1.5
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (-26165%), veh/ln	0.0	1.1	0.0	11.0	0.0	34.8	0.0	13.7
%ile Storage Ratio (RQ%)	0.00	0.06	0.00	0.93	0.00	1.77	0.00	0.78
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	35.7	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	67.8
HCM 2010 LOS	E

Notes

User approved ignoring U-Turning movement.

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	483	1314	538	167	712	222	251	619	79	257	577	227
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	508	1383	566	176	749	234	264	652	83	271	607	239
Adj No. of Lanes	2	3	1	2	3	1	2	2	1	2	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	332	1227	382	166	982	306	361	705	315	368	734	328
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.10	0.24	0.24	0.05	0.19	0.19	0.10	0.20	0.20	0.11	0.21	0.21
Ln Grp Delay, s/veh	290.1	99.4	261.5	125.9	37.2	48.2	38.8	50.7	28.5	38.8	39.2	38.6
Ln Grp LOS	F	F	F	F	D	D	D	D	C	D	D	D
Approach Vol, veh/h		2457			1159			999			1117	
Approach Delay, s/veh		176.2			52.9			45.7			39.0	
Approach LOS		F			D			D			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	17.0	24.0	17.9	24.0	13.0	28.0	17.2	24.7
Change Period (Y+Rc), s	9.0	8.0	9.0	7.5	9.0	8.0	8.5	7.5
Max Green (Gmax), s	8.0	16.0	16.0	16.5	4.0	20.0	16.0	17.0
Max Allow Headway (MAH), s	3.7	4.6	3.7	4.7	3.7	4.6	3.7	4.7
Max Q Clear (g_c+I1), s	10.0	13.6	8.3	17.0	6.0	22.0	8.2	15.6
Green Ext Time (g_e), s	0.0	2.3	0.5	0.0	0.0	0.0	0.5	1.1
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	0.98	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	0.05	1.00	1.00	1.00	0.04	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3442		3442		3442		3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		5085		3539		5085		3539

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		1583		1583		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	
Lanes in Grp	2	0	2	0	2	0	2	0

Grp Vol (v), veh/h	508	0	271	0	176	0	264	0
Grp Sat Flow (s), veh/h/ln	1721	0	1721	0	1721	0	1721	0
Q Serve Time (g_s), s	8.0	0.0	6.3	0.0	4.0	0.0	6.2	0.0
Cycle Q Clear Time (g_c), s	8.0	0.0	6.3	0.0	4.0	0.0	6.2	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	332	0	368	0	166	0	361	0
V/C Ratio (X)	1.53	0.00	0.74	0.00	1.06	0.00	0.73	0.00
Avail Cap (c_a), veh/h	332	0	665	0	166	0	665	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	37.4	0.0	35.9	0.0	39.4	0.0	36.0	0.0
Incr Delay (d2), s/veh	252.7	0.0	2.9	0.0	86.4	0.0	2.9	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	290.1	0.0	38.8	0.0	125.9	0.0	38.8	0.0
1st-Term Q (Q1), veh/ln	3.7	0.0	3.0	0.0	1.9	0.0	2.9	0.0
2nd-Term Q (Q2), veh/ln	11.7	0.0	0.1	0.0	2.0	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (-26165%), veh/ln	15.4	0.0	3.2	0.0	3.9	0.0	3.1	0.0
%ile Storage Ratio (RQ%)	0.73	0.00	0.16	0.00	0.19	0.00	0.15	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	43.9	0.0	0.0	0.0	2.5	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.4	0.0	0.0	0.0	0.3	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	2	0	3	0	2
Grp Vol (v), veh/h	0	749	0	652	0	1383	0	607
Grp Sat Flow (s), veh/h/ln	0	1695	0	1770	0	1695	0	1770
Q Serve Time (g_s), s	0.0	11.5	0.0	15.0	0.0	20.0	0.0	13.6
Cycle Q Clear Time (g_c), s	0.0	11.5	0.0	15.0	0.0	20.0	0.0	13.6
Lane Grp Cap (c), veh/h	0	982	0	705	0	1227	0	734
V/C Ratio (X)	0.00	0.76	0.00	0.93	0.00	1.13	0.00	0.83
Avail Cap (c_a), veh/h	0	982	0	705	0	1227	0	734
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	31.6	0.0	32.6	0.0	31.4	0.0	31.4
Incr Delay (d2), s/veh	0.0	5.6	0.0	18.1	0.0	68.0	0.0	7.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	37.2	0.0	50.7	0.0	99.4	0.0	39.2
1st-Term Q (Q1), veh/ln	0.0	5.4	0.0	7.3	0.0	9.2	0.0	6.7
2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	1.8	0.0	7.7	0.0	0.8

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (-26165%), veh/ln	0.0	5.9	0.0	9.1	0.0	16.9	0.0	7.5
%ile Storage Ratio (RQ%)	0.00	0.09	0.00	0.40	0.00	0.13	0.00	0.27
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	38.9	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	234	0	83	0	566	0	239
Grp Sat Flow (s), veh/h/ln	0	1583	0	1583	0	1583	0	1583
Q Serve Time (g_s), s	0.0	11.6	0.0	3.7	0.0	20.0	0.0	11.7
Cycle Q Clear Time (g_c), s	0.0	11.6	0.0	3.7	0.0	20.0	0.0	11.7
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	306	0	315	0	382	0	328
V/C Ratio (X)	0.00	0.77	0.00	0.26	0.00	1.48	0.00	0.73
Avail Cap (c_a), veh/h	0	306	0	315	0	382	0	328
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	31.7	0.0	28.0	0.0	31.4	0.0	30.7
Incr Delay (d2), s/veh	0.0	16.6	0.0	0.4	0.0	230.1	0.0	7.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	48.2	0.0	28.5	0.0	261.5	0.0	38.6
1st-Term Q (Q1), veh/ln	0.0	5.1	0.0	1.6	0.0	8.7	0.0	5.1
2nd-Term Q (Q2), veh/ln	0.0	1.4	0.0	0.0	0.0	24.4	0.0	0.7
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (-26165%), veh/ln	0.0	6.5	0.0	1.6	0.0	33.1	0.0	5.8
%ile Storage Ratio (RQ%)	0.00	0.53	0.00	0.16	0.00	2.84	0.00	0.29
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	46.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	101.8
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	440	1272	113	79	870	150	20	975	65	155	1321	349
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	463	1339	119	83	916	158	21	1026	68	163	1391	367
Adj No. of Lanes	2	3	1	2	3	1	2	3	1	2	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	471	1490	464	132	989	308	122	1221	380	487	1760	548
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.14	0.29	0.29	0.04	0.19	0.19	0.04	0.24	0.24	0.14	0.35	0.35
Ln Grp Delay, s/veh	85.4	47.3	31.9	62.0	60.4	46.8	53.6	44.5	34.4	45.6	37.0	37.9
Ln Grp LOS	F	D	C	E	E	D	D	D	C	D	D	D
Approach Vol, veh/h		1921			1157			1115			1921	
Approach Delay, s/veh		55.6			58.6			44.1			37.9	
Approach LOS		E			E			D			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	24.0	30.0	24.5	34.7	12.8	41.2	12.5	46.7
Change Period (Y+Rc), s	8.5	8.0	8.5	7.5	8.5	8.0	8.5	7.5
Max Green (Gmax), s	15.5	22.0	16.0	34.0	4.5	33.0	16.5	33.5
Max Allow Headway (MAH), s	3.7	4.8	3.7	4.8	3.7	4.8	3.7	4.8
Max Q Clear (g_c+I1), s	17.2	22.0	6.8	23.7	4.7	30.6	2.7	29.9
Green Ext Time (g_e), s	0.0	0.0	0.3	3.4	0.0	2.2	0.0	3.4
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	0.93	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	0.00	0.91	1.00	0.00	0.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3442		3442		3442		3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		5085		5085		5085		5085

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		1583		1583		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	
Lanes in Grp	2	0	2	0	2	0	2	0

Grp Vol (v), veh/h	463	0	163	0	83	0	21	0
Grp Sat Flow (s), veh/h/ln	1721	0	1721	0	1721	0	1721	0
Q Serve Time (g_s), s	15.2	0.0	4.8	0.0	2.7	0.0	0.7	0.0
Cycle Q Clear Time (g_c), s	15.2	0.0	4.8	0.0	2.7	0.0	0.7	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	471	0	487	0	132	0	122	0
V/C Ratio (X)	0.98	0.00	0.33	0.00	0.63	0.00	0.17	0.00
Avail Cap (c_a), veh/h	471	0	487	0	137	0	502	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	48.7	0.0	43.8	0.0	53.6	0.0	53.0	0.0
Incr Delay (d2), s/veh	36.7	0.0	1.9	0.0	8.4	0.0	0.7	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	85.4	0.0	45.6	0.0	62.0	0.0	53.6	0.0
1st-Term Q (Q1), veh/ln	7.2	0.0	2.3	0.0	1.3	0.0	0.3	0.0
2nd-Term Q (Q2), veh/ln	2.4	0.0	0.1	0.0	0.2	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (-26165%), veh/ln	9.6	0.0	2.4	0.0	1.4	0.0	0.3	0.0
%ile Storage Ratio (RQ%)	0.41	0.00	0.13	0.00	0.06	0.00	0.02	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	3	0	3	0	3
Grp Vol (v), veh/h	0	916	0	1026	0	1339	0	1391
Grp Sat Flow (s), veh/h/ln	0	1695	0	1695	0	1695	0	1695
Q Serve Time (g_s), s	0.0	20.0	0.0	21.7	0.0	28.6	0.0	27.9
Cycle Q Clear Time (g_c), s	0.0	20.0	0.0	21.7	0.0	28.6	0.0	27.9
Lane Grp Cap (c), veh/h	0	989	0	1221	0	1490	0	1760
V/C Ratio (X)	0.00	0.93	0.00	0.84	0.00	0.90	0.00	0.79
Avail Cap (c_a), veh/h	0	989	0	1528	0	1490	0	1760
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	44.8	0.0	40.9	0.0	38.4	0.0	33.3
Incr Delay (d2), s/veh	0.0	15.6	0.0	3.6	0.0	9.0	0.0	3.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	60.4	0.0	44.5	0.0	47.3	0.0	37.0
1st-Term Q (Q1), veh/ln	0.0	9.4	0.0	10.2	0.0	13.4	0.0	13.0
2nd-Term Q (Q2), veh/ln	0.0	1.4	0.0	0.4	0.0	1.2	0.0	0.6

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (-26165%), veh/ln	0.0	10.8	0.0	10.6	0.0	14.6	0.0	13.6
%ile Storage Ratio (RQ%)	0.00	0.29	0.00	0.40	0.00	0.22	0.00	0.44
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	158	0	68	0	119	0	367
Grp Sat Flow (s), veh/h/ln	0	1583	0	1583	0	1583	0	1583
Q Serve Time (g_s), s	0.0	10.1	0.0	3.9	0.0	6.5	0.0	22.3
Cycle Q Clear Time (g_c), s	0.0	10.1	0.0	3.9	0.0	6.5	0.0	22.3
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	308	0	380	0	464	0	548
V/C Ratio (X)	0.00	0.51	0.00	0.18	0.00	0.26	0.00	0.67
Avail Cap (c_a), veh/h	0	308	0	476	0	464	0	548
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	40.8	0.0	34.1	0.0	30.6	0.0	31.5
Incr Delay (d2), s/veh	0.0	6.0	0.0	0.2	0.0	1.3	0.0	6.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	46.8	0.0	34.4	0.0	31.9	0.0	37.9
1st-Term Q (Q1), veh/ln	0.0	4.4	0.0	1.7	0.0	2.8	0.0	9.8
2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	0.0	0.0	0.2	0.0	1.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (-26165%), veh/ln	0.0	4.9	0.0	1.7	0.0	3.0	0.0	10.8
%ile Storage Ratio (RQ%)	0.00	0.40	0.00	0.08	0.00	0.11	0.00	0.35
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	48.5
HCM 2010 LOS	D

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	3	849	4	13	387	18	1	0	16	60	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	325	-	-	289	-	-	-	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	894	4	14	407	19	1	0	17	63	0	5

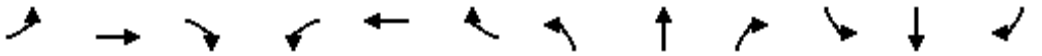
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	426	0	0	898	0	0	1133	1356	449	897	1348	213
Stage 1	-	-	-	-	-	-	902	902	-	444	444	-
Stage 2	-	-	-	-	-	-	231	454	-	453	904	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1130	-	-	752	-	-	158	148	557	235	150	792
Stage 1	-	-	-	-	-	-	299	355	-	563	574	-
Stage 2	-	-	-	-	-	-	751	568	-	556	354	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1130	-	-	752	-	-	154	145	557	224	147	792
Mov Cap-2 Maneuver	-	-	-	-	-	-	154	145	-	224	147	-
Stage 1	-	-	-	-	-	-	298	354	-	562	563	-
Stage 2	-	-	-	-	-	-	732	557	-	538	353	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.3	12.7	25.9
HCM LOS			B	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	483	1130	-	-	752	-	-	224	792
HCM Lane V/C Ratio	0.037	0.003	-	-	0.018	-	-	0.282	0.007
HCM Control Delay (s)	12.7	8.2	-	-	9.9	-	-	27.3	9.6
HCM Lane LOS	B	A	-	-	A	-	-	D	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0.1	-	-	1.1	0

No Build Alternative 2030 AM

2: West Ramp & Donald Ross Corridor: Donald Ross Road

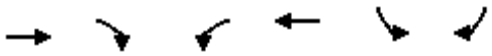


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	801	226	1484	364	0	0	0	0	773	0	41
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0	4.0	7.0	6.0					6.0		4.0
Lane Util. Factor		0.86	1.00	0.86	0.86					0.94		1.00
Frt		1.00	0.85	1.00	1.00					1.00		0.85
Flt Protected		1.00	1.00	0.95	0.97					0.95		1.00
Satd. Flow (prot)		6408	1583	3044	3115					4990		1583
Flt Permitted		1.00	1.00	0.95	0.54					0.95		1.00
Satd. Flow (perm)		6408	1583	3044	1735					4990		1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	843	238	1562	383	0	0	0	0	814	0	43
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	843	238	1047	898	0	0	0	0	814	0	43
Turn Type		NA	Free	Prot	NA					Prot		Free
Protected Phases		6		5	2					3		
Permitted Phases			Free									Free
Actuated Green, G (s)		33.4	102.4	33.0	73.4					17.0		102.4
Effective Green, g (s)		33.4	102.4	33.0	73.4					17.0		102.4
Actuated g/C Ratio		0.33	1.00	0.32	0.72					0.17		1.00
Clearance Time (s)		6.0		7.0	6.0					6.0		
Vehicle Extension (s)		3.0		3.0	3.0					3.0		
Lane Grp Cap (vph)		2090	1583	980	1688					828		1583
v/s Ratio Prot		0.13		c0.34	0.17					c0.16		
v/s Ratio Perm			0.15		c0.21							0.03
v/c Ratio		0.40	0.15	1.07	0.94dl					0.98		0.03
Uniform Delay, d1		26.8	0.0	34.7	6.6					42.6		0.0
Progression Factor		1.00	1.00	1.00	0.96					1.00		1.00
Incremental Delay, d2		0.6	0.2	47.8	0.3					26.9		0.0
Delay (s)		27.3	0.2	82.3	6.7					69.5		0.0
Level of Service		C	A	F	A					E		A
Approach Delay (s)		21.4			47.4			0.0			66.0	
Approach LOS		C			D			A			E	

Intersection Summary			
HCM 2000 Control Delay	44.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	102.4	Sum of lost time (s)	19.0
Intersection Capacity Utilization	67.1%	ICU Level of Service	C
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

c Critical Lane Group



Lane Group	EBT	EBR	WBL	WBT	SBL	SBR
Lane Group Flow (vph)	843	238	1047	898	814	43
v/c Ratio	0.42	0.15	1.04	0.94dl	0.96	0.03
Control Delay	28.2	0.2	72.8	37.8	64.5	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	28.2	0.2	72.8	37.8	64.5	0.0
Queue Length 50th (ft)	123	0	~280	213	184	0
Queue Length 95th (ft)	153	0	#532	#289	#265	0
Internal Link Dist (ft)	2056			679		
Turn Bay Length (ft)		433				
Base Capacity (vph)	1986	1583	1004	1058	848	1583
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.42	0.15	1.04	0.85	0.96	0.03

Intersection Summary

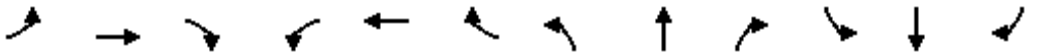
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

No Build Alternative 2030 AM

9: East Ramp & Donald Ross Corridor: Donald Ross Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	41	1533	0	0	1753	484	95	0	1178	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0			6.0	4.0	6.0		6.0			
Lane Util. Factor	0.97	0.91			0.86	1.00	0.97		0.76			
Frt	1.00	1.00			1.00	0.85	1.00		0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (prot)	3433	5085			6408	1583	3433		3610			
Flt Permitted	0.95	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (perm)	3433	5085			6408	1583	3433		3610			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	43	1614	0	0	1845	509	100	0	1240	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	967	0	0	0
Lane Group Flow (vph)	43	1614	0	0	1845	509	100	0	273	0	0	0
Turn Type	Prot	NA			NA	Free	Prot		Prot			
Protected Phases	1	6			2		7		7			
Permitted Phases						Free						
Actuated Green, G (s)	2.4	33.4			65.0	102.4	17.0		17.0			
Effective Green, g (s)	2.4	33.4			65.0	102.4	17.0		17.0			
Actuated g/C Ratio	0.02	0.33			0.63	1.00	0.17		0.17			
Clearance Time (s)	6.0	6.0			6.0		6.0		6.0			
Vehicle Extension (s)	3.0	3.0			3.0		3.0		3.0			
Lane Grp Cap (vph)	80	1658			4067	1583	569		599			
v/s Ratio Prot	0.01	c0.32			c0.29		0.03		c0.08			
v/s Ratio Perm						c0.32						
v/c Ratio	0.54	0.97			0.45	0.32	0.18		0.46			
Uniform Delay, d1	49.5	34.1			9.6	0.0	36.7		38.5			
Progression Factor	0.56	0.95			1.00	1.00	1.00		1.00			
Incremental Delay, d2	4.9	13.4			0.4	0.5	0.1		0.6			
Delay (s)	32.7	45.7			10.0	0.5	36.8		39.1			
Level of Service	C	D			A	A	D		D			
Approach Delay (s)		45.4			7.9			38.9			0.0	
Approach LOS		D			A			D			A	

Intersection Summary			
HCM 2000 Control Delay	27.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	102.4	Sum of lost time (s)	19.0
Intersection Capacity Utilization	67.1%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

No Build Alternative 2030 AM

9: East Ramp & Donald Ross Corridor: Donald Ross Road

Lane Group	EBL	EBT	WBT	WBR	NBL	NBR
Lane Group Flow (vph)	43	1614	1845	509	100	1240
v/c Ratio	0.31	1.02	0.44	0.32	0.17	0.79
Control Delay	30.6	58.8	9.5	0.5	36.4	8.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.6	58.8	9.5	0.5	36.4	8.0
Queue Length 50th (ft)	11	~412	172	0	28	19
Queue Length 95th (ft)	m19	m#479	199	0	52	69
Internal Link Dist (ft)		679	2740			
Turn Bay Length (ft)						
Base Capacity (vph)	137	1576	4164	1583	583	1575
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.31	1.02	0.44	0.32	0.17	0.79

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

HOOD ROAD CORRIDOR

Arterial Level of Service: EB Hood Road

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Central Blvd	II	45	133.7	31.0	164.7	1.67	36.5	A
Military Trail	II	45	31.0	41.9	72.9	0.31	15.5	E
Total	II		164.7	72.9	237.6	1.98	30.1	B

Arterial Level of Service: WB Hood Road

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Military Trail	II	45	14.9	28.4	43.3	0.14	11.3	F
Central Blvd	II	45	31.0	24.7	55.7	0.31	20.2	D
Total	II		45.9	53.1	99.0	0.45	16.3	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	194	414	139	353	112	7	136	738	350	349	733	139
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	204	436	146	372	118	7	143	777	368	367	772	146
Adj No. of Lanes	2	2	1	2	2	1	2	2	1	2	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	302	685	307	457	845	378	493	987	442	502	1040	465
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.09	0.19	0.19	0.13	0.24	0.24	0.05	0.28	0.28	0.07	0.29	0.29
Ln Grp Delay, s/veh	35.2	28.2	27.5	41.3	22.1	21.4	18.8	30.8	41.6	26.9	28.2	21.9
Ln Grp LOS	D	C	C	D	C	C	B	C	D	C	C	C
Approach Vol, veh/h		786			497			1288			1285	
Approach Delay, s/veh		29.9			36.5			32.5			27.1	
Approach LOS		C			D			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	3.0	2.0	3.0	1.1	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	11.0	26.5	15.8	20.2	9.9	27.6	12.4	23.6
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green (Gmax), s	5.0	20.5	10.0	35.5	4.0	21.5	10.0	35.5
Max Allow Headway (MAH), s	3.7	4.7	3.7	4.7	3.7	4.7	3.7	4.7
Max Q Clear (g_c+I1), s	7.0	18.0	9.7	10.3	4.1	16.5	6.2	3.9
Green Ext Time (g_e), s	0.0	2.1	0.0	3.9	0.0	4.0	0.2	4.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.01	1.00	0.00	0.94	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3442		3442		3442		3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3539		3539		3539		3539

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		1583		1583		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Pr/Pm)		(Prot)		(Pr/Pm)		(Prot)	
Lanes in Grp	2	0	2	0	2	0	2	0

Grp Vol (v), veh/h	367	0	372	0	143	0	204	0
Grp Sat Flow (s), veh/h/ln	1721	0	1721	0	1721	0	1721	0
Q Serve Time (g_s), s	5.0	0.0	7.7	0.0	2.1	0.0	4.2	0.0
Cycle Q Clear Time (g_c), s	5.0	0.0	7.7	0.0	2.1	0.0	4.2	0.0
Perm LT Sat Flow (s_l), veh/h/ln	474	0	0	0	588	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	20.5	0.0	0.0	0.0	20.5	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	5.6	0.0	0.0	0.0	7.1	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	5.6	0.0	0.0	0.0	1.9	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	502	0	457	0	493	0	302	0
V/C Ratio (X)	0.73	0.00	0.81	0.00	0.29	0.00	0.68	0.00
Avail Cap (c_a), veh/h	502	0	468	0	497	0	468	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	21.5	0.0	31.0	0.0	18.5	0.0	32.5	0.0
Incr Delay (d2), s/veh	5.4	0.0	10.3	0.0	0.3	0.0	2.6	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	26.9	0.0	41.3	0.0	18.8	0.0	35.2	0.0
1st-Term Q (Q1), veh/ln	1.3	0.0	3.7	0.0	1.0	0.0	2.0	0.0
2nd-Term Q (Q2), veh/ln	0.4	0.0	0.7	0.0	0.0	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (-26165%), veh/ln	1.7	0.0	4.3	0.0	1.0	0.0	2.1	0.0
%ile Storage Ratio (RQ%)	0.14	0.00	0.07	0.00	0.07	0.00	0.10	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	2	0	2	0	2
Grp Vol (v), veh/h	0	777	0	436	0	772	0	118
Grp Sat Flow (s), veh/h/ln	0	1770	0	1770	0	1770	0	1770
Q Serve Time (g_s), s	0.0	14.9	0.0	8.3	0.0	14.5	0.0	1.9
Cycle Q Clear Time (g_c), s	0.0	14.9	0.0	8.3	0.0	14.5	0.0	1.9
Lane Grp Cap (c), veh/h	0	987	0	685	0	1040	0	845
V/C Ratio (X)	0.00	0.79	0.00	0.64	0.00	0.74	0.00	0.14
Avail Cap (c_a), veh/h	0	987	0	1710	0	1040	0	1710
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	24.5	0.0	27.3	0.0	23.4	0.0	22.0
Incr Delay (d2), s/veh	0.0	6.3	0.0	1.0	0.0	4.8	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	30.8	0.0	28.2	0.0	28.2	0.0	22.1
1st-Term Q (Q1), veh/ln	0.0	7.2	0.0	4.1	0.0	7.1	0.0	0.9
2nd-Term Q (Q2), veh/ln	0.0	0.9	0.0	0.1	0.0	0.7	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (-26165%), veh/ln	0.0	8.1	0.0	4.2	0.0	7.8	0.0	0.9
%ile Storage Ratio (RQ%)	0.00	0.47	0.00	0.14	0.00	0.21	0.00	0.02
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	368	0	146	0	146	0	7
Grp Sat Flow (s), veh/h/ln	0	1583	0	1583	0	1583	0	1583
Q Serve Time (g_s), s	0.0	16.0	0.0	6.0	0.0	5.3	0.0	0.2
Cycle Q Clear Time (g_c), s	0.0	16.0	0.0	6.0	0.0	5.3	0.0	0.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	442	0	307	0	465	0	378
V/C Ratio (X)	0.00	0.83	0.00	0.48	0.00	0.31	0.00	0.02
Avail Cap (c_a), veh/h	0	442	0	765	0	465	0	765
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	24.9	0.0	26.3	0.0	20.2	0.0	21.4
Incr Delay (d2), s/veh	0.0	16.7	0.0	1.1	0.0	1.8	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	41.6	0.0	27.5	0.0	21.9	0.0	21.4
1st-Term Q (Q1), veh/ln	0.0	7.0	0.0	2.6	0.0	2.3	0.0	0.1
2nd-Term Q (Q2), veh/ln	0.0	2.0	0.0	0.1	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (-26165%), veh/ln	0.0	9.0	0.0	2.7	0.0	2.5	0.0	0.1
%ile Storage Ratio (RQ%)	0.00	0.82	0.00	0.23	0.00	0.19	0.00	0.01
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	30.7
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	236	551	215	298	191	62	2	788	420	256	874	283
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	248	580	226	314	201	65	2	829	442	269	920	298
Adj No. of Lanes	2	2	1	2	2	1	2	3	1	2	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	353	708	317	353	708	317	172	1023	319	310	1227	382
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.10	0.20	0.20	0.10	0.20	0.20	0.05	0.20	0.20	0.09	0.24	0.24
Ln Grp Delay, s/veh	45.9	40.9	42.7	62.3	28.1	28.2	36.2	37.4	224.5	62.4	32.4	42.9
Ln Grp LOS	D	D	D	E	C	C	D	D	F	E	C	D
Approach Vol, veh/h		1054			580			1273			1487	
Approach Delay, s/veh		42.4			46.6			102.4			39.9	
Approach LOS		D			D			F			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	12.5	26.8	16.7	24.0	15.7	23.6	16.7	24.0
Change Period (Y+Rc), s	8.5	7.5	8.5	8.0	8.5	7.5	8.5	8.0
Max Green (Gmax), s	4.0	19.3	8.2	16.0	7.2	16.1	8.2	16.0
Max Allow Headway (MAH), s	3.7	4.6	3.7	4.6	3.7	4.6	3.7	4.6
Max Q Clear (g_c+l1), s	2.0	16.1	7.6	5.9	8.2	18.1	9.2	14.5
Green Ext Time (g_e), s	0.0	2.9	0.1	4.1	0.0	0.0	0.0	0.9
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3442		3442		3442		3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		5085		3539		5085		3539

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		1583		1583		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	
Lanes in Grp	2	0	2	0	2	0	2	0

Grp Vol (v), veh/h	2	0	248	0	269	0	314	0
Grp Sat Flow (s), veh/h/ln	1721	0	1721	0	1721	0	1721	0
Q Serve Time (g_s), s	0.0	0.0	5.6	0.0	6.2	0.0	7.2	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	5.6	0.0	6.2	0.0	7.2	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	172	0	353	0	310	0	353	0
V/C Ratio (X)	0.01	0.00	0.70	0.00	0.87	0.00	0.89	0.00
Avail Cap (c_a), veh/h	172	0	353	0	310	0	353	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	36.1	0.0	34.7	0.0	35.9	0.0	35.5	0.0
Incr Delay (d2), s/veh	0.1	0.0	11.1	0.0	26.5	0.0	26.8	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	36.2	0.0	45.9	0.0	62.4	0.0	62.3	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	2.7	0.0	2.9	0.0	3.4	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.5	0.0	1.1	0.0	1.3	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (-26165%), veh/ln	0.0	0.0	3.2	0.0	4.1	0.0	4.7	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.15	0.00	0.17	0.00	0.23	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	2	0	3	0	2
Grp Vol (v), veh/h	0	920	0	201	0	829	0	580
Grp Sat Flow (s), veh/h/ln	0	1695	0	1770	0	1695	0	1770
Q Serve Time (g_s), s	0.0	13.4	0.0	3.9	0.0	12.4	0.0	12.5
Cycle Q Clear Time (g_c), s	0.0	13.4	0.0	3.9	0.0	12.4	0.0	12.5
Lane Grp Cap (c), veh/h	0	1227	0	708	0	1023	0	708
V/C Ratio (X)	0.00	0.75	0.00	0.28	0.00	0.81	0.00	0.82
Avail Cap (c_a), veh/h	0	1227	0	708	0	1023	0	708
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	28.1	0.0	27.1	0.0	30.5	0.0	30.6
Incr Delay (d2), s/veh	0.0	4.2	0.0	1.0	0.0	6.9	0.0	10.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	32.4	0.0	28.1	0.0	37.4	0.0	40.9
1st-Term Q (Q1), veh/ln	0.0	6.2	0.0	1.9	0.0	5.8	0.0	6.1
2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	0.1	0.0	0.7	0.0	1.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (-26165%), veh/ln	0.0	6.7	0.0	2.0	0.0	6.5	0.0	7.1
%ile Storage Ratio (RQ%)	0.00	0.18	0.00	0.08	0.00	0.22	0.00	0.12
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	298	0	65	0	442	0	226
Grp Sat Flow (s), veh/h/ln	0	1583	0	1583	0	1583	0	1583
Q Serve Time (g_s), s	0.0	14.1	0.0	2.7	0.0	16.1	0.0	10.7
Cycle Q Clear Time (g_c), s	0.0	14.1	0.0	2.7	0.0	16.1	0.0	10.7
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	382	0	317	0	319	0	317
V/C Ratio (X)	0.00	0.78	0.00	0.21	0.00	1.39	0.00	0.71
Avail Cap (c_a), veh/h	0	382	0	317	0	319	0	317
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	28.4	0.0	26.7	0.0	32.0	0.0	29.9
Incr Delay (d2), s/veh	0.0	14.6	0.0	1.5	0.0	192.5	0.0	12.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	42.9	0.0	28.2	0.0	224.5	0.0	42.7
1st-Term Q (Q1), veh/ln	0.0	6.1	0.0	1.2	0.0	7.0	0.0	4.6
2nd-Term Q (Q2), veh/ln	0.0	1.5	0.0	0.1	0.0	17.0	0.0	1.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (-26165%), veh/ln	0.0	7.6	0.0	1.3	0.0	24.0	0.0	5.8
%ile Storage Ratio (RQ%)	0.00	0.32	0.00	0.11	0.00	2.00	0.00	0.44
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	30.8	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	59.5
HCM 2010 LOS	E

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	25	787	335	58	29	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	399	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	26	828	353	61	31	11

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	353	0	-	0	1234	353
Stage 1	-	-	-	-	353	-
Stage 2	-	-	-	-	881	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1206	-	-	-	195	691
Stage 1	-	-	-	-	711	-
Stage 2	-	-	-	-	405	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1206	-	-	-	187	691
Mov Cap-2 Maneuver	-	-	-	-	187	-
Stage 1	-	-	-	-	711	-
Stage 2	-	-	-	-	389	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	24
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1206	-	-	-	230
HCM Lane V/C Ratio	0.022	-	-	-	0.178
HCM Control Delay (s)	8.1	0	-	-	24
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.6

MILITARY TRAIL CORRIDOR

Arterial Level of Service: NB N Military Trail

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
PGA Blvd	II	45	18.9	92.5	111.4	0.17	5.6	F
Kyoto Gardens Dr	II	45	43.4	32.2	75.6	0.49	23.5	C
Hood Road	II	45	104.9	30.0	134.9	1.31	35.0	B
Donald Ross	II	45	102.8	37.6	140.4	1.29	33.0	B
Total	II		270.0	192.3	462.3	3.26	25.4	C

Arterial Level of Service: SB N Military Trail

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Donald Ross	II	45	22.3	30.5	52.8	0.20	13.9	E
Hood Road	II	45	102.8	30.1	132.9	1.29	34.8	B
Kyoto Gardens Dr	II	45	104.9	34.3	139.2	1.31	33.9	B
PGA Blvd	II	45	43.4	50.7	94.1	0.49	18.9	D
Total	II		273.4	145.6	419.0	3.29	28.3	B

Movement	WBL	WBR	WBR2	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SER
Lane Configurations											
Traffic Volume (veh/h)	281	74	52	41	1148	185	102	1182	1	0	0
Future Volume (veh/h)	281	74	52	41	1148	185	102	1182	1	0	0
Number	7	14	14	1	6	16	5	2	12		
Initial Q, veh	0	0	0	0	0	0	0	0	0		
Ped-Bike Adj (A_pbT)	1.00	1.00	1.00	1.00		1.00	1.00		1.00		
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900		
Adj Flow Rate, veh/h	296	55	55	43	1208	195	107	1244	1		
Adj No. of Lanes	2	1	1	1	3	1	1	3	0		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2		
Opposing Right Turn Influence	Yes			Yes			Yes				
Cap, veh/h	918	422	422	118	1348	420	136	1399	1		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Prop Arrive On Green	0.27	0.27	0.27	0.07	0.26	0.26	0.08	0.27	0.27		
Ln Grp Delay, s/veh	18.6	17.4	17.4	35.2	30.8	22.2	62.8	33.8	41.7		
Ln Grp LOS	B	B	B	D	C	C	E	C	D		

Approach Vol, veh/h	351				1446			1352			Timer:
Approach Delay, s/veh	18.4				29.8			38.7			Assigned Phs
Approach LOS	B				C			D			Case No
Phs Duration (G+Y+Rc), s		12.0	24.0		24.0	12.1	23.9				
Change Period (Y+Rc), s		8.0	8.0		8.0	7.5	8.0				
Max Green (Gmax), s		4.0	16.0		16.0	4.6	15.9				
Max Allow Headway (MAH), s		3.7	4.8		3.7	3.7	4.8				
Max Q Clear (g_c+I1), s		3.4	15.7		6.1	5.6	15.7				
Green Ext Time (g_e), s		0.0	0.3		0.8	0.0	0.2				
Prob of Phs Call (p_c)		1.00	1.00		1.00	1.00	1.00				
Prob of Max Out (p_x)		0.00	0.00		0.00	0.00	0.00				

Left-Turn Movement Data											
Assigned Mvmt		1			7	5					
Mvmt Sat Flow, veh/h		1774			3442	1774					

Through Movement Data											
Assigned Mvmt			2		4		6				
Mvmt Sat Flow, veh/h			5248		0		5085				

Right-Turn Movement Data											
Assigned Mvmt			12		14		16				
Mvmt Sat Flow, veh/h			4		1583		1583				

Left Lane Group Data											
Assigned Mvmt		1	0	0	7	5	0	0	0		
Lane Assignment		(Prot)				(Prot)					
Lanes in Grp		1	0	0	2	1	0	0	0		
Grp Vol (v), veh/h		43	0	0	296	107	0	0	0		
Grp Sat Flow (s), veh/h/ln		1774	0	0	1721	1774	0	0	0		

Q Serve Time (g_s), s	1.4	0.0	0.0	4.1	3.6	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	1.4	0.0	0.0	4.1	3.6	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1721	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	118	0	0	918	136	0	0	0
V/C Ratio (X)	0.36	0.00	0.00	0.32	0.79	0.00	0.00	0.00
Avail Cap (c_a), veh/h	118	0	0	918	136	0	0	0
Upstream Filter (I)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	26.8	0.0	0.0	17.7	27.2	0.0	0.0	0.0
Incr Delay (d2), s/veh	8.4	0.0	0.0	0.9	35.6	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	35.2	0.0	0.0	18.6	62.8	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.7	0.0	0.0	2.0	1.7	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.3	0.0	0.0	0.1	1.3	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	1.0	0.0	0.0	2.1	3.1	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.08	0.00	0.00	0.07	0.21	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	3	0	0
Grp Vol (v), veh/h	0	804	0	0	0	1208	0	0
Grp Sat Flow (s), veh/h/ln	0	1695	0	0	0	1695	0	0
Q Serve Time (g_s), s	0.0	13.7	0.0	0.0	0.0	13.7	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	13.7	0.0	0.0	0.0	13.7	0.0	0.0
Lane Grp Cap (c), veh/h	0	904	0	0	0	1348	0	0
V/C Ratio (X)	0.00	0.89	0.00	0.00	0.00	0.90	0.00	0.00
Avail Cap (c_a), veh/h	0	904	0	0	0	1348	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	21.1	0.0	0.0	0.0	21.3	0.0	0.0
Incr Delay (d2), s/veh	0.0	12.7	0.0	0.0	0.0	9.6	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	33.8	0.0	0.0	0.0	30.8	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	6.4	0.0	0.0	0.0	6.4	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	1.6	0.0	0.0	0.0	1.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00

%ile Back of Q (50%), veh/ln	0.0	8.0	0.0	0.0	0.0	7.6	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.03	0.00	0.00	0.00	0.48	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment		T+R		R		R		
Lanes in Grp	0	1	0	1	0	1	0	0
Grp Vol (v), veh/h	0	441	0	55	0	195	0	0
Grp Sat Flow (s), veh/h/ln	0	1862	0	1583	0	1583	0	0
Q Serve Time (g_s), s	0.0	13.7	0.0	1.6	0.0	6.2	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	13.7	0.0	1.6	0.0	6.2	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	497	0	422	0	420	0	0
V/C Ratio (X)	0.00	0.89	0.00	0.13	0.00	0.46	0.00	0.00
Avail Cap (c_a), veh/h	0	497	0	422	0	420	0	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	21.1	0.0	16.7	0.0	18.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	20.6	0.0	0.6	0.0	3.7	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	41.7	0.0	17.4	0.0	22.2	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	7.0	0.0	1.6	0.0	2.7	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	2.8	0.0	0.1	0.0	0.4	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	9.8	0.0	1.6	0.0	3.1	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.04	0.00	0.06	0.00	0.27	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	32.4
HCM 2010 LOS	C

NORTHLAKE BOULEVARD CORRIDOR

Arterial Level of Service: EB Northlake Blvd

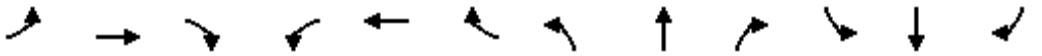
Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Keating Dr	II	45	17.3	55.7	73.0	0.16	7.8	F
West Ramps	II	45	12.7	35.0	47.7	0.12	8.8	F
East Ramps	II	45	11.1	39.1	50.2	0.10	7.3	F
Roan Ln	II	45	8.8	0.3	9.1	0.08	32.1	B
Sandtree Dr	II	45	13.5	27.6	41.1	0.12	10.9	F
Total	II		63.4	157.7	221.1	0.58	9.5	F

Arterial Level of Service: WB Northlake Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Sunrise Dr	II	45	15.3	22.3	37.6	0.14	13.5	E
Roan Ln	II	45	13.5	5.3	18.8	0.12	23.8	C
East Ramps	II	45	8.8	30.8	39.6	0.08	7.4	F
West Ramps	II	45	11.1	22.8	33.9	0.10	10.8	F
Keating Dr	II	45	12.7	9.4	22.1	0.12	18.9	D
Total	II		61.4	90.6	152.0	0.56	13.3	E

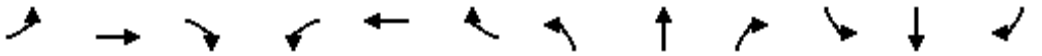
No Build Alternative 2030 AM

3: Keating Dr & Northlake Blvd Corridor: Northlake Boulevard



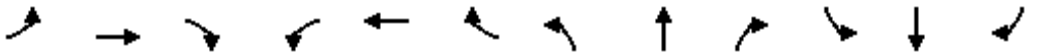
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	2298	97	260	1321	90	91	0	131	203	3	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0	4.0	5.0	5.0	6.0	6.0	6.0		6.0	
Lane Util. Factor		0.91	1.00	1.00	0.91	1.00	0.95	0.95	1.00		0.95	
Frt		1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85		1.00	
Flt Protected		1.00	1.00	0.95	1.00	1.00	0.95	0.95	1.00		0.95	
Satd. Flow (prot)		5085	1583	1770	5085	1583	1681	1681	1583		3373	
Flt Permitted		1.00	1.00	0.95	1.00	1.00	0.95	0.45	1.00		0.72	
Satd. Flow (perm)		5085	1583	1770	5085	1583	1681	793	1583		2536	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	2419	102	274	1391	95	96	0	138	214	3	0
RTOR Reduction (vph)	0	0	56	0	0	35	0	0	103	0	0	0
Lane Group Flow (vph)	0	2419	46	274	1391	60	48	48	35	0	217	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6			2			4			
Actuated Green, G (s)		45.1	45.1	14.0	63.1	63.1	3.1	25.1	25.1		16.0	
Effective Green, g (s)		45.1	45.1	14.0	63.1	63.1	3.1	25.1	25.1		16.0	
Actuated g/C Ratio		0.45	0.45	0.14	0.64	0.64	0.03	0.25	0.25		0.16	
Clearance Time (s)		5.0	5.0	4.0	5.0	5.0	6.0	6.0	6.0		6.0	
Vehicle Extension (s)		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)		2311	719	249	3234	1006	52	228	400		409	
v/s Ratio Prot		c0.48		c0.15	0.27		c0.03	0.01				
v/s Ratio Perm			0.03			0.04		0.05	0.02		c0.09	
v/c Ratio		1.05	0.06	1.10	0.43	0.06	0.92	0.21	0.09		0.53	
Uniform Delay, d1		27.1	15.2	42.6	9.0	6.8	47.9	29.2	28.3		38.2	
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	
Incremental Delay, d2		32.4	0.2	86.5	0.4	0.1	96.0	0.5	0.1		1.3	
Delay (s)		59.4	15.4	129.1	9.5	6.9	143.9	29.7	28.4		39.5	
Level of Service		E	B	F	A	A	F	C	C		D	
Approach Delay (s)		57.6			28.0			52.4			39.5	
Approach LOS		E			C			D			D	

Intersection Summary			
HCM 2000 Control Delay	45.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	99.2	Sum of lost time (s)	21.0
Intersection Capacity Utilization	89.2%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



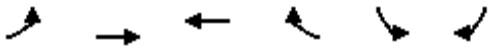
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1639	775	1034	1030	0	0	0	0	600	0	474
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0	4.0	7.0	6.5					6.0		6.0
Lane Util. Factor		0.81	1.00	0.97	0.91					0.97		0.88
Frt		1.00	0.85	1.00	1.00					1.00		0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (prot)		7544	1583	3433	5085					3433		2787
Flt Permitted		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (perm)		7544	1583	3433	5085					3433		2787
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	1725	816	1088	1084	0	0	0	0	632	0	499
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	351
Lane Group Flow (vph)	0	1725	816	1088	1084	0	0	0	0	632	0	148
Turn Type		NA	Free	Prot	NA					Prot		Perm
Protected Phases		6		5	2					3		
Permitted Phases			Free									6
Actuated Green, G (s)		29.6	100.0	30.0	31.0					21.4		29.6
Effective Green, g (s)		29.6	100.0	30.0	31.0					21.4		29.6
Actuated g/C Ratio		0.30	1.00	0.30	0.31					0.21		0.30
Clearance Time (s)		6.0		7.0	6.5					6.0		6.0
Vehicle Extension (s)		3.0		3.0	3.0					3.0		3.0
Lane Grp Cap (vph)		2233	1583	1029	1576					734		824
v/s Ratio Prot		c0.23		c0.32	0.21					c0.18		
v/s Ratio Perm			c0.52									0.05
v/c Ratio		0.77	0.52	1.06	0.69					0.86		0.18
Uniform Delay, d1		32.1	0.0	35.0	30.3					37.9		26.2
Progression Factor		1.00	1.00	1.38	0.69					1.00		1.00
Incremental Delay, d2		2.7	1.2	39.1	1.6					10.1		0.5
Delay (s)		34.8	1.2	87.3	22.4					48.0		26.6
Level of Service		C	A	F	C					D		C
Approach Delay (s)		24.0			54.9			0.0			38.6	
Approach LOS		C			D			A			D	

Intersection Summary			
HCM 2000 Control Delay	38.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	81.4%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



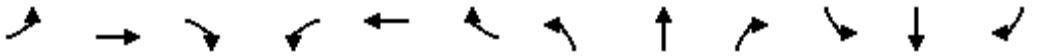
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	819	1420	0	0	1330	498	734	0	1041	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	6.0			6.5	4.0	6.0		6.5			
Lane Util. Factor	0.97	0.91			0.81	1.00	0.97		0.88			
Frt	1.00	1.00			1.00	0.85	1.00		0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (prot)	3433	5085			7544	1583	3433		2787			
Flt Permitted	0.95	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (perm)	3433	5085			7544	1583	3433		2787			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	862	1495	0	0	1400	524	773	0	1096	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	756	0	0	0
Lane Group Flow (vph)	862	1495	0	0	1400	524	773	0	340	0	0	0
Turn Type	Prot	NA			NA	Free	Prot		Perm			
Protected Phases	1	6			2		7					
Permitted Phases						Free			2			
Actuated Green, G (s)	28.1	29.6			31.0	100.0	21.4		31.0			
Effective Green, g (s)	28.1	29.6			31.0	100.0	21.4		31.0			
Actuated g/C Ratio	0.28	0.30			0.31	1.00	0.21		0.31			
Clearance Time (s)	7.0	6.0			6.5		6.0		6.5			
Vehicle Extension (s)	3.0	3.0			3.0		3.0		3.0			
Lane Grp Cap (vph)	964	1505			2338	1583	734		863			
v/s Ratio Prot	c0.25	c0.29			0.19		c0.23					
v/s Ratio Perm						c0.33			0.12			
v/c Ratio	0.89	0.99			0.60	0.33	1.05		0.39			
Uniform Delay, d1	34.5	35.1			29.2	0.0	39.3		27.1			
Progression Factor	1.36	0.60			1.00	1.00	1.00		1.00			
Incremental Delay, d2	6.6	16.2			1.1	0.6	48.1		1.3			
Delay (s)	53.5	37.4			30.4	0.6	87.4		28.5			
Level of Service	D	D			C	A	F		C			
Approach Delay (s)		43.3			22.3			52.8			0.0	
Approach LOS		D			C			D			A	

Intersection Summary			
HCM 2000 Control Delay	39.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	81.4%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



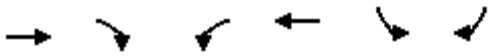
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	85	2130	1671	79	0	176
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	8.0	6.5	6.5	4.0		4.0
Lane Util. Factor	1.00	0.91	0.76	1.00		1.00
Frt	1.00	1.00	1.00	0.85		0.86
Flt Protected	0.95	1.00	1.00	1.00		1.00
Satd. Flow (prot)	1770	5085	8494	1583		1611
Flt Permitted	0.95	1.00	1.00	1.00		1.00
Satd. Flow (perm)	1770	5085	8494	1583		1611
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	89	2242	1759	83	0	185
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	89	2242	1759	83	0	185
Turn Type	Prot	NA	NA	Free		Free
Protected Phases	1	6	2			
Permitted Phases				Free		Free
Actuated Green, G (s)	3.8	39.7	21.4	39.7		39.7
Effective Green, g (s)	3.8	39.7	21.4	39.7		39.7
Actuated g/C Ratio	0.10	1.00	0.54	1.00		1.00
Clearance Time (s)	8.0	6.5	6.5			
Vehicle Extension (s)	3.0	3.0	3.0			
Lane Grp Cap (vph)	169	5085	4578	1583		1611
v/s Ratio Prot	0.05	c0.44	0.21			
v/s Ratio Perm				0.05		0.11
v/c Ratio	0.53	0.44	0.38	0.05		0.11
Uniform Delay, d1	17.1	0.0	5.3	0.0		0.0
Progression Factor	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	2.9	0.1	0.1	0.1		0.1
Delay (s)	20.0	0.1	5.4	0.1		0.1
Level of Service	C	A	A	A		A
Approach Delay (s)		0.8	5.1		0.1	
Approach LOS		A	A		A	

Intersection Summary			
HCM 2000 Control Delay	2.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	39.7	Sum of lost time (s)	14.5
Intersection Capacity Utilization	46.6%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	92	1798	239	106	1332	64	289	1	94	91	1	129
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.5	7.5	7.0	7.5		6.0	6.5	6.5	6.0	6.5	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91		0.97	0.95	0.95	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.85	0.85	1.00	0.85	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1583	3433	5051		3433	1509	1504	1770	1585	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1583	3433	5051		3433	1509	1504	1770	1585	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	97	1893	252	112	1402	67	304	1	99	96	1	136
RTOR Reduction (vph)	0	0	143	0	5	0	0	43	42	0	94	0
Lane Group Flow (vph)	97	1893	109	112	1464	0	304	8	7	96	43	0
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6						4			
Actuated Green, G (s)	5.6	36.5	36.5	4.0	34.9		8.0	11.6	11.6	5.6	9.2	
Effective Green, g (s)	5.6	36.5	36.5	4.0	34.9		8.0	11.6	11.6	5.6	9.2	
Actuated g/C Ratio	0.07	0.43	0.43	0.05	0.41		0.09	0.14	0.14	0.07	0.11	
Clearance Time (s)	7.0	7.5	7.5	7.0	7.5		6.0	6.5	6.5	6.0	6.5	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	117	2191	682	162	2081		324	206	205	117	172	
v/s Ratio Prot	c0.05	c0.37		0.03	0.29		c0.09	0.01		0.05	c0.03	
v/s Ratio Perm			0.07						0.00			
v/c Ratio	0.83	0.86	0.16	0.69	0.70		0.94	0.04	0.03	0.82	0.25	
Uniform Delay, d1	39.1	21.8	14.7	39.7	20.6		38.1	31.7	31.7	39.1	34.6	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	36.1	4.8	0.5	12.0	2.0		33.8	0.1	0.1	35.0	0.8	
Delay (s)	75.2	26.7	15.2	51.7	22.6		71.9	31.8	31.8	74.0	35.3	
Level of Service	E	C	B	D	C		E	C	C	E	D	
Approach Delay (s)		27.5			24.7			62.0			51.3	
Approach LOS		C			C			E			D	

Intersection Summary			
HCM 2000 Control Delay	30.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	84.7	Sum of lost time (s)	27.0
Intersection Capacity Utilization	76.9%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Lane Group	EBT	EBR	WBL	WBT	SBL	SBR
Lane Group Flow (vph)	1725	816	1088	1084	632	499
v/c Ratio	0.77	0.52	1.06	0.69	0.86	0.42
Control Delay	35.0	1.2	85.1	22.8	51.2	3.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.0	1.2	85.1	22.8	51.2	3.7
Queue Length 50th (ft)	247	0	~410	112	201	0
Queue Length 95th (ft)	284	0	m#482	m123	#292	39
Internal Link Dist (ft)	533			458		
Turn Bay Length (ft)						
Base Capacity (vph)	2233	1583	1029	1575	734	1176
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.77	0.52	1.06	0.69	0.86	0.42

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

No Build Alternative 2030 AM

9: East Ramps & Northlake Blvd Corridor: Northlake Boulevard

Lane Group	EBL	EBT	WBT	WBR	NBL	NBR
Lane Group Flow (vph)	862	1495	1400	524	773	1096
v/c Ratio	0.89	0.99	0.60	0.33	1.05	0.68
Control Delay	54.7	39.1	30.8	0.6	87.0	4.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	54.7	39.1	30.8	0.6	87.0	4.1
Queue Length 50th (ft)	308	124	189	0	~278	0
Queue Length 95th (ft)	m#377	#430	221	0	#395	50
Internal Link Dist (ft)		458	348			
Turn Bay Length (ft)				400		
Base Capacity (vph)	1002	1505	2337	1583	734	1619
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.86	0.99	0.60	0.33	1.05	0.68

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

PGA BOULEVARD CORRIDOR

Arterial Level of Service: EB PGA Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Fairway Dr	II	45	16.8	54.2	71.0	0.15	7.8	F
Central Blvd	II	45	36.7	33.3	70.0	0.39	20.1	D
N Military Trail	II	45	81.7	71.5	153.2	1.02	24.0	C
West Ramps	II	45	20.5	19.6	40.1	0.19	16.9	E
East Ramps	II	45	6.3	130.0	136.3	0.06	1.5	F
Lake Victoria Gnds	II	45	56.6	38.4	95.0	0.71	26.8	C
Total	II		218.6	347.0	565.6	2.52	16.0	E

Arterial Level of Service: WB PGA Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Lake Victoria Gnds	II	45	13.7	39.2	52.9	0.13	8.6	F
East Ramps	II	45	56.6	29.5	86.1	0.71	29.5	B
West Ramps	II	45	6.3	36.8	43.1	0.06	4.9	F
N Military Trail	II	45	20.5	46.7	67.2	0.19	10.1	F
Central Blvd	II	45	25.0	82.1	107.1	0.24	8.1	F
FL Turnpike	II	45	36.7	73.6	110.3	0.39	12.8	F
Total	II		158.8	307.9	466.7	1.71	13.2	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	311	1262	890	347	349	687	520	882	22	851	679	134
Future Volume (veh/h)	311	1262	890	347	349	687	520	882	22	851	679	134
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	327	1328	0	365	367	0	547	928	0	896	715	141
Adj No. of Lanes	2	3	1	2	3	1	2	3	1	2	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	373	1373	427	298	1296	403	615	831	259	906	1278	398
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.11	0.27	0.00	0.09	0.25	0.00	0.18	0.16	0.00	0.26	0.25	0.25
Ln Grp Delay, s/veh	83.3	71.7	0.0	195.4	45.4	0.0	69.5	131.4	0.0	82.0	49.5	46.7
Ln Grp LOS	F	E		F	D		E	F		F	D	D
Approach Vol, veh/h		1655			732			1475			1752	
Approach Delay, s/veh		74.0			120.2			108.4			65.9	
Approach LOS		E			F			F			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	24.3	45.7	48.0	32.0	22.0	48.0	34.8	45.2
Change Period (Y+Rc), s	8.0	7.5	8.5	7.5	9.0	7.5	8.0	7.5
Max Green (Gmax), s	18.0	36.5	39.5	24.5	13.0	40.5	36.0	28.5
Max Allow Headway (MAH), s	3.7	4.9	3.7	4.8	3.7	4.9	3.7	4.8
Max Q Clear (g_c+I1), s	16.0	10.7	40.9	26.5	15.0	40.7	25.3	20.4
Green Ext Time (g_e), s	0.2	12.9	0.0	0.0	0.0	0.0	1.5	5.8
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	1.00	1.00	0.00	0.04	0.83

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3442		3442		3442		3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		5085		5085		5085		5085

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		1583		1583		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	2	0	2	0
Grp Vol (v), veh/h	327	0	896	0	365	0	547	0
Grp Sat Flow (s), veh/h/ln	1721	0	1721	0	1721	0	1721	0
Q Serve Time (g_s), s	14.0	0.0	38.9	0.0	13.0	0.0	23.3	0.0
Cycle Q Clear Time (g_c), s	14.0	0.0	38.9	0.0	13.0	0.0	23.3	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	373	0	906	0	298	0	615	0
V/C Ratio (X)	0.88	0.00	0.99	0.00	1.22	0.00	0.89	0.00
Avail Cap (c_a), veh/h	413	0	906	0	298	0	826	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	65.9	0.0	55.0	0.0	68.5	0.0	60.2	0.0
Incr Delay (d2), s/veh	17.4	0.0	27.0	0.0	126.9	0.0	9.3	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	83.3	0.0	82.0	0.0	195.4	0.0	69.5	0.0
1st-Term Q (Q1), veh/ln	6.7	0.0	18.5	0.0	6.2	0.0	11.1	0.0
2nd-Term Q (Q2), veh/ln	0.9	0.0	3.4	0.0	5.3	0.0	0.8	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.60	0.00	1.35	0.00	1.80	0.00	1.48	0.00
%ile Back of Q (95%), veh/ln	12.1	0.0	29.6	0.0	20.6	0.0	17.5	0.0
%ile Storage Ratio (RQ%)	0.67	0.00	1.66	0.00	1.04	0.00	1.02	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	16.7	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	3	0	3	0	3
Grp Vol (v), veh/h	0	367	0	928	0	1328	0	715
Grp Sat Flow (s), veh/h/ln	0	1695	0	1695	0	1695	0	1695
Q Serve Time (g_s), s	0.0	8.7	0.0	24.5	0.0	38.7	0.0	18.4
Cycle Q Clear Time (g_c), s	0.0	8.7	0.0	24.5	0.0	38.7	0.0	18.4
Lane Grp Cap (c), veh/h	0	1296	0	831	0	1373	0	1278
V/C Ratio (X)	0.00	0.28	0.00	1.12	0.00	0.97	0.00	0.56
Avail Cap (c_a), veh/h	0	1296	0	831	0	1373	0	1278
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	44.9	0.0	62.7	0.0	54.1	0.0	48.9
Incr Delay (d2), s/veh	0.0	0.5	0.0	68.6	0.0	17.6	0.0	0.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	45.4	0.0	131.4	0.0	71.7	0.0	49.5
1st-Term Q (Q1), veh/ln	0.0	4.1	0.0	11.5	0.0	18.1	0.0	8.6

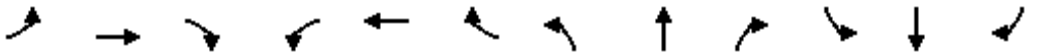
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	5.3	0.0	2.2	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.36	0.00	1.56
%ile Back of Q (95%), veh/ln	0.0	7.5	0.0	30.1	0.0	27.7	0.0	13.5
%ile Storage Ratio (RQ%)	0.00	0.46	0.00	1.03	0.00	0.66	0.00	0.40
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	24.4	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	0	0	0	0	141
Grp Sat Flow (s), veh/h/ln	0	1583	0	1583	0	1583	0	1583
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	403	0	259	0	427	0	398
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35
Avail Cap (c_a), veh/h	0	403	0	259	0	427	0	398
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	46.1
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	46.7
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.8
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.74
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.5
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.48
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	86.5
HCM 2010 LOS	F

No Build Alternative 2030 AM

3: Fairway Dr/FL Turnpike & PGA Blvd Corridor: PGA Boulevard

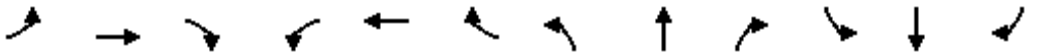


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	50	928	32	239	1093	481	44	75	470	1256	159	148
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.5		7.5	8.0	8.0	7.5	7.5	7.5	7.5	7.5	4.0
Lane Util. Factor	0.97	0.91		0.97	0.95	0.88	1.00	0.95	0.95	0.91	0.91	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	0.89	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.97	1.00
Satd. Flow (prot)	3433	5060		3433	3539	2787	1770	1576	1504	3221	1641	1583
Flt Permitted	0.11	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.12	1.00
Satd. Flow (perm)	405	5060		3433	3539	2787	1770	1576	1504	3221	197	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	53	977	34	252	1151	506	46	79	495	1322	167	156
RTOR Reduction (vph)	0	3	0	0	0	345	0	69	229	0	0	0
Lane Group Flow (vph)	53	1008	0	252	1151	161	46	223	53	991	498	156
Turn Type	pm+pt	NA		Prot	NA	Perm	Prot	NA	Prot	Prot	NA	Free
Protected Phases	7	4		3	8		5	2	2	1	6	
Permitted Phases	4					8						Free
Actuated Green, G (s)	38.9	35.7		12.3	44.8	44.8	7.4	21.1	21.1	42.0	70.6	141.1
Effective Green, g (s)	38.9	35.7		12.3	44.8	44.8	7.4	21.1	21.1	42.0	70.6	141.1
Actuated g/C Ratio	0.28	0.25		0.09	0.32	0.32	0.05	0.15	0.15	0.30	0.50	1.00
Clearance Time (s)	7.0	7.5		7.5	8.0	8.0	7.5	7.5	7.5	7.5	7.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	180	1280		299	1123	884	92	235	224	958	528	1583
v/s Ratio Prot	0.01	0.20		c0.07	c0.33		0.03	0.14	0.04	c0.31	0.28	
v/s Ratio Perm	0.07					0.06					c0.19	0.10
v/c Ratio	0.29	0.79		0.84	1.02	0.18	0.50	0.95	0.24	1.03	0.94	0.10
Uniform Delay, d1	41.1	49.2		63.4	48.1	34.9	65.0	59.5	52.9	49.5	33.4	0.0
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.9	3.3		18.9	33.4	0.1	4.2	46.9	2.5	38.3	25.6	0.1
Delay (s)	42.0	52.4		82.4	81.5	35.0	69.3	106.4	55.4	87.9	58.9	0.1
Level of Service	D	D		F	F	C	E	F	E	F	E	A
Approach Delay (s)		51.9			69.3			80.5			70.8	
Approach LOS		D			E			F			E	

Intersection Summary			
HCM 2000 Control Delay	67.6	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.06		
Actuated Cycle Length (s)	141.1	Sum of lost time (s)	30.0
Intersection Capacity Utilization	98.1%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

No Build Alternative 2030 AM

10: Central Blvd & PGA Blvd Corridor: PGA Boulevard



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	777	1577	35	137	1141	315	39	43	167	292	29	834
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.5	8.5		7.0	8.0	8.0		8.5	8.5	8.5	8.5	7.5
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00		1.00	1.00	0.95	0.95	1.00
Frt	1.00	1.00		1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.98	1.00	0.95	0.96	1.00
Satd. Flow (prot)	3433	5069		1770	5085	1583		1819	1583	1681	1700	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.98	1.00	0.95	0.96	1.00
Satd. Flow (perm)	3433	5069		1770	5085	1583		1819	1583	1681	1700	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	818	1660	37	144	1201	332	41	45	176	307	31	878
RTOR Reduction (vph)	0	2	0	0	0	254	0	0	161	0	0	123
Lane Group Flow (vph)	818	1695	0	144	1201	78	0	86	15	169	169	755
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	pm+ov
Protected Phases	1	6		5	2		4	4		3	3	1
Permitted Phases						2			4			3
Actuated Green, G (s)	47.5	65.2		15.2	32.9	32.9		11.8	11.8	16.1	16.1	63.6
Effective Green, g (s)	47.5	65.2		15.2	32.9	32.9		11.8	11.8	16.1	16.1	63.6
Actuated g/C Ratio	0.34	0.46		0.11	0.23	0.23		0.08	0.08	0.11	0.11	0.45
Clearance Time (s)	7.5	8.5		7.0	8.0	8.0		8.5	8.5	8.5	8.5	7.5
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	1158	2347		191	1188	369		152	132	192	194	715
v/s Ratio Prot	0.24	0.33		0.08	c0.24			c0.05		0.10	0.10	c0.36
v/s Ratio Perm						0.05			0.01			0.12
v/c Ratio	0.71	0.72		0.75	1.01	0.21		0.57	0.11	0.88	0.87	1.06
Uniform Delay, d1	40.6	30.5		61.0	54.0	43.5		62.0	59.7	61.4	61.3	38.6
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.0	2.0		15.5	28.8	1.3		4.8	0.4	39.7	37.9	49.5
Delay (s)	42.6	32.5		76.4	82.8	44.8		66.8	60.0	101.1	99.3	88.1
Level of Service	D	C		E	F	D		E	E	F	F	F
Approach Delay (s)		35.8			74.7			62.3			91.4	
Approach LOS		D			E			E			F	

Intersection Summary			
HCM 2000 Control Delay	60.4	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	140.8	Sum of lost time (s)	32.5
Intersection Capacity Utilization	98.1%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (vph)	0	0	0	418	0	328	0	826	1355	0	1769	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0		6.0		6.0	4.0		6.0	
Lane Util. Factor				0.97		0.88		0.91	1.00		0.86	
Frt				1.00		0.85		1.00	0.85		1.00	
Flt Protected				0.95		1.00		1.00	1.00		1.00	
Satd. Flow (prot)				3433		2787		5085	1583		6408	
Flt Permitted				0.95		1.00		1.00	1.00		1.00	
Satd. Flow (perm)				3433		2787		5085	1583		6408	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	440	0	345	0	869	1426	0	1862	0
RTOR Reduction (vph)	0	0	0	0	0	303	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	440	0	42	0	869	1426	0	1862	0
Turn Type				Prot		Prot		NA	Free		NA	
Protected Phases				3		3		6			2	
Permitted Phases									Free			
Actuated Green, G (s)				17.0		17.0		74.0	141.0		74.0	
Effective Green, g (s)				17.0		17.0		74.0	141.0		74.0	
Actuated g/C Ratio				0.12		0.12		0.52	1.00		0.52	
Clearance Time (s)				6.0		6.0		6.0			6.0	
Vehicle Extension (s)				3.0		3.0		3.0			3.0	
Lane Grp Cap (vph)				413		336		2668	1583		3363	
v/s Ratio Prot				0.13		0.01		0.17			0.29	
v/s Ratio Perm									c0.90			
v/c Ratio				1.07		0.12		0.33	0.90		0.55	
Uniform Delay, d1				62.0		55.4		19.2	0.0		22.4	
Progression Factor				1.00		1.00		1.00	1.00		1.60	
Incremental Delay, d2				62.7		0.2		0.3	8.7		0.7	
Delay (s)				124.7		55.5		19.5	8.7		36.6	
Level of Service				F		E		B	A		D	
Approach Delay (s)		0.0			94.3			12.8			36.6	
Approach LOS		A			F			B			D	

Intersection Summary			
HCM 2000 Control Delay	34.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	1.03		
Actuated Cycle Length (s)	141.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	96.7%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	NBL	NBR	NET	NER	SWL	SWT
Lane Configurations						
Volume (vph)	0	2689	1244	0	0	609
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0	6.0			6.0
Lane Util. Factor		0.76	0.91			0.86
Frt		0.85	1.00			1.00
Flt Protected		1.00	1.00			1.00
Satd. Flow (prot)		3610	5085			6408
Flt Permitted		1.00	1.00			1.00
Satd. Flow (perm)		3610	5085			6408
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	2831	1309	0	0	641
RTOR Reduction (vph)	0	410	0	0	0	0
Lane Group Flow (vph)	0	2421	1309	0	0	641
Turn Type		Perm	NA			NA
Protected Phases			4			
Permitted Phases		2				8
Actuated Green, G (s)		74.0	32.0			55.0
Effective Green, g (s)		74.0	32.0			55.0
Actuated g/C Ratio		0.52	0.23			0.39
Clearance Time (s)		6.0	6.0			6.0
Vehicle Extension (s)		3.0	3.0			3.0
Lane Grp Cap (vph)		1894	1154			2499
v/s Ratio Prot			c0.26			
v/s Ratio Perm		c0.67				c0.10
v/c Ratio		1.28	1.13			0.26
Uniform Delay, d1		33.5	54.5			29.1
Progression Factor		1.00	1.28			1.00
Incremental Delay, d2		129.4	69.8			0.1
Delay (s)		162.9	139.6			29.2
Level of Service		F	F			C
Approach Delay (s)	162.9		139.6			29.2
Approach LOS	F		F			C

Intersection Summary			
HCM 2000 Control Delay	138.6	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.11		
Actuated Cycle Length (s)	141.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	96.7%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	534	2689	467	0	1300	0	215	0	86	0	0	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0		6.0		6.0	6.0	6.0			7.0
Lane Util. Factor	0.97	0.91	1.00		0.91		0.91	0.86	0.95			1.00
Frt	1.00	1.00	0.85		1.00		1.00	0.97	0.85			0.86
Flt Protected	0.95	1.00	1.00		1.00		0.95	0.96	1.00			1.00
Satd. Flow (prot)	3433	5085	1583		5085		3221	1492	1504			1611
Flt Permitted	0.95	1.00	1.00		1.00		0.95	0.96	1.00			1.00
Satd. Flow (perm)	3433	5085	1583		5085		3221	1492	1504			1611
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	562	2831	492	0	1368	0	226	0	91	0	0	12
RTOR Reduction (vph)	0	0	209	0	0	0	0	55	51	0	0	10
Lane Group Flow (vph)	562	2831	283	0	1368	0	163	25	23	0	0	2
Turn Type	Prot	NA	Perm		NA		Prot	NA	Perm			Perm
Protected Phases	7	4			8		5	2				
Permitted Phases			4						2			6
Actuated Green, G (s)	16.9	50.0	50.0		27.1		5.0	28.0	28.0			16.0
Effective Green, g (s)	16.9	50.0	50.0		27.1		5.0	28.0	28.0			16.0
Actuated g/C Ratio	0.19	0.56	0.56		0.30		0.06	0.31	0.31			0.18
Clearance Time (s)	6.0	6.0	6.0		6.0		6.0	6.0	6.0			7.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0	3.0			3.0
Lane Grp Cap (vph)	644	2825	879		1531		178	464	467			286
v/s Ratio Prot	0.16	c0.56			0.27		c0.05	c0.00				
v/s Ratio Perm			0.18					0.01	0.02			0.00
v/c Ratio	0.87	1.00	0.32		0.89		0.92	0.05	0.05			0.01
Uniform Delay, d1	35.5	20.0	10.8		30.1		42.3	21.7	21.7			30.5
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00	1.00			1.00
Incremental Delay, d2	12.5	17.4	0.2		7.1		43.7	0.0	0.2			0.0
Delay (s)	48.0	37.4	11.0		37.2		86.0	21.8	21.9			30.5
Level of Service	D	D	B		D		F	C	C			C
Approach Delay (s)		35.6			37.2			54.8			30.5	
Approach LOS		D			D			D			C	

Intersection Summary			
HCM 2000 Control Delay	37.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	25.0
Intersection Capacity Utilization	66.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	38	93	0	349	0	0	11	61
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					6.0	6.0		6.0			7.0	7.0
Lane Util. Factor					1.00	1.00		0.95			1.00	1.00
Frt					1.00	0.85		1.00			1.00	0.85
Flt Protected					1.00	1.00		1.00			1.00	1.00
Satd. Flow (prot)					1863	1583		3539			1863	1583
Flt Permitted					1.00	1.00		1.00			1.00	1.00
Satd. Flow (perm)					1863	1583		3539			1863	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	0	40	98	0	367	0	0	12	64
RTOR Reduction (vph)	0	0	0	0	0	68	0	0	0	0	0	53
Lane Group Flow (vph)	0	0	0	0	40	30	0	367	0	0	12	11
Turn Type					NA	Perm		NA			NA	Perm
Protected Phases					8			7			6	
Permitted Phases						8						6
Actuated Green, G (s)					27.1	27.1		16.9			16.0	16.0
Effective Green, g (s)					27.1	27.1		16.9			16.0	16.0
Actuated g/C Ratio					0.30	0.30		0.19			0.18	0.18
Clearance Time (s)					6.0	6.0		6.0			7.0	7.0
Vehicle Extension (s)					3.0	3.0		3.0			3.0	3.0
Lane Grp Cap (vph)					560	476		664			331	281
v/s Ratio Prot					c0.02			c0.10			0.01	
v/s Ratio Perm						0.02						c0.01
v/c Ratio					0.07	0.06		0.55			0.04	0.04
Uniform Delay, d1					22.5	22.4		33.1			30.6	30.6
Progression Factor					1.00	1.00		0.15			1.00	1.00
Incremental Delay, d2					0.1	0.1		0.5			0.2	0.3
Delay (s)					22.5	22.5		5.6			30.8	30.9
Level of Service					C	C		A			C	C
Approach Delay (s)		0.0			22.5			5.6			30.9	
Approach LOS		A			C			A			C	

Intersection Summary			
HCM 2000 Control Delay	12.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.18		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	25.0
Intersection Capacity Utilization	25.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	SBL	SBR	NET	NER	SWT
Lane Group Flow (vph)	440	345	869	1426	1862
v/c Ratio	1.07	0.54	0.33	0.90	0.55
Control Delay	120.3	8.8	19.6	9.4	36.8
Queue Delay	631.3	0.0	0.5	0.0	48.7
Total Delay	751.5	8.8	20.1	9.4	85.5
Queue Length 50th (ft)	~228	0	162	0	411
Queue Length 95th (ft)	#339	50	193	0	449
Internal Link Dist (ft)			215		227
Turn Bay Length (ft)					
Base Capacity (vph)	413	639	2668	1583	3363
Starvation Cap Reductn	0	0	0	0	1956
Spillback Cap Reductn	413	0	1256	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	440.00	0.54	0.62	0.90	1.32

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	NBR	NET	SWT
Lane Group Flow (vph)	2831	1309	641
v/c Ratio	1.23	1.13	0.26
Control Delay	129.9	130.0	29.5
Queue Delay	0.0	2.7	0.3
Total Delay	129.9	132.7	29.8
Queue Length 50th (ft)	~1231	~526	115
Queue Length 95th (ft)	#1328	m#574	140
Internal Link Dist (ft)		227	250
Turn Bay Length (ft)			
Base Capacity (vph)	2304	1154	2499
Starvation Cap Reductn	0	465	0
Spillback Cap Reductn	0	0	1137
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	1.23	1.90	0.47

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (veh/h)	0	69	3261	1099	142	709
Future Volume (Veh/h)	0	69	3261	1099	142	709
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	0	73	3433	1157	149	746
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			1299			
pX, platoon unblocked	0.83	0.83			0.83	
vC, conflicting volume	4558	1437			4590	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	4260	494			4299	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	0	83			0	
cM capacity (veh/h)	0	432			27	

Direction, Lane #	NW 1	NE 1	NE 2	NE 3	NE 4	SW 1	SW 2	SW 3	SW 4
Volume Total	73	981	981	981	1647	149	249	249	249
Volume Left	0	0	0	0	0	149	0	0	0
Volume Right	73	0	0	0	1157	0	0	0	0
cSH	432	1700	1700	1700	1700	27	1700	1700	1700
Volume to Capacity	0.17	0.58	0.58	0.58	0.97	5.45	0.15	0.15	0.15
Queue Length 95th (ft)	15	0	0	0	0	Err	0	0	0
Control Delay (s)	15.0	0.0	0.0	0.0	0.0	2290.1	0.0	0.0	0.0
Lane LOS	C					F			
Approach Delay (s)	15.0	0.0				381.3			
Approach LOS	C								

Intersection Summary			
Average Delay	61.6		
Intersection Capacity Utilization	80.2%	ICU Level of Service	D
Analysis Period (min)	15		

Lane Group	SBL	SBR	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	0	0	7	3926	609	0
Future Volume (vph)	0	0	7	3926	609	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	500			0
Storage Lanes	0	0	1			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.86	0.91	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	6408	5085	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	6408	5085	0
Link Speed (mph)	45			45	45	
Link Distance (ft)	247			189	328	
Travel Time (s)	3.7			2.9	5.0	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	7	4133	641	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	7	4133	641	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	90.3%	ICU Level of Service	E
Analysis Period (min)	15		

APPENDIX K

SYNCHRO REPORTS

NO BUILD 2030 PM

CENTRAL BOULEVARD CORRIDOR

Arterial Level of Service: NB Central Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
PGA Blvd	II	45	11.9	216.9	228.8	0.11	1.7	F
117th Ct	II	45	61.9	12.8	74.7	0.77	37.3	A
Hood Rd	II	45	101.7	27.0	128.7	1.27	35.5	A
Donald Ross	II	45	100.8	89.6	190.4	1.26	23.8	C
Total	II		276.3	346.3	622.6	3.41	19.7	D

Arterial Level of Service: SB Central Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Donald Ross	II	45	22.2	54.9	77.1	0.20	9.5	F
Hood Rd	II	45	100.8	21.1	121.9	1.26	37.2	A
117th Ct	II	45	101.7	7.7	109.4	1.27	41.8	A
PGA Blvd	II	45	61.9	71.3	133.2	0.77	20.9	D
Total	II		286.6	155.0	441.6	3.51	28.6	B

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	270	129	846	130	91	879
Number	3	18	2	12	1	6
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	284	136	891	137	96	925
Adj No. of Lanes	1	1	2	1	1	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	344	307	2083	932	413	2413
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.19	0.19	0.59	0.59	0.04	0.68
Ln Grp Delay, s/veh	36.2	29.7	9.8	7.8	6.6	6.0
Ln Grp LOS	D	C	A	A	A	A
Approach Vol, veh/h	420		1028			1021
Approach Delay, s/veh	34.1		9.5			6.0
Approach LOS	C		A			A

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	8			6		
Case No	1.2	7.0	9.0			4.0		
Phs Duration (G+Y+Rc), s	7.5	52.5	20.7			60.0		
Change Period (Y+Rc), s	4.0	5.0	5.0			5.0		
Max Green (Gmax), s	6.0	45.0	60.0			55.0		
Max Allow Headway (MAH), s	3.7	4.8	3.8			4.8		
Max Q Clear (g_c+I1), s	3.6	13.2	14.4			11.1		
Green Ext Time (g_e), s	0.0	16.1	1.3			18.5		
Prob of Phs Call (p_c)	0.88	1.00	1.00			1.00		
Prob of Max Out (p_x)	1.00	0.00	0.00			0.00		
Left-Turn Movement Data								
Assigned Mvmt	1	5	3					
Mvmt Sat Flow, veh/h	1774	0	1774					
Through Movement Data								
Assigned Mvmt		2	8			6		
Mvmt Sat Flow, veh/h		3632	0			3632		
Right-Turn Movement Data								
Assigned Mvmt		12	18			16		
Mvmt Sat Flow, veh/h		1583	1583			0		
Left Lane Group Data								
Assigned Mvmt	1	5	3	0	0	0	0	0
Lane Assignment	(Pr/Pm)							
Lanes in Grp	1	0	1	0	0	0	0	0

Grp Vol (v), veh/h	96	0	284	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1774	0	1774	0	0	0	0	0
Q Serve Time (g_s), s	1.6	0.0	12.4	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	1.6	0.0	12.4	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	546	0	1774	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	49.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	36.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	47.5	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	413	0	344	0	0	0	0	0
V/C Ratio (X)	0.23	0.00	0.82	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	467	0	1320	0	0	0	0	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	6.3	0.0	31.2	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.0	5.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	6.6	0.0	36.2	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.7	0.0	6.1	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	1.00	1.64	0.00	0.00	0.00	0.00	0.00
%ile Back of Q (95%), veh/ln	1.4	0.0	10.8	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.10	0.00	0.57	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	0	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	891	0	0	0	925	0	0
Grp Sat Flow (s), veh/h/ln	0	1770	0	0	0	1770	0	0
Q Serve Time (g_s), s	0.0	11.2	0.0	0.0	0.0	9.1	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	11.2	0.0	0.0	0.0	9.1	0.0	0.0
Lane Grp Cap (c), veh/h	0	2083	0	0	0	2413	0	0
V/C Ratio (X)	0.00	0.43	0.00	0.00	0.00	0.38	0.00	0.00
Avail Cap (c_a), veh/h	0	2083	0	0	0	2413	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	9.1	0.0	0.0	0.0	5.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.6	0.0	0.0	0.0	0.5	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	9.8	0.0	0.0	0.0	6.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	5.4	0.0	0.0	0.0	4.4	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.0	0.0	0.2	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.69	1.00	0.00	0.00	1.77	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	9.5	0.0	0.0	0.0	8.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.42	0.00	0.00	0.00	0.40	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	18	0	0	16	0	0
Lane Assignment		R	R					
Lanes in Grp	0	1	1	0	0	0	0	0
Grp Vol (v), veh/h	0	137	136	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1583	1583	0	0	0	0	0
Q Serve Time (g_s), s	0.0	3.1	6.1	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	3.1	6.1	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	932	307	0	0	0	0	0
V/C Ratio (X)	0.00	0.15	0.44	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	932	1178	0	0	0	0	0
Upstream Filter (I)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	7.5	28.7	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.3	1.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	7.8	29.7	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	1.4	2.7	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	1.80	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	2.6	5.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.18	0.45	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	12.3
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	272	29	23	134	29	490	31	886	58	179	875	88
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	0	-	336	280	-	-	350	-	350
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	286	31	24	141	31	516	33	933	61	188	921	93

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1845	2357	461	1881	2326	497	921	0	0	994	0	0
Stage 1	1298	1298	-	1028	1028	-	-	-	-	-	-	-
Stage 2	547	1059	-	853	1298	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	~ 46	35	547	~ 44	37	519	737	-	-	692	-	-
Stage 1	~ 171	230	-	251	310	-	-	-	-	-	-	-
Stage 2	489	299	-	320	230	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	~ 24	547	-	~ 26	519	737	-	-	692	-	-
Mov Cap-2 Maneuver	-	~ 24	-	-	~ 26	-	-	-	-	-	-	-
Stage 1	~ 163	168	-	240	296	-	-	-	-	-	-	-
Stage 2	~ 3	286	-	182	168	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s			0.3	1.9
HCM LOS	-	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	737	-	-	-	42	-	252	692	-	-
HCM Lane V/C Ratio	0.044	-	-	-	1.303	-	2.168	0.272	-	-
HCM Control Delay (s)	10.1	-	-	-	$ 393.3	-	$ 570.1	12.1	-	-
HCM Lane LOS	B	-	-	-	F	-	F	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-	5.4	-	41.7	1.1	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

DONALD ROSS CORRIDOR

Arterial Level of Service: EB Donald Ross

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
West Ramp	II	45	46.0	27.2	73.2	0.52	25.7	C
East Ramp	II	45	15.7	28.1	43.8	0.14	11.8	F
Parkside Dr	II	45	42.7	83.7	126.4	0.53	15.2	E
Central Blvd	II	45	52.1	41.1	93.2	0.65	25.1	C
Military Trail	II	45	32.9	51.5	84.4	0.34	14.6	E
Total	II		189.4	231.6	421.0	2.19	18.8	D

Arterial Level of Service: WB Donald Ross

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Military Trail	II	45	21.4	65.6	87.0	0.20	8.1	F
Central Blvd	II	45	32.9	71.1	104.0	0.34	11.9	F
Parkside Dr	II	45	52.1	37.6	89.7	0.65	26.1	C
East Ramp	II	45	42.7	10.2	52.9	0.53	36.3	A
West Ramp	II	45	15.7	35.8	51.5	0.14	10.0	F
Total	II		164.8	220.3	385.1	1.87	17.5	D

HCM 2010 methodology does not support clustered intersections.

HCM 2010 methodology does not support clustered intersections.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	437	1166	298	649	1452	144	679	164	763	76	125	610
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	460	1227	314	683	1528	152	715	173	803	80	132	642
Adj No. of Lanes	2	3	1	1	3	1	2	1	1	1	1	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	591	1181	449	568	2091	928	603	375	504	201	201	1117
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.12	0.23	0.23	0.29	0.41	0.41	0.18	0.20	0.20	0.05	0.11	0.11
Ln Grp Delay, s/veh	43.4	93.7	56.3	151.8	38.1	14.1	161.2	53.1	326.2	56.2	71.2	35.4
Ln Grp LOS	D	F	E	F	D	B	F	D	F	E	E	D
Approach Vol, veh/h		2001			2363			1691			854	
Approach Delay, s/veh		76.3			69.4			228.5			42.9	
Approach LOS		E			E			F			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	3.0	2.0	3.0	1.1	3.0	1.1	3.0
Phs Duration (G+Y+Rc), s	25.4	69.6	30.0	23.5	52.0	43.0	16.1	37.4
Change Period (Y+Rc), s	8.0	* 8.5	4.0	* 7.5	8.5	8.5	8.5	7.5
Max Green (Gmax), s	20.0	* 60	26.0	* 16	43.5	34.5	9.7	24.3
Max Allow Headway (MAH), s	3.7	4.8	3.7	4.1	3.7	4.8	3.7	4.1
Max Q Clear (g_c+I1), s	16.9	39.6	28.0	18.0	45.5	36.5	7.9	31.9
Green Ext Time (g_e), s	0.5	17.4	0.0	0.0	0.0	0.0	0.0	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	0.96	1.00
Prob of Max Out (p_x)	1.00	0.85	1.00	1.00	0.00	0.00	1.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3442		3442		1774		1774	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		5085		1863		5085		1863

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		2787		1583		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Pr/Pm)		(Prot)		(Pr/Pm)		(Pr/Pm)	
Lanes in Grp	2	0	2	0	1	0	1	0

Grp Vol (v), veh/h	460	0	715	0	683	0	80	0
Grp Sat Flow (s), veh/h/ln	1721	0	1721	0	1774	0	1774	0
Q Serve Time (g_s), s	14.9	0.0	26.0	0.0	43.5	0.0	5.9	0.0
Cycle Q Clear Time (g_c), s	14.9	0.0	26.0	0.0	43.5	0.0	5.9	0.0
Perm LT Sat Flow (s_l), veh/h/ln	284	0	0	0	335	0	574	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	34.5	0.0	0.0	0.0	36.5	0.0	16.0	0.0
Perm LT Serve Time (g_u), s	23.5	0.0	0.0	0.0	0.0	0.0	16.0	0.0
Perm LT Q Serve Time (g_ps), s	23.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	591	0	603	0	568	0	201	0
V/C Ratio (X)	0.78	0.00	1.19	0.00	1.20	0.00	0.40	0.00
Avail Cap (c_a), veh/h	650	0	603	0	568	0	226	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	37.9	0.0	61.3	0.0	44.8	0.0	55.0	0.0
Incr Delay (d2), s/veh	5.5	0.0	99.9	0.0	107.0	0.0	1.3	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	43.4	0.0	161.2	0.0	151.8	0.0	56.2	0.0
1st-Term Q (Q1), veh/ln	7.0	0.0	12.3	0.0	23.2	0.0	2.9	0.0
2nd-Term Q (Q2), veh/ln	0.4	0.0	8.4	0.0	16.9	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (-26165%), veh/ln	7.5	0.0	20.7	0.0	40.1	0.0	2.9	0.0
%ile Storage Ratio (RQ%)	0.35	0.00	1.50	0.00	3.29	0.00	0.50	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	28.1	0.0	28.7	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.3	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	1	0	3	0	1
Grp Vol (v), veh/h	0	1528	0	132	0	1227	0	173
Grp Sat Flow (s), veh/h/ln	0	1695	0	1863	0	1695	0	1863
Q Serve Time (g_s), s	0.0	37.6	0.0	10.1	0.0	34.5	0.0	12.1
Cycle Q Clear Time (g_c), s	0.0	37.6	0.0	10.1	0.0	34.5	0.0	12.1
Lane Grp Cap (c), veh/h	0	2091	0	201	0	1181	0	375
V/C Ratio (X)	0.00	0.73	0.00	0.66	0.00	1.04	0.00	0.46
Avail Cap (c_a), veh/h	0	2091	0	201	0	1181	0	375
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	36.8	0.0	63.6	0.0	57.0	0.0	52.2
Incr Delay (d2), s/veh	0.0	1.3	0.0	7.6	0.0	36.7	0.0	0.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	38.1	0.0	71.2	0.0	93.7	0.0	53.1
1st-Term Q (Q1), veh/ln	0.0	17.5	0.0	5.2	0.0	16.1	0.0	6.2
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.4	0.0	4.0	0.0	0.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (-26165%), veh/ln	0.0	17.8	0.0	5.6	0.0	20.1	0.0	6.3
%ile Storage Ratio (RQ%)	0.00	0.14	0.00	0.24	0.00	0.19	0.00	0.21
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	11.4	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	2	0	1	0	1
Grp Vol (v), veh/h	0	152	0	642	0	314	0	803
Grp Sat Flow (s), veh/h/ln	0	1583	0	1393	0	1583	0	1583
Q Serve Time (g_s), s	0.0	6.5	0.0	16.0	0.0	26.3	0.0	29.9
Cycle Q Clear Time (g_c), s	0.0	6.5	0.0	16.0	0.0	26.3	0.0	29.9
Prot RT Sat Flow (s_R), veh/h/ln	0.0	1583.3	0.0	1393.3	0.0	1583.3	0.0	1583.3
Prot RT Eff Green (g_R), s	0.0	26.0	0.0	43.5	0.0	7.6	0.0	17.4
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	928	0	1117	0	449	0	504
V/C Ratio (X)	0.00	0.16	0.00	0.57	0.00	0.70	0.00	1.59
Avail Cap (c_a), veh/h	0	928	0	1117	0	449	0	504
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	14.1	0.0	34.7	0.0	47.5	0.0	50.6
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.7	0.0	8.7	0.0	275.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	14.1	0.0	35.4	0.0	56.3	0.0	326.2
1st-Term Q (Q1), veh/ln	0.0	2.8	0.0	10.3	0.0	11.5	0.0	20.6
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	1.1	0.0	38.6
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (-26165%), veh/ln	0.0	2.9	0.0	10.4	0.0	12.6	0.0	59.2
%ile Storage Ratio (RQ%)	0.00	0.15	0.00	0.88	0.00	0.64	0.00	3.34
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	74.6
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4

Intersection Summary	
HCM 2010 Ctrl Delay	107.1
HCM 2010 LOS	F

Notes

User approved ignoring U-Turning movement.

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	432	958	470	304	1254	148	365	616	252	444	463	317
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	455	1008	495	320	1320	156	384	648	265	467	487	334
Adj No. of Lanes	2	3	1	2	3	1	2	2	1	2	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	438	1380	430	380	1294	403	448	595	266	501	666	298
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.13	0.27	0.27	0.11	0.25	0.25	0.13	0.17	0.17	0.15	0.19	0.19
Ln Grp Delay, s/veh	101.4	38.4	132.1	62.0	71.1	36.7	59.7	109.0	99.4	71.1	46.2	133.6
Ln Grp LOS	F	D	F	E	F	D	E	F	F	E	D	F
Approach Vol, veh/h		1958			1796			1297			1288	
Approach Delay, s/veh		76.7			66.5			92.5			77.9	
Approach LOS		E			E			F			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	23.0	36.0	25.0	26.0	21.1	37.9	22.8	28.2
Change Period (Y+Rc), s	9.0	8.0	9.0	7.5	9.0	8.0	8.5	7.5
Max Green (Gmax), s	14.0	28.0	16.0	18.5	13.0	29.0	16.0	19.0
Max Allow Headway (MAH), s	3.7	4.7	3.7	4.6	3.7	4.7	3.7	4.6
Max Q Clear (g_c+I1), s	16.0	30.0	16.8	20.5	12.0	31.9	14.0	22.7
Green Ext Time (g_e), s	0.0	0.0	0.0	0.0	0.1	0.0	0.3	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3442		3442		3442		3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		5085		3539		5085		3539

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		1583		1583		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	
Lanes in Grp	2	0	2	0	2	0	2	0

Grp Vol (v), veh/h	455	0	467	0	320	0	384	0
Grp Sat Flow (s), veh/h/ln	1721	0	1721	0	1721	0	1721	0
Q Serve Time (g_s), s	14.0	0.0	14.8	0.0	10.0	0.0	12.0	0.0
Cycle Q Clear Time (g_c), s	14.0	0.0	14.8	0.0	10.0	0.0	12.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	438	0	501	0	380	0	448	0
V/C Ratio (X)	1.04	0.00	0.93	0.00	0.84	0.00	0.86	0.00
Avail Cap (c_a), veh/h	438	0	501	0	407	0	501	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	48.0	0.0	46.5	0.0	48.0	0.0	46.8	0.0
Incr Delay (d2), s/veh	53.4	0.0	24.6	0.0	14.0	0.0	12.8	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	101.4	0.0	71.1	0.0	62.0	0.0	59.7	0.0
1st-Term Q (Q1), veh/ln	6.6	0.0	7.0	0.0	4.8	0.0	5.7	0.0
2nd-Term Q (Q2), veh/ln	3.2	0.0	1.7	0.0	0.7	0.0	0.8	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (-26165%), veh/ln	9.9	0.0	8.7	0.0	5.5	0.0	6.5	0.0
%ile Storage Ratio (RQ%)	0.47	0.00	0.43	0.00	0.27	0.00	0.31	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	2	0	3	0	2
Grp Vol (v), veh/h	0	1320	0	648	0	1008	0	487
Grp Sat Flow (s), veh/h/ln	0	1695	0	1770	0	1695	0	1770
Q Serve Time (g_s), s	0.0	28.0	0.0	18.5	0.0	19.8	0.0	14.3
Cycle Q Clear Time (g_c), s	0.0	28.0	0.0	18.5	0.0	19.8	0.0	14.3
Lane Grp Cap (c), veh/h	0	1294	0	595	0	1380	0	666
V/C Ratio (X)	0.00	1.02	0.00	1.09	0.00	0.73	0.00	0.73
Avail Cap (c_a), veh/h	0	1294	0	595	0	1380	0	666
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	41.0	0.0	45.7	0.0	36.4	0.0	42.0
Incr Delay (d2), s/veh	0.0	30.1	0.0	63.3	0.0	2.0	0.0	4.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	71.1	0.0	109.0	0.0	38.4	0.0	46.2
1st-Term Q (Q1), veh/ln	0.0	13.1	0.0	9.0	0.0	9.2	0.0	7.0
2nd-Term Q (Q2), veh/ln	0.0	3.6	0.0	5.2	0.0	0.3	0.0	0.4

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (-26165%), veh/ln	0.0	16.7	0.0	14.2	0.0	9.5	0.0	7.3
%ile Storage Ratio (RQ%)	0.00	0.25	0.00	0.62	0.00	0.07	0.00	0.27
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	6.4	0.0	13.2	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.3	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	156	0	265	0	495	0	334
Grp Sat Flow (s), veh/h/ln	0	1583	0	1583	0	1583	0	1583
Q Serve Time (g_s), s	0.0	9.0	0.0	18.4	0.0	29.9	0.0	20.7
Cycle Q Clear Time (g_c), s	0.0	9.0	0.0	18.4	0.0	29.9	0.0	20.7
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	403	0	266	0	430	0	298
V/C Ratio (X)	0.00	0.39	0.00	1.00	0.00	1.15	0.00	1.12
Avail Cap (c_a), veh/h	0	403	0	266	0	430	0	298
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	33.9	0.0	45.7	0.0	40.1	0.0	44.7
Incr Delay (d2), s/veh	0.0	2.8	0.0	53.7	0.0	92.0	0.0	89.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	36.7	0.0	99.4	0.0	132.1	0.0	133.6
1st-Term Q (Q1), veh/ln	0.0	3.9	0.0	8.1	0.0	13.0	0.0	9.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	4.0	0.0	11.0	0.0	7.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (-26165%), veh/ln	0.0	4.2	0.0	12.0	0.0	24.0	0.0	16.4
%ile Storage Ratio (RQ%)	0.00	0.34	0.00	1.18	0.00	2.06	0.00	0.82
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	16.3	0.0	9.1
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.3

Intersection Summary	
HCM 2010 Ctrl Delay	77.3
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	569	800	44	556	1003	148	47	1016	117	338	968	502
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	599	842	46	585	1056	156	49	1069	123	356	1019	528
Adj No. of Lanes	2	3	1	2	3	1	2	3	1	2	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	588	1059	330	617	1102	343	115	1059	330	459	1568	488
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.17	0.21	0.21	0.18	0.22	0.22	0.03	0.21	0.21	0.13	0.31	0.31
Ln Grp Delay, s/veh	91.7	51.2	39.6	72.9	65.3	45.1	59.4	77.4	41.5	62.4	38.0	106.0
Ln Grp LOS	F	D	D	E	E	D	E	F	D	E	D	F
Approach Vol, veh/h		1487			1797			1241			1903	
Approach Delay, s/veh		67.2			66.0			73.1			61.4	
Approach LOS		E			E			E			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	29.0	34.0	24.5	32.5	30.0	33.0	12.5	44.5
Change Period (Y+Rc), s	8.5	8.0	8.5	7.5	8.5	8.0	8.5	7.5
Max Green (Gmax), s	20.5	26.0	16.0	25.0	21.5	25.0	16.5	24.5
Max Allow Headway (MAH), s	3.7	4.8	3.7	4.7	3.7	4.8	3.7	4.7
Max Q Clear (g_c+I1), s	22.5	26.6	14.0	27.0	22.2	20.9	3.7	39.0
Green Ext Time (g_e), s	0.0	0.0	0.3	0.0	0.0	3.5	0.1	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3442		3442		3442		3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		5085		5085		5085		5085

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		1583		1583		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	
Lanes in Grp	2	0	2	0	2	0	2	0

Grp Vol (v), veh/h	599	0	356	0	585	0	49	0
Grp Sat Flow (s), veh/h/ln	1721	0	1721	0	1721	0	1721	0
Q Serve Time (g_s), s	20.5	0.0	12.0	0.0	20.2	0.0	1.7	0.0
Cycle Q Clear Time (g_c), s	20.5	0.0	12.0	0.0	20.2	0.0	1.7	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	588	0	459	0	617	0	115	0
V/C Ratio (X)	1.02	0.00	0.78	0.00	0.95	0.00	0.43	0.00
Avail Cap (c_a), veh/h	588	0	459	0	617	0	473	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	49.7	0.0	50.3	0.0	48.7	0.0	56.9	0.0
Incr Delay (d2), s/veh	41.9	0.0	12.1	0.0	24.2	0.0	2.5	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	91.7	0.0	62.4	0.0	72.9	0.0	59.4	0.0
1st-Term Q (Q1), veh/ln	9.7	0.0	5.7	0.0	9.6	0.0	0.8	0.0
2nd-Term Q (Q2), veh/ln	3.4	0.0	0.8	0.0	2.1	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (-26165%), veh/ln	13.1	0.0	6.5	0.0	11.7	0.0	0.8	0.0
%ile Storage Ratio (RQ%)	0.56	0.00	0.34	0.00	0.53	0.00	0.04	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	3	0	3	0	3
Grp Vol (v), veh/h	0	1056	0	1069	0	842	0	1019
Grp Sat Flow (s), veh/h/ln	0	1695	0	1695	0	1695	0	1695
Q Serve Time (g_s), s	0.0	24.6	0.0	25.0	0.0	18.9	0.0	20.8
Cycle Q Clear Time (g_c), s	0.0	24.6	0.0	25.0	0.0	18.9	0.0	20.8
Lane Grp Cap (c), veh/h	0	1102	0	1059	0	1059	0	1568
V/C Ratio (X)	0.00	0.96	0.00	1.01	0.00	0.79	0.00	0.65
Avail Cap (c_a), veh/h	0	1102	0	1059	0	1059	0	1568
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	46.5	0.0	47.5	0.0	45.1	0.0	35.9
Incr Delay (d2), s/veh	0.0	18.8	0.0	29.9	0.0	6.2	0.0	2.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	65.3	0.0	77.4	0.0	51.2	0.0	38.0
1st-Term Q (Q1), veh/ln	0.0	11.5	0.0	11.7	0.0	8.8	0.0	9.7
2nd-Term Q (Q2), veh/ln	0.0	1.9	0.0	2.9	0.0	0.6	0.0	0.3

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (-26165%), veh/ln	0.0	13.5	0.0	14.6	0.0	9.4	0.0	10.0
%ile Storage Ratio (RQ%)	0.00	0.36	0.00	0.55	0.00	0.14	0.00	0.33
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	2.4	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	156	0	123	0	46	0	528
Grp Sat Flow (s), veh/h/ln	0	1583	0	1583	0	1583	0	1583
Q Serve Time (g_s), s	0.0	10.3	0.0	8.0	0.0	2.8	0.0	37.0
Cycle Q Clear Time (g_c), s	0.0	10.3	0.0	8.0	0.0	2.8	0.0	37.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	343	0	330	0	330	0	488
V/C Ratio (X)	0.00	0.45	0.00	0.37	0.00	0.14	0.00	1.08
Avail Cap (c_a), veh/h	0	343	0	330	0	330	0	488
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	40.8	0.0	40.8	0.0	38.7	0.0	41.5
Incr Delay (d2), s/veh	0.0	4.3	0.0	0.7	0.0	0.9	0.0	64.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	45.1	0.0	41.5	0.0	39.6	0.0	106.0
1st-Term Q (Q1), veh/ln	0.0	4.5	0.0	3.5	0.0	1.2	0.0	16.1
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.1	0.0	0.1	0.0	8.7
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (-26165%), veh/ln	0.0	4.9	0.0	3.5	0.0	1.3	0.0	24.9
%ile Storage Ratio (RQ%)	0.00	0.40	0.00	0.17	0.00	0.05	0.00	0.81
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3

Intersection Summary	
HCM 2010 Ctrl Delay	66.3
HCM 2010 LOS	E

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	3	622	0	44	824	51	6	0	30	28	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	325	-	-	289	-	-	-	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	655	0	46	867	54	6	0	32	29	0	0

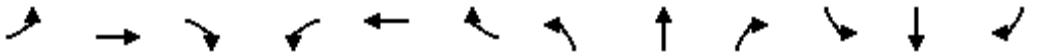
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	921	0	0	655	0	0	1187	1675	327	1321	1648	461
Stage 1	-	-	-	-	-	-	661	661	-	987	987	-
Stage 2	-	-	-	-	-	-	526	1014	-	334	661	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	737	-	-	928	-	-	144	94	669	115	98	547
Stage 1	-	-	-	-	-	-	418	458	-	265	324	-
Stage 2	-	-	-	-	-	-	503	314	-	653	458	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	737	-	-	928	-	-	138	89	669	105	93	547
Mov Cap-2 Maneuver	-	-	-	-	-	-	138	89	-	105	93	-
Stage 1	-	-	-	-	-	-	416	456	-	264	308	-
Stage 2	-	-	-	-	-	-	478	298	-	620	456	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.4	14.7	52.2
HCM LOS			B	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	408	737	-	-	928	-	-	105	-
HCM Lane V/C Ratio	0.093	0.004	-	-	0.05	-	-	0.281	-
HCM Control Delay (s)	14.7	9.9	-	-	9.1	-	-	52.2	0
HCM Lane LOS	B	A	-	-	A	-	-	F	A
HCM 95th %tile Q(veh)	0.3	0	-	-	0.2	-	-	1.1	-

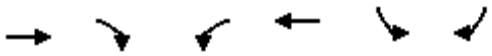
No Build Alternative 2030 PM

2: West Ramp & Donald Ross Corridor: Donald Ross Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	588	63	1146	869	0	0	0	0	410	0	47
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0	4.0	7.0	6.0					6.0		4.0
Lane Util. Factor		0.86	1.00	0.86	0.86					0.94		1.00
Frt		1.00	0.85	1.00	1.00					1.00		0.85
Flt Protected		1.00	1.00	0.95	0.99					0.95		1.00
Satd. Flow (prot)		6408	1583	3044	3179					4990		1583
Flt Permitted		1.00	1.00	0.95	0.64					0.95		1.00
Satd. Flow (perm)		6408	1583	3044	2054					4990		1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	619	66	1206	915	0	0	0	0	432	0	49
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	619	66	1037	1084	0	0	0	0	432	0	49
Turn Type		NA	Free	Prot	NA					Prot		Free
Protected Phases		6		5	2					3		
Permitted Phases			Free									Free
Actuated Green, G (s)		26.5	91.5	30.0	63.5					16.0		91.5
Effective Green, g (s)		26.5	91.5	30.0	63.5					16.0		91.5
Actuated g/C Ratio		0.29	1.00	0.33	0.69					0.17		1.00
Clearance Time (s)		6.0		7.0	6.0					6.0		
Vehicle Extension (s)		3.0		3.0	3.0					3.0		
Lane Grp Cap (vph)		1855	1583	998	1794					872		1583
v/s Ratio Prot		0.10		c0.34	0.20					c0.09		
v/s Ratio Perm			0.04		c0.22							0.03
v/c Ratio		0.33	0.04	1.04	0.60					0.50		0.03
Uniform Delay, d1		25.6	0.0	30.8	7.4					34.1		0.0
Progression Factor		1.00	1.00	1.04	1.03					1.00		1.00
Incremental Delay, d2		0.5	0.0	37.8	0.5					0.4		0.0
Delay (s)		26.0	0.0	69.6	8.1					34.5		0.0
Level of Service		C	A	E	A					C		A
Approach Delay (s)		23.5			38.2			0.0			31.0	
Approach LOS		C			D			A			C	

Intersection Summary			
HCM 2000 Control Delay	34.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	91.5	Sum of lost time (s)	19.0
Intersection Capacity Utilization	62.5%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Lane Group	EBT	EBR	WBL	WBT	SBL	SBR
Lane Group Flow (vph)	619	66	1037	1084	432	49
v/c Ratio	0.36	0.04	1.01	0.91	0.48	0.03
Control Delay	27.2	0.0	61.5	35.8	34.7	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	27.2	0.0	61.5	35.8	34.7	0.0
Queue Length 50th (ft)	83	0	~277	241	78	0
Queue Length 95th (ft)	109	0	#479	#422	108	0
Internal Link Dist (ft)	2056			679		
Turn Bay Length (ft)		433				
Base Capacity (vph)	1727	1583	1025	1192	953	1583
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.36	0.04	1.01	0.91	0.45	0.03

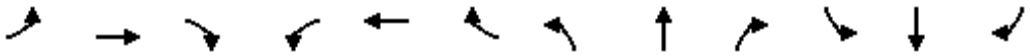
Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

No Build Alternative 2030 PM

9: East Ramp & Donald Ross Corridor: Donald Ross Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	43	955	0	0	1704	1010	311	0	1460	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0			6.0	4.0	6.0		6.0			
Lane Util. Factor	0.97	0.91			0.86	1.00	0.97		0.76			
Frt	1.00	1.00			1.00	0.85	1.00		0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (prot)	3433	5085			6408	1583	3433		3610			
Flt Permitted	0.95	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (perm)	3433	5085			6408	1583	3433		3610			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	45	1005	0	0	1794	1063	327	0	1537	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	1031	0	0	0
Lane Group Flow (vph)	45	1005	0	0	1794	1063	327	0	506	0	0	0
Turn Type	Prot	NA			NA	Free	Prot		Prot			
Protected Phases	1	6			2		7		7			
Permitted Phases						Free						
Actuated Green, G (s)	2.4	26.5			55.1	91.5	16.0		16.0			
Effective Green, g (s)	2.4	26.5			55.1	91.5	16.0		16.0			
Actuated g/C Ratio	0.03	0.29			0.60	1.00	0.17		0.17			
Clearance Time (s)	6.0	6.0			6.0		6.0		6.0			
Vehicle Extension (s)	3.0	3.0			3.0		3.0		3.0			
Lane Grp Cap (vph)	90	1472			3858	1583	600		631			
v/s Ratio Prot	0.01	0.20			0.28		0.10		0.14			
v/s Ratio Perm						c0.67						
v/c Ratio	0.50	0.68			0.47	0.67	0.55		0.80			
Uniform Delay, d1	44.0	28.8			10.1	0.0	34.4		36.2			
Progression Factor	0.60	0.83			1.00	1.00	1.00		1.00			
Incremental Delay, d2	4.0	2.4			0.4	2.3	1.0		7.2			
Delay (s)	30.2	26.2			10.5	2.3	35.4		43.5			
Level of Service	C	C			B	A	D		D			
Approach Delay (s)		26.4			7.4			42.1			0.0	
Approach LOS		C			A			D			A	

Intersection Summary			
HCM 2000 Control Delay	22.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	91.5	Sum of lost time (s)	19.0
Intersection Capacity Utilization	62.5%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	WBT	WBR	NBL	NBR
Lane Group Flow (vph)	45	1005	1794	1063	327	1537
v/c Ratio	0.29	0.73	0.45	0.67	0.53	0.92
Control Delay	29.4	28.1	10.2	2.3	36.5	16.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.4	28.1	10.2	2.3	36.5	16.8
Queue Length 50th (ft)	13	112	165	0	86	63
Queue Length 95th (ft)	m29	134	195	0	128	#196
Internal Link Dist (ft)		679	2740			
Turn Bay Length (ft)						
Base Capacity (vph)	154	1371	3964	1583	655	1700
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.29	0.73	0.45	0.67	0.50	0.90

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

HOOD ROAD CORRIDOR

Arterial Level of Service: EB Hood Road

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Central Blvd	II	45	133.7	29.9	163.6	1.67	36.8	A
Military Trail	II	45	31.0	33.6	64.6	0.31	17.4	D
Total	II		164.7	63.5	228.2	1.98	31.3	B

Arterial Level of Service: WB Hood Road

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Military Trail	II	45	14.9	32.0	46.9	0.14	10.5	F
Central Blvd	II	45	31.0	26.1	57.1	0.31	19.7	D
Total	II		45.9	58.1	104.0	0.45	15.6	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	98	173	82	312	270	188	163	824	351	367	714	224
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	103	182	86	328	284	198	172	867	369	386	752	236
Adj No. of Lanes	2	2	1	2	2	1	2	2	1	2	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	203	480	215	424	707	316	578	1117	500	545	1169	523
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.06	0.14	0.14	0.12	0.20	0.20	0.06	0.32	0.32	0.07	0.33	0.33
Ln Grp Delay, s/veh	33.0	27.3	28.1	36.6	24.1	27.0	15.4	26.4	30.2	21.9	22.1	20.8
Ln Grp LOS	C	C	C	D	C	C	B	C	C	C	C	C
Approach Vol, veh/h		371			810			1408			1374	
Approach Delay, s/veh		29.1			29.9			26.1			21.8	
Approach LOS		C			C			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	3.0	2.0	3.0	1.1	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	11.0	27.5	14.4	15.2	10.0	28.5	10.0	19.6
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green (Gmax), s	5.0	21.5	9.0	35.5	4.0	22.5	6.0	38.5
Max Allow Headway (MAH), s	3.7	4.6	3.7	4.5	3.7	4.6	3.7	4.5
Max Q Clear (g_c+I1), s	7.0	17.1	8.3	5.4	4.2	14.3	4.0	9.8
Green Ext Time (g_e), s	0.0	3.7	0.1	3.8	0.0	6.4	0.0	3.8
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	0.96	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3442		3442		3442		3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3539		3539		3539		3539

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		1583		1583		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Pr/Pm)		(Prot)		(Pr/Pm)		(Prot)	
Lanes in Grp	2	0	2	0	2	0	2	0

Grp Vol (v), veh/h	386	0	328	0	172	0	103	0
Grp Sat Flow (s), veh/h/ln	1721	0	1721	0	1721	0	1721	0
Q Serve Time (g_s), s	5.0	0.0	6.3	0.0	2.2	0.0	2.0	0.0
Cycle Q Clear Time (g_c), s	5.0	0.0	6.3	0.0	2.2	0.0	2.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	435	0	0	0	550	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	21.5	0.0	0.0	0.0	21.5	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	6.4	0.0	0.0	0.0	10.2	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	6.4	0.0	0.0	0.0	2.1	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	545	0	424	0	578	0	203	0
V/C Ratio (X)	0.71	0.00	0.77	0.00	0.30	0.00	0.51	0.00
Avail Cap (c_a), veh/h	545	0	455	0	578	0	303	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	17.7	0.0	29.0	0.0	15.2	0.0	31.1	0.0
Incr Delay (d2), s/veh	4.2	0.0	7.6	0.0	0.3	0.0	2.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	21.9	0.0	36.6	0.0	15.4	0.0	33.0	0.0
1st-Term Q (Q1), veh/ln	1.2	0.0	3.0	0.0	1.1	0.0	0.9	0.0
2nd-Term Q (Q2), veh/ln	0.3	0.0	0.4	0.0	0.0	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (-26165%), veh/ln	1.6	0.0	3.4	0.0	1.1	0.0	1.0	0.0
%ile Storage Ratio (RQ%)	0.13	0.00	0.06	0.00	0.08	0.00	0.05	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	2	0	2	0	2
Grp Vol (v), veh/h	0	867	0	182	0	752	0	284
Grp Sat Flow (s), veh/h/ln	0	1770	0	1770	0	1770	0	1770
Q Serve Time (g_s), s	0.0	15.1	0.0	3.2	0.0	12.3	0.0	4.8
Cycle Q Clear Time (g_c), s	0.0	15.1	0.0	3.2	0.0	12.3	0.0	4.8
Lane Grp Cap (c), veh/h	0	1117	0	480	0	1169	0	707
V/C Ratio (X)	0.00	0.78	0.00	0.38	0.00	0.64	0.00	0.40
Avail Cap (c_a), veh/h	0	1117	0	1844	0	1169	0	2000
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	21.1	0.0	26.8	0.0	19.4	0.0	23.7
Incr Delay (d2), s/veh	0.0	5.3	0.0	0.5	0.0	2.7	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	26.4	0.0	27.3	0.0	22.1	0.0	24.1
1st-Term Q (Q1), veh/ln	0.0	7.3	0.0	1.6	0.0	6.0	0.0	2.3
2nd-Term Q (Q2), veh/ln	0.0	0.8	0.0	0.0	0.0	0.4	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (-26165%), veh/ln	0.0	8.2	0.0	1.6	0.0	6.4	0.0	2.4
%ile Storage Ratio (RQ%)	0.00	0.48	0.00	0.05	0.00	0.17	0.00	0.04
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	369	0	86	0	236	0	198
Grp Sat Flow (s), veh/h/ln	0	1583	0	1583	0	1583	0	1583
Q Serve Time (g_s), s	0.0	14.2	0.0	3.4	0.0	8.0	0.0	7.8
Cycle Q Clear Time (g_c), s	0.0	14.2	0.0	3.4	0.0	8.0	0.0	7.8
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	500	0	215	0	523	0	316
V/C Ratio (X)	0.00	0.74	0.00	0.40	0.00	0.45	0.00	0.63
Avail Cap (c_a), veh/h	0	500	0	825	0	523	0	895
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	20.8	0.0	26.9	0.0	18.0	0.0	24.9
Incr Delay (d2), s/veh	0.0	9.4	0.0	1.2	0.0	2.8	0.0	2.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	30.2	0.0	28.1	0.0	20.8	0.0	27.0
1st-Term Q (Q1), veh/ln	0.0	6.1	0.0	1.5	0.0	3.5	0.0	3.4
2nd-Term Q (Q2), veh/ln	0.0	1.3	0.0	0.1	0.0	0.4	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (-26165%), veh/ln	0.0	7.4	0.0	1.6	0.0	3.9	0.0	3.6
%ile Storage Ratio (RQ%)	0.00	0.67	0.00	0.13	0.00	0.29	0.00	0.26
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	25.7
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	175	415	39	346	413	94	146	839	327	119	832	296
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	184	437	41	364	435	99	154	883	344	125	876	312
Adj No. of Lanes	2	2	1	2	2	1	2	3	1	2	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	370	708	317	409	748	334	198	1144	356	172	1106	344
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.11	0.20	0.20	0.12	0.21	0.21	0.06	0.22	0.22	0.05	0.22	0.22
Ln Grp Delay, s/veh	38.4	33.2	27.1	58.8	31.7	28.8	62.6	34.1	70.4	60.8	35.4	60.1
Ln Grp LOS	D	C	C	E	C	C	E	C	E	E	D	E
Approach Vol, veh/h		662			898			1381			1313	
Approach Delay, s/veh		34.3			42.4			46.4			43.7	
Approach LOS		C			D			D			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	13.1	24.9	17.1	24.9	12.5	25.5	18.0	24.0
Change Period (Y+Rc), s	8.5	7.5	8.5	8.0	8.5	7.5	8.5	8.0
Max Green (Gmax), s	4.6	17.4	8.6	16.9	4.0	18.0	9.5	16.0
Max Allow Headway (MAH), s	3.7	4.6	3.7	4.8	3.7	4.6	3.7	4.8
Max Q Clear (g_c+l1), s	5.5	17.4	6.0	10.8	4.9	19.2	10.3	11.0
Green Ext Time (g_e), s	0.0	0.0	0.1	2.9	0.0	0.0	0.0	2.5
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3442		3442		3442		3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		5085		3539		5085		3539

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		1583		1583		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	
Lanes in Grp	2	0	2	0	2	0	2	0

Grp Vol (v), veh/h	154	0	184	0	125	0	364	0
Grp Sat Flow (s), veh/h/ln	1721	0	1721	0	1721	0	1721	0
Q Serve Time (g_s), s	3.5	0.0	4.0	0.0	2.9	0.0	8.3	0.0
Cycle Q Clear Time (g_c), s	3.5	0.0	4.0	0.0	2.9	0.0	8.3	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	198	0	370	0	172	0	409	0
V/C Ratio (X)	0.78	0.00	0.50	0.00	0.73	0.00	0.89	0.00
Avail Cap (c_a), veh/h	198	0	370	0	172	0	409	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	37.2	0.0	33.7	0.0	37.5	0.0	34.7	0.0
Incr Delay (d2), s/veh	25.4	0.0	4.7	0.0	23.3	0.0	24.1	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	62.6	0.0	38.4	0.0	60.8	0.0	58.8	0.0
1st-Term Q (Q1), veh/ln	1.7	0.0	1.9	0.0	1.4	0.0	3.9	0.0
2nd-Term Q (Q2), veh/ln	0.7	0.0	0.2	0.0	0.6	0.0	1.4	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (-26165%), veh/ln	2.4	0.0	2.2	0.0	1.9	0.0	5.3	0.0
%ile Storage Ratio (RQ%)	0.14	0.00	0.10	0.00	0.08	0.00	0.25	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	2	0	3	0	2
Grp Vol (v), veh/h	0	876	0	435	0	883	0	437
Grp Sat Flow (s), veh/h/ln	0	1695	0	1770	0	1695	0	1770
Q Serve Time (g_s), s	0.0	13.0	0.0	8.8	0.0	13.0	0.0	9.0
Cycle Q Clear Time (g_c), s	0.0	13.0	0.0	8.8	0.0	13.0	0.0	9.0
Lane Grp Cap (c), veh/h	0	1106	0	748	0	1144	0	708
V/C Ratio (X)	0.00	0.79	0.00	0.58	0.00	0.77	0.00	0.62
Avail Cap (c_a), veh/h	0	1106	0	748	0	1144	0	708
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	29.6	0.0	28.4	0.0	29.1	0.0	29.2
Incr Delay (d2), s/veh	0.0	5.8	0.0	3.3	0.0	5.1	0.0	4.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	35.4	0.0	31.7	0.0	34.1	0.0	33.2
1st-Term Q (Q1), veh/ln	0.0	6.1	0.0	4.3	0.0	6.1	0.0	4.4
2nd-Term Q (Q2), veh/ln	0.0	0.6	0.0	0.3	0.0	0.5	0.0	0.4

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (-26165%), veh/ln	0.0	6.7	0.0	4.6	0.0	6.6	0.0	4.8
%ile Storage Ratio (RQ%)	0.00	0.18	0.00	0.18	0.00	0.22	0.00	0.08
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	312	0	99	0	344	0	41
Grp Sat Flow (s), veh/h/ln	0	1583	0	1583	0	1583	0	1583
Q Serve Time (g_s), s	0.0	15.4	0.0	4.2	0.0	17.2	0.0	1.7
Cycle Q Clear Time (g_c), s	0.0	15.4	0.0	4.2	0.0	17.2	0.0	1.7
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	344	0	334	0	356	0	317
V/C Ratio (X)	0.00	0.91	0.00	0.30	0.00	0.97	0.00	0.13
Avail Cap (c_a), veh/h	0	344	0	334	0	356	0	317
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	30.5	0.0	26.5	0.0	30.7	0.0	26.3
Incr Delay (d2), s/veh	0.0	29.6	0.0	2.2	0.0	39.8	0.0	0.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	60.1	0.0	28.8	0.0	70.4	0.0	27.1
1st-Term Q (Q1), veh/ln	0.0	6.7	0.0	1.8	0.0	7.5	0.0	0.7
2nd-Term Q (Q2), veh/ln	0.0	2.8	0.0	0.2	0.0	3.9	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (-26165%), veh/ln	0.0	9.6	0.0	2.1	0.0	11.4	0.0	0.8
%ile Storage Ratio (RQ%)	0.00	0.40	0.00	0.17	0.00	0.95	0.00	0.06
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	42.8
HCM 2010 LOS	D

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	20	345	528	90	44	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	399	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	21	363	556	95	46	5

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	556	0	-	0	961	556
Stage 1	-	-	-	-	556	-
Stage 2	-	-	-	-	405	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1015	-	-	-	284	531
Stage 1	-	-	-	-	574	-
Stage 2	-	-	-	-	673	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1015	-	-	-	277	531
Mov Cap-2 Maneuver	-	-	-	-	277	-
Stage 1	-	-	-	-	574	-
Stage 2	-	-	-	-	656	-

Approach	EB	WB	SB
HCM Control Delay, s	0.5	0	20
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1015	-	-	-	291
HCM Lane V/C Ratio	0.021	-	-	-	0.177
HCM Control Delay (s)	8.6	0	-	-	20
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.6

MILITARY TRAIL CORRIDOR

Arterial Level of Service: NB N Military Trail

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
PGA Blvd	II	45	15.7	106.4	122.1	0.14	4.2	F
Kyoto Gardens Dr	II	45	43.4	30.0	73.4	0.49	24.2	C
Hood Road	II	45	104.9	44.2	149.1	1.31	31.7	B
Donald Ross	II	45	102.8	58.8	161.6	1.29	28.6	B
Total	II		266.8	239.4	506.2	3.23	23.0	C

Arterial Level of Service: SB N Military Trail

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Donald Ross	II	45	20.4	35.4	55.8	0.19	12.0	F
Hood Road	II	45	102.8	31.0	133.8	1.29	34.6	B
Kyoto Gardens Dr	II	45	104.9	43.4	148.3	1.31	31.8	B
PGA Blvd	II	45	43.4	74.7	118.1	0.49	15.0	E
Total	II		271.5	184.5	456.0	3.28	25.9	C

Movement	WBL	WBR	WBR2	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SER
Lane Configurations											
Volume (veh/h)	352	441	149	99	1334	338	23	1270	59	0	0
Number	7	14	14	1	6	16	5	2	12		
Initial Q, veh	0	0	0	0	0	0	0	0	0		
Ped-Bike Adj (A_pbT)	1.00	1.00	1.00	1.00		1.00	1.00		1.00		
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900		
Adj Flow Rate, veh/h	371	157	157	104	1404	356	24	1337	62		
Adj No. of Lanes	2	1	1	1	3	1	1	3	0		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2		
Opposing Right Turn Influence	Yes			Yes			Yes				
Cap, veh/h	934	430	430	117	1785	556	94	1649	76		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Prop Arrive On Green	0.27	0.27	0.27	0.07	0.35	0.35	0.05	0.33	0.33		
Ln Grp Delay, s/veh	23.7	24.6	24.6	91.4	25.5	26.1	40.8	29.5	34.4		
Ln Grp LOS	C	C	C	F	C	C	D	C	C		
Approach Vol, veh/h	528				1864			1423			Timer:
Approach Delay, s/veh	24.0				29.3			31.3			Assigned Phs
Approach LOS	C				C			C			Case No
Phs Duration (G+Y+Rc), s		13.0	33.5		29.0	11.5	35.0				
Change Period (Y+Rc), s		8.0	* 8.5		8.5	7.5	8.5				
Max Green (Gmax), s		5.0	* 25		20.5	4.0	26.0				
Max Allow Headway (MAH), s		3.7	4.8		3.8	3.7	4.8				
Max Q Clear (g_c+I1), s		6.4	20.5		8.6	3.0	20.7				
Green Ext Time (g_e), s		0.0	4.3		1.5	0.0	5.0				
Prob of Phs Call (p_c)		1.00	1.00		1.00	1.00	1.00				
Prob of Max Out (p_x)		0.00	0.00		0.00	0.00	0.00				
Left-Turn Movement Data											
Assigned Mvmt		1			7	5					
Mvmt Sat Flow, veh/h		1774			3442	1774					
Through Movement Data											
Assigned Mvmt			2		4		6				
Mvmt Sat Flow, veh/h			4981		0		5085				
Right-Turn Movement Data											
Assigned Mvmt			12		14		16				
Mvmt Sat Flow, veh/h			231		1583		1583				
Left Lane Group Data											
Assigned Mvmt		1	0	0	7	5	0	0	0		
Lane Assignment		(Prot)				(Prot)					
Lanes in Grp		1	0	0	2	1	0	0	0		
Grp Vol (v), veh/h		104	0	0	371	24	0	0	0		
Grp Sat Flow (s), veh/h/ln		1774	0	0	1721	1774	0	0	0		
Q Serve Time (g_s), s		4.4	0.0	0.0	6.6	1.0	0.0	0.0	0.0		

Cycle Q Clear Time (g_c), s	4.4	0.0	0.0	6.6	1.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1721	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	117	0	0	934	94	0	0	0
V/C Ratio (X)	0.89	0.00	0.00	0.40	0.26	0.00	0.00	0.00
Avail Cap (c_a), veh/h	117	0	0	934	94	0	0	0
Upstream Filter (I)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	35.0	0.0	0.0	22.5	34.3	0.0	0.0	0.0
Incr Delay (d2), s/veh	56.5	0.0	0.0	1.3	6.4	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	91.4	0.0	0.0	23.7	40.8	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	2.1	0.0	0.0	3.1	0.5	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	1.8	0.0	0.0	0.2	0.2	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	0.00	1.80	1.80	0.00	0.00	0.00
%ile Back of Q (95%), veh/ln	7.2	0.0	0.0	6.0	1.2	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.61	0.00	0.00	0.21	0.08	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	3	0	0
Grp Vol (v), veh/h	0	910	0	0	0	1404	0	0
Grp Sat Flow (s), veh/h/ln	0	1695	0	0	0	1695	0	0
Q Serve Time (g_s), s	0.0	18.5	0.0	0.0	0.0	18.7	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	18.5	0.0	0.0	0.0	18.7	0.0	0.0
Lane Grp Cap (c), veh/h	0	1123	0	0	0	1785	0	0
V/C Ratio (X)	0.00	0.81	0.00	0.00	0.00	0.79	0.00	0.00
Avail Cap (c_a), veh/h	0	1123	0	0	0	1785	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	23.1	0.0	0.0	0.0	22.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	6.4	0.0	0.0	0.0	3.6	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	29.5	0.0	0.0	0.0	25.5	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	8.6	0.0	0.0	0.0	8.7	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	1.0	0.0	0.0	0.0	0.6	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.53	0.00	1.00	0.00	1.54	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	14.7	0.0	0.0	0.0	14.3	0.0	0.0

%ile Storage Ratio (RQ%)	0.00	0.06	0.00	0.00	0.00	0.91	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment		T+R		R		R		
Lanes in Grp	0	1	0	1	0	1	0	0
Grp Vol (v), veh/h	0	489	0	157	0	356	0	0
Grp Sat Flow (s), veh/h/ln	0	1822	0	1583	0	1583	0	0
Q Serve Time (g_s), s	0.0	18.5	0.0	6.1	0.0	14.2	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	18.5	0.0	6.1	0.0	14.2	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.13	0.00	1.00	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	603	0	430	0	556	0	0
V/C Ratio (X)	0.00	0.81	0.00	0.37	0.00	0.64	0.00	0.00
Avail Cap (c_a), veh/h	0	603	0	430	0	556	0	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	23.1	0.0	22.2	0.0	20.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	11.3	0.0	2.4	0.0	5.6	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	34.4	0.0	24.6	0.0	26.1	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	9.2	0.0	5.7	0.0	6.1	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	1.9	0.0	0.3	0.0	0.9	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.49	0.00	1.67	0.00	1.62	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	16.6	0.0	10.0	0.0	11.3	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.06	0.00	0.34	0.00	0.96	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	29.3
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

NORTHLAKE BOULEVARD CORRIDOR

Arterial Level of Service: EB Northlake Blvd

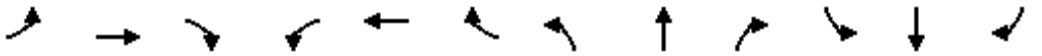
Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Keating Dr	II	45	17.3	24.1	41.4	0.16	13.8	E
West Ramps	II	45	12.7	53.7	66.4	0.12	6.3	F
East Ramps	II	45	11.1	38.6	49.7	0.10	7.4	F
Roan Ln	II	45	8.8	0.3	9.1	0.08	32.1	B
Sandtree Dr	II	45	13.5	22.4	35.9	0.12	12.4	F
Total	II		63.4	139.1	202.5	0.58	10.3	F

Arterial Level of Service: WB Northlake Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Sunrise Dr	II	45	15.3	54.2	69.5	0.14	7.3	F
Roan Ln	II	45	13.5	6.1	19.6	0.12	22.8	C
East Ramps	II	45	8.8	45.9	54.7	0.08	5.3	F
West Ramps	II	45	11.1	98.1	109.2	0.10	3.4	F
Keating Dr	II	45	12.7	16.2	28.9	0.12	14.5	E
Total	II		61.4	220.5	281.9	0.56	7.2	F

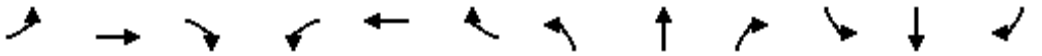
No Build Alternative 2030 PM

3: Keating Dr & Northlake Blvd Corridor: Northlake Boulevard



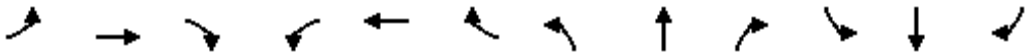
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	22	1927	56	163	2229	148	47	3	228	98	2	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.0	5.0	4.0	5.0	5.0	6.0	6.0	6.0		6.0	
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	0.95	0.95	1.00		0.95	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85		1.00	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.96	1.00		0.95	
Satd. Flow (prot)	1770	5085	1583	1770	5085	1583	1681	1695	1583		3374	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.76	1.00		0.73	
Satd. Flow (perm)	1770	5085	1583	1770	5085	1583	1681	1351	1583		2586	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	23	2028	59	172	2346	156	49	3	240	103	2	0
RTOR Reduction (vph)	0	0	31	0	0	67	0	0	147	0	0	0
Lane Group Flow (vph)	23	2028	28	172	2346	89	26	26	93	0	105	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6			2			4			
Actuated Green, G (s)	1.5	41.9	41.9	10.1	50.5	50.5	1.5	21.6	21.6		14.1	
Effective Green, g (s)	1.5	41.9	41.9	10.1	50.5	50.5	1.5	21.6	21.6		14.1	
Actuated g/C Ratio	0.02	0.47	0.47	0.11	0.57	0.57	0.02	0.24	0.24		0.16	
Clearance Time (s)	4.0	5.0	5.0	4.0	5.0	5.0	6.0	6.0	6.0		6.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)	29	2404	748	201	2898	902	28	335	385		411	
v/s Ratio Prot	0.01	0.40		c0.10	c0.46		c0.02	0.00				
v/s Ratio Perm			0.02			0.06		0.02	c0.06		0.04	
v/c Ratio	0.79	0.84	0.04	0.86	0.81	0.10	0.93	0.08	0.24		0.26	
Uniform Delay, d1	43.4	20.5	12.5	38.5	15.2	8.7	43.5	25.8	26.9		32.6	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	
Incremental Delay, d2	83.5	3.8	0.1	28.2	2.6	0.2	137.8	0.1	0.3		0.3	
Delay (s)	126.9	24.3	12.6	66.7	17.8	8.9	181.3	25.9	27.3		33.0	
Level of Service	F	C	B	E	B	A	F	C	C		C	
Approach Delay (s)		25.1			20.4			40.9			33.0	
Approach LOS		C			C			D			C	

Intersection Summary			
HCM 2000 Control Delay	23.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	88.6	Sum of lost time (s)	21.0
Intersection Capacity Utilization	71.0%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



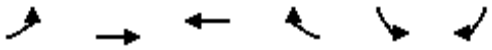
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1672	567	1200	1958	0	0	0	0	475	0	707
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0	4.0	7.0	6.5					6.0		6.0
Lane Util. Factor		0.81	1.00	0.97	0.91					0.97		0.88
Frt		1.00	0.85	1.00	1.00					1.00		0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (prot)		7544	1583	3433	5085					3433		2787
Flt Permitted		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (perm)		7544	1583	3433	5085					3433		2787
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	1760	597	1263	2061	0	0	0	0	500	0	744
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	542
Lane Group Flow (vph)	0	1760	597	1263	2061	0	0	0	0	500	0	202
Turn Type		NA	Free	Prot	NA					Prot		Perm
Protected Phases		6		5	2					3		
Permitted Phases			Free									6
Actuated Green, G (s)		38.0	140.0	46.0	49.5					37.0		38.0
Effective Green, g (s)		38.0	140.0	46.0	49.5					37.0		38.0
Actuated g/C Ratio		0.27	1.00	0.33	0.35					0.26		0.27
Clearance Time (s)		6.0		7.0	6.5					6.0		6.0
Vehicle Extension (s)		3.0		3.0	3.0					3.0		3.0
Lane Grp Cap (vph)		2047	1583	1127	1797					907		756
v/s Ratio Prot		0.23		c0.37	c0.41					c0.15		
v/s Ratio Perm			0.38									0.07
v/c Ratio		0.86	0.38	1.12	1.15					0.55		0.27
Uniform Delay, d1		48.5	0.0	47.0	45.2					44.4		40.1
Progression Factor		1.00	1.00	1.62	0.66					1.00		1.00
Incremental Delay, d2		5.0	0.7	58.8	68.6					0.7		0.9
Delay (s)		53.5	0.7	134.8	98.6					45.1		40.9
Level of Service		D	A	F	F					D		D
Approach Delay (s)		40.1			112.3			0.0			42.6	
Approach LOS		D			F			A			D	

Intersection Summary			
HCM 2000 Control Delay	75.2	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	95.6%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	909	1238	0	0	2167	737	991	0	1175	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	6.0			6.5	4.0	6.0		6.5			
Lane Util. Factor	0.97	0.91			0.81	1.00	0.97		0.88			
Frt	1.00	1.00			1.00	0.85	1.00		0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (prot)	3433	5085			7544	1583	3433		2787			
Flt Permitted	0.95	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (perm)	3433	5085			7544	1583	3433		2787			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	957	1303	0	0	2281	776	1043	0	1237	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	650	0	0	0
Lane Group Flow (vph)	957	1303	0	0	2281	776	1043	0	587	0	0	0
Turn Type	Prot	NA			NA	Free	Prot		Perm			
Protected Phases	1	6			2		7					
Permitted Phases						Free			2			
Actuated Green, G (s)	34.0	38.0			49.5	140.0	37.0		49.5			
Effective Green, g (s)	34.0	38.0			49.5	140.0	37.0		49.5			
Actuated g/C Ratio	0.24	0.27			0.35	1.00	0.26		0.35			
Clearance Time (s)	7.0	6.0			6.5		6.0		6.5			
Vehicle Extension (s)	3.0	3.0			3.0		3.0		3.0			
Lane Grp Cap (vph)	833	1380			2667	1583	907		985			
v/s Ratio Prot	c0.28	c0.26			c0.30		c0.30					
v/s Ratio Perm						0.49			0.21			
v/c Ratio	1.15	0.94			0.86	0.49	1.15		0.60			
Uniform Delay, d1	53.0	50.0			41.9	0.0	51.5		37.1			
Progression Factor	1.34	0.57			1.00	1.00	1.00		1.00			
Incremental Delay, d2	75.6	9.4			3.8	1.1	80.3		2.7			
Delay (s)	146.4	37.9			45.7	1.1	131.8		39.7			
Level of Service	F	D			D	A	F		D			
Approach Delay (s)		83.9			34.4			81.8			0.0	
Approach LOS		F			C			F			A	

Intersection Summary			
HCM 2000 Control Delay	63.3	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.04		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	95.6%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	107	2065	2896	87	0	103
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	8.0	6.5	6.5	4.0		4.0
Lane Util. Factor	1.00	0.91	0.76	1.00		1.00
Frt	1.00	1.00	1.00	0.85		0.86
Flt Protected	0.95	1.00	1.00	1.00		1.00
Satd. Flow (prot)	1770	5085	8494	1583		1611
Flt Permitted	0.95	1.00	1.00	1.00		1.00
Satd. Flow (perm)	1770	5085	8494	1583		1611
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	113	2174	3048	92	0	108
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	113	2174	3048	92	0	108
Turn Type	Prot	NA	NA	Free		Free
Protected Phases	1	6	2			
Permitted Phases				Free		Free
Actuated Green, G (s)	3.2	39.3	21.6	39.3		39.3
Effective Green, g (s)	3.2	39.3	21.6	39.3		39.3
Actuated g/C Ratio	0.08	1.00	0.55	1.00		1.00
Clearance Time (s)	8.0	6.5	6.5			
Vehicle Extension (s)	3.0	3.0	3.0			
Lane Grp Cap (vph)	144	5085	4668	1583		1611
v/s Ratio Prot	0.06	c0.43	c0.36			
v/s Ratio Perm				0.06		0.07
v/c Ratio	0.78	0.43	0.65	0.06		0.07
Uniform Delay, d1	17.7	0.0	6.2	0.0		0.0
Progression Factor	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	23.8	0.1	0.3	0.1		0.1
Delay (s)	41.6	0.1	6.6	0.1		0.1
Level of Service	D	A	A	A		A
Approach Delay (s)		2.1	6.4		0.1	
Approach LOS		A	A		A	

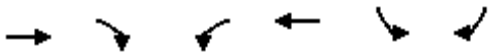
Intersection Summary			
HCM 2000 Control Delay	4.5	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	39.3	Sum of lost time (s)	14.5
Intersection Capacity Utilization	46.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	142	1649	274	117	2462	138	376	1	121	47	1	145
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.5	7.5	7.0	7.5		6.0	6.5	6.5	6.0	6.5	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91		0.97	0.95	0.95	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.85	0.85	1.00	0.85	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1583	3433	5045		3433	1508	1504	1770	1585	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1583	3433	5045		3433	1508	1504	1770	1585	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	149	1736	288	123	2592	145	396	1	127	49	1	153
RTOR Reduction (vph)	0	0	131	0	4	0	0	55	54	0	103	0
Lane Group Flow (vph)	149	1736	157	123	2733	0	396	10	9	49	51	0
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6						4			
Actuated Green, G (s)	11.0	73.4	73.4	8.6	71.0		15.0	19.1	19.1	6.9	11.0	
Effective Green, g (s)	11.0	73.4	73.4	8.6	71.0		15.0	19.1	19.1	6.9	11.0	
Actuated g/C Ratio	0.08	0.54	0.54	0.06	0.53		0.11	0.14	0.14	0.05	0.08	
Clearance Time (s)	7.0	7.5	7.5	7.0	7.5		6.0	6.5	6.5	6.0	6.5	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	144	2764	860	218	2653		381	213	212	90	129	
v/s Ratio Prot	c0.08	0.34		0.04	c0.54		c0.12	0.01		0.03	c0.03	
v/s Ratio Perm			0.10						0.01			
v/c Ratio	1.03	0.63	0.18	0.56	1.03		1.04	0.05	0.04	0.54	0.40	
Uniform Delay, d1	62.0	21.3	15.6	61.4	32.0		60.0	50.1	50.0	62.5	58.8	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	84.5	1.1	0.5	3.3	25.7		56.7	0.1	0.1	6.6	2.0	
Delay (s)	146.5	22.4	16.1	64.7	57.7		116.7	50.2	50.1	69.1	60.8	
Level of Service	F	C	B	E	E		F	D	D	E	E	
Approach Delay (s)		30.1			58.0			100.4			62.8	
Approach LOS		C			E			F			E	

Intersection Summary			
HCM 2000 Control Delay	51.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	135.0	Sum of lost time (s)	27.0
Intersection Capacity Utilization	100.8%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

No Build Alternative 2030 PM

6: West Ramps & Northlake Blvd Corridor: Northlake Boulevard



Lane Group	EBT	EBR	WBL	WBT	SBL	SBR
Lane Group Flow (vph)	1760	597	1263	2061	500	744
v/c Ratio	0.86	0.38	1.12	1.15	0.55	0.57
Control Delay	53.7	0.7	124.4	98.1	47.1	4.5
Queue Delay	0.6	0.0	0.9	0.1	0.0	0.0
Total Delay	54.2	0.7	125.3	98.2	47.1	4.5
Queue Length 50th (ft)	378	0	~701	~798	203	0
Queue Length 95th (ft)	418	0	m#745	m#793	261	52
Internal Link Dist (ft)	533			458		
Turn Bay Length (ft)						
Base Capacity (vph)	2047	1583	1127	1797	907	1298
Starvation Cap Reductn	0	0	201	32	0	0
Spillback Cap Reductn	72	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.89	0.38	1.36	1.17	0.55	0.57

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBT	WBT	WBR	NBL	NBR
Lane Group Flow (vph)	957	1303	2281	776	1043	1237
v/c Ratio	1.15	0.94	0.86	0.49	1.15	0.76
Control Delay	135.6	38.6	45.9	1.1	125.9	10.1
Queue Delay	0.0	0.0	46.6	0.0	2.8	0.0
Total Delay	135.6	38.6	92.6	1.1	128.7	10.1
Queue Length 50th (ft)	~541	134	473	0	~574	96
Queue Length 95th (ft)	#679	#495	513	0	#708	197
Internal Link Dist (ft)		458	348			
Turn Bay Length (ft)				400		
Base Capacity (vph)	833	1380	2667	1583	907	1635
Starvation Cap Reductn	0	0	681	0	0	0
Spillback Cap Reductn	0	0	409	0	326	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.15	0.94	1.15	0.49	1.80	0.76

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

PGA BOULEVARD CORRIDOR

Arterial Level of Service: EB PGA Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
FL Turnpike	II	45	16.8	48.9	65.7	0.15	8.4	F
Central Blvd	II	45	36.7	33.7	70.4	0.39	20.0	D
N Military Trail	II	45	81.7	103.7	185.4	1.02	19.8	D
West Ramps	II	45	20.5	16.9	37.4	0.19	18.1	D
East Ramps	II	45	6.3	60.1	66.4	0.06	3.2	F
Lake Victoria Garden	II	45	56.6	20.0	76.6	0.71	33.2	B
Total	II		218.6	283.3	501.9	2.52	18.1	D

Arterial Level of Service: WB PGA Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Lake Victoria Garden	II	45	13.7	175.8	189.5	0.13	2.4	F
East Ramps	II	45	56.6	20.6	77.2	0.71	33.0	B
West Ramps	II	45	6.3	38.5	44.8	0.06	4.7	F
N Military Trail	II	45	20.5	43.4	63.9	0.19	10.6	F
Central Blvd	II	45	25.0	51.0	76.0	0.24	11.4	F
FL Turnpike	II	45	36.7	131.2	167.9	0.39	8.4	F
Total	II		158.8	460.5	619.3	1.71	9.9	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	182	1061	818	592	810	1025	856	760	589	1016	697	172
Future Volume (veh/h)	182	1061	818	592	810	1025	856	760	589	1016	697	172
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	192	1117	0	623	853	0	901	800	0	1069	734	181
Adj No. of Lanes	2	3	1	2	3	1	2	3	1	2	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	172	1035	322	467	1507	469	974	781	243	946	758	236
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.05	0.20	0.00	0.14	0.30	0.00	0.28	0.15	0.00	0.28	0.15	0.15
Ln Grp Delay, s/veh	169.5	107.6	0.0	224.8	43.2	0.0	61.1	97.8	0.0	122.5	84.2	71.2
Ln Grp LOS	F	F		F	D		E	F		F	F	E
Approach Vol, veh/h		1309			1476			1701			1984	
Approach Delay, s/veh		116.7			119.8			78.3			103.6	
Approach LOS		F			F			E			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	15.0	49.0	47.0	29.0	28.0	36.0	47.6	28.4
Change Period (Y+Rc), s	8.0	7.5	8.5	7.5	9.0	7.5	8.0	7.5
Max Green (Gmax), s	7.0	41.5	38.5	21.5	19.0	28.5	44.0	16.5
Max Allow Headway (MAH), s	3.7	4.9	3.7	4.8	3.7	4.9	3.7	4.8
Max Q Clear (g_c+I1), s	9.0	21.9	40.5	23.5	21.0	30.5	37.6	22.1
Green Ext Time (g_e), s	0.0	12.6	0.0	0.0	0.0	0.0	2.0	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	1.00	1.00	0.00	0.45	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3442		3442		3442		3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		5085		5085		5085		5085

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		1583		1583		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	2	0	2	0
Grp Vol (v), veh/h	192	0	1069	0	623	0	901	0
Grp Sat Flow (s), veh/h/ln	1721	0	1721	0	1721	0	1721	0
Q Serve Time (g_s), s	7.0	0.0	38.5	0.0	19.0	0.0	35.6	0.0
Cycle Q Clear Time (g_c), s	7.0	0.0	38.5	0.0	19.0	0.0	35.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	172	0	946	0	467	0	974	0
V/C Ratio (X)	1.12	0.00	1.13	0.00	1.33	0.00	0.92	0.00
Avail Cap (c_a), veh/h	172	0	946	0	467	0	1082	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	66.5	0.0	50.8	0.0	60.5	0.0	48.7	0.0
Incr Delay (d2), s/veh	103.0	0.0	71.7	0.0	164.3	0.0	12.3	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	169.5	0.0	122.5	0.0	224.8	0.0	61.1	0.0
1st-Term Q (Q1), veh/ln	3.3	0.0	18.3	0.0	9.0	0.0	16.9	0.0
2nd-Term Q (Q2), veh/ln	2.5	0.0	9.4	0.0	10.7	0.0	1.7	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	1.80	0.00	1.80	0.00	1.38	0.00
%ile Back of Q (95%), veh/ln	10.4	0.0	49.9	0.0	35.4	0.0	25.6	0.0
%ile Storage Ratio (RQ%)	0.57	0.00	2.80	0.00	1.80	0.00	1.48	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	5.0	0.0	30.6	0.0	39.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.3	0.0	0.3	0.0	0.3	0.0	0.0	0.0

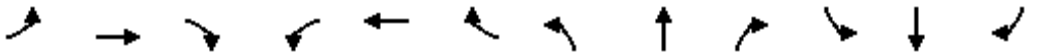
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	3	0	3	0	3
Grp Vol (v), veh/h	0	853	0	800	0	1117	0	734
Grp Sat Flow (s), veh/h/ln	0	1695	0	1695	0	1695	0	1695
Q Serve Time (g_s), s	0.0	19.9	0.0	21.5	0.0	28.5	0.0	20.1
Cycle Q Clear Time (g_c), s	0.0	19.9	0.0	21.5	0.0	28.5	0.0	20.1
Lane Grp Cap (c), veh/h	0	1507	0	781	0	1035	0	758
V/C Ratio (X)	0.00	0.57	0.00	1.02	0.00	1.08	0.00	0.97
Avail Cap (c_a), veh/h	0	1507	0	781	0	1035	0	758
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	41.6	0.0	59.3	0.0	55.8	0.0	59.2
Incr Delay (d2), s/veh	0.0	1.5	0.0	38.5	0.0	51.8	0.0	25.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	43.2	0.0	97.8	0.0	107.6	0.0	84.2
1st-Term Q (Q1), veh/ln	0.0	9.3	0.0	10.1	0.0	13.3	0.0	9.4

2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	2.8	0.0	5.0	0.0	1.8
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.53	0.00	1.80	0.00	1.80	0.00	1.49
%ile Back of Q (95%), veh/ln	0.0	14.6	0.0	23.1	0.0	32.9	0.0	16.7
%ile Storage Ratio (RQ%)	0.00	0.91	0.00	0.79	0.00	0.79	0.00	0.49
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	4.8	0.0	20.4	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.3	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	0	0	0	0	181
Grp Sat Flow (s), veh/h/ln	0	1583	0	1583	0	1583	0	1583
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.4
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.4
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	469	0	243	0	322	0	236
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.77
Avail Cap (c_a), veh/h	0	469	0	243	0	322	0	236
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	57.2
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	71.2
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.7
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.59
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.2
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.69
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	103.3
HCM 2010 LOS	F

No Build Alternative 2030 PM

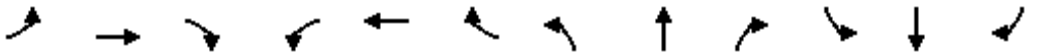
3: FL Turnpike & PGA Blvd Corridor: PGA Boulevard



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	107	706	47	270	1427	709	65	230	709	753	55	114
Future Volume (vph)	107	706	47	270	1427	709	65	230	709	753	55	114
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.5		7.5	8.0	8.0	7.5	7.5	7.5	7.5	7.5	4.0
Lane Util. Factor	0.97	0.91		0.97	0.95	0.88	1.00	0.95	0.95	0.91	0.91	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	0.92	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.96	1.00
Satd. Flow (prot)	3433	5038		3433	3539	2787	1770	1630	1504	3221	1630	1583
Flt Permitted	0.10	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.08	1.00
Satd. Flow (perm)	353	5038		3433	3539	2787	1770	1630	1504	3221	131	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	113	743	49	284	1502	746	68	242	746	793	58	120
RTOR Reduction (vph)	0	5	0	0	0	405	0	27	186	0	0	0
Lane Group Flow (vph)	113	787	0	284	1502	341	68	484	291	563	288	120
Turn Type	pm+pt	NA		Prot	NA	Perm	Prot	NA	Prot	Prot	NA	Free
Protected Phases	7	4		3	8		5	2	2	1	6	
Permitted Phases	4					8						Free
Actuated Green, G (s)	44.9	40.9		17.1	54.0	54.0	8.7	39.0	39.0	24.5	71.0	151.5
Effective Green, g (s)	44.9	40.9		17.1	54.0	54.0	8.7	39.0	39.0	24.5	71.0	151.5
Actuated g/C Ratio	0.30	0.27		0.11	0.36	0.36	0.06	0.26	0.26	0.16	0.47	1.00
Clearance Time (s)	7.0	7.5		7.5	8.0	8.0	7.5	7.5	7.5	7.5	7.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	185	1360		387	1261	993	101	419	387	520	303	1583
v/s Ratio Prot	0.02	0.16		c0.08	c0.42		0.04	c0.30	0.19	c0.17	0.15	
v/s Ratio Perm	0.16					0.12					0.29	0.08
v/c Ratio	0.61	0.58		0.73	1.19	0.34	0.67	1.16	0.75	1.08	0.95	0.08
Uniform Delay, d1	43.4	47.8		65.0	48.8	35.7	70.0	56.2	51.8	63.5	38.6	0.0
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	5.9	0.6		7.0	94.1	0.2	16.3	93.9	12.6	63.7	38.5	0.1
Delay (s)	49.3	48.4		72.0	142.9	36.0	86.3	150.1	64.4	127.2	77.0	0.1
Level of Service	D	D		E	F	D	F	F	E	F	E	A
Approach Delay (s)		48.5			103.4			107.3			96.6	
Approach LOS		D			F			F			F	

Intersection Summary			
HCM 2000 Control Delay	93.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.17		
Actuated Cycle Length (s)	151.5	Sum of lost time (s)	30.0
Intersection Capacity Utilization	109.2%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1049	879	24	240	1251	1066	48	54	160	235	32	868
Future Volume (vph)	1049	879	24	240	1251	1066	48	54	160	235	32	868
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.5	8.5		7.0	8.0	8.0		8.5	8.5	8.5	8.5	7.5
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00		1.00	1.00	0.95	0.95	1.00
Frt	1.00	1.00		1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.98	1.00	0.95	0.96	1.00
Satd. Flow (prot)	3433	5065		1770	5085	1583		1820	1583	1681	1705	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.98	1.00	0.95	0.96	1.00
Satd. Flow (perm)	3433	5065		1770	5085	1583		1820	1583	1681	1705	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1104	925	25	253	1317	1122	51	57	168	247	34	914
RTOR Reduction (vph)	0	2	0	0	0	274	0	0	153	0	0	103
Lane Group Flow (vph)	1104	948	0	253	1317	848	0	108	15	141	140	811
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	pm+ov
Protected Phases	1	6		5	2		4	4		3	3	1
Permitted Phases						2			4			3
Actuated Green, G (s)	41.5	67.4		27.1	53.0	53.0		14.3	14.3	16.5	16.5	58.0
Effective Green, g (s)	41.5	67.4		27.1	53.0	53.0		14.3	14.3	16.5	16.5	58.0
Actuated g/C Ratio	0.26	0.43		0.17	0.34	0.34		0.09	0.09	0.10	0.10	0.37
Clearance Time (s)	7.5	8.5		7.0	8.0	8.0		8.5	8.5	8.5	8.5	7.5
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	902	2163		303	1707	531		164	143	175	178	581
v/s Ratio Prot	0.32	0.19		0.14	0.26			c0.06		0.08	0.08	c0.37
v/s Ratio Perm						c0.54			0.01			0.15
v/c Ratio	1.22	0.44		0.83	0.77	1.60		0.66	0.11	0.81	0.79	1.40
Uniform Delay, d1	58.2	31.9		63.2	47.0	52.4		69.4	65.9	69.1	68.9	49.9
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	110.7	0.6		17.7	3.4	277.2		9.2	0.3	31.4	28.7	188.4
Delay (s)	168.9	32.5		80.9	50.4	329.6		78.6	66.2	100.5	97.6	238.3
Level of Service	F	C		F	D	F		E	E	F	F	F
Approach Delay (s)		105.8			169.6			71.1			205.6	
Approach LOS		F			F			E			F	

Intersection Summary			
HCM 2000 Control Delay	151.1	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.39		
Actuated Cycle Length (s)	157.8	Sum of lost time (s)	32.5
Intersection Capacity Utilization	121.4%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	0	0	0	152	0	147	0	1147	1761	0	2549	0
Future Volume (vph)	0	0	0	152	0	147	0	1147	1761	0	2549	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0		6.0		6.0	4.0		6.0	
Lane Util. Factor				0.97		0.88		0.91	1.00		0.86	
Frt				1.00		0.85		1.00	0.85		1.00	
Flt Protected				0.95		1.00		1.00	1.00		1.00	
Satd. Flow (prot)				3433		2787		5085	1583		6408	
Flt Permitted				0.95		1.00		1.00	1.00		1.00	
Satd. Flow (perm)				3433		2787		5085	1583		6408	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	160	0	155	0	1207	1854	0	2683	0
RTOR Reduction (vph)	0	0	0	0	0	147	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	160	0	8	0	1207	1854	0	2683	0
Turn Type				Prot		Prot		NA	Free		NA	
Protected Phases				3		3		6			2	
Permitted Phases									Free			
Actuated Green, G (s)				4.0		4.0		36.0	80.0		36.0	
Effective Green, g (s)				4.0		4.0		36.0	80.0		36.0	
Actuated g/C Ratio				0.05		0.05		0.45	1.00		0.45	
Clearance Time (s)				6.0		6.0		6.0			6.0	
Vehicle Extension (s)				3.0		3.0		3.0			3.0	
Lane Grp Cap (vph)				171		139		2288	1583		2883	
v/s Ratio Prot				0.05		0.00		0.24			0.42	
v/s Ratio Perm									c1.17			
v/c Ratio				0.94		0.06		0.53	1.17		0.93	
Uniform Delay, d1				37.9		36.2		15.9	40.0		20.8	
Progression Factor				1.00		1.00		1.00	1.00		1.51	
Incremental Delay, d2				49.9		0.2		0.9	84.2		6.5	
Delay (s)				87.8		36.4		16.7	124.2		38.1	
Level of Service				F		D		B	F		D	
Approach Delay (s)		0.0			62.5			81.8			38.1	
Approach LOS		A			E			F			D	

Intersection Summary			
HCM 2000 Control Delay	61.4	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.51		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	67.7%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	NBL	NBR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	0	1398	1299	0	0	1531
Future Volume (vph)	0	1398	1299	0	0	1531
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0	6.0			6.0
Lane Util. Factor		0.76	0.91			0.86
Frt		0.85	1.00			1.00
Flt Protected		1.00	1.00			1.00
Satd. Flow (prot)		3610	5085			6408
Flt Permitted		1.00	1.00			1.00
Satd. Flow (perm)		3610	5085			6408
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	1472	1367	0	0	1612
RTOR Reduction (vph)	0	212	0	0	0	0
Lane Group Flow (vph)	0	1260	1367	0	0	1612
Turn Type		Perm	NA			NA
Protected Phases			4			
Permitted Phases		2				8
Actuated Green, G (s)		36.0	22.0			32.0
Effective Green, g (s)		36.0	22.0			32.0
Actuated g/C Ratio		0.45	0.28			0.40
Clearance Time (s)		6.0	6.0			6.0
Vehicle Extension (s)		3.0	3.0			3.0
Lane Grp Cap (vph)		1624	1398			2563
v/s Ratio Prot			c0.27			
v/s Ratio Perm		c0.35				c0.25
v/c Ratio		0.78	0.98			0.63
Uniform Delay, d1		18.6	28.8			19.2
Progression Factor		1.00	1.48			1.00
Incremental Delay, d2		3.7	16.7			0.5
Delay (s)		22.3	59.2			19.7
Level of Service		C	E			B
Approach Delay (s)	22.3		59.2			19.7
Approach LOS	C		E			B

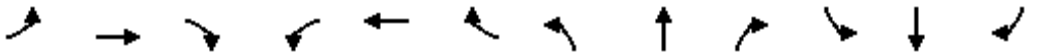
Intersection Summary			
HCM 2000 Control Delay	32.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	67.7%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	607	1765	451	0	2554	0	300	0	129	0	0	47
Future Volume (vph)	607	1765	451	0	2554	0	300	0	129	0	0	47
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0		6.0		6.0	6.0	6.0			7.0
Lane Util. Factor	0.97	0.91	1.00		0.91		0.91	0.86	0.95			1.00
Frt	1.00	1.00	0.85		1.00		1.00	0.96	0.85			0.86
Flt Protected	0.95	1.00	1.00		1.00		0.95	0.96	1.00			1.00
Satd. Flow (prot)	3433	5085	1583		5085		3221	1482	1504			1611
Flt Permitted	0.95	1.00	1.00		1.00		0.95	0.96	1.00			1.00
Satd. Flow (perm)	3433	5085	1583		5085		3221	1482	1504			1611
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	639	1858	475	0	2688	0	316	0	136	0	0	49
RTOR Reduction (vph)	0	0	184	0	0	0	0	77	44	0	0	41
Lane Group Flow (vph)	639	1858	291	0	2688	0	234	36	61	0	0	8
Turn Type	Prot	NA	Perm		NA		Prot	NA	Perm			Perm
Protected Phases	7	4			8		5	2				
Permitted Phases			4						2			6
Actuated Green, G (s)	23.0	90.0	90.0		61.0		16.2	48.0	48.0			24.8
Effective Green, g (s)	23.0	90.0	90.0		61.0		16.2	48.0	48.0			24.8
Actuated g/C Ratio	0.15	0.60	0.60		0.41		0.11	0.32	0.32			0.17
Clearance Time (s)	6.0	6.0	6.0		6.0		6.0	6.0	6.0			7.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0	3.0			3.0
Lane Grp Cap (vph)	526	3051	949		2067		347	474	481			266
v/s Ratio Prot	c0.19	0.37			c0.53		c0.07	0.01				
v/s Ratio Perm			0.18					0.02	c0.04			0.01
v/c Ratio	1.21	0.61	0.31		1.30		0.67	0.08	0.13			0.03
Uniform Delay, d1	63.5	18.9	14.7		44.5		64.4	35.5	36.1			52.5
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00	1.00			1.00
Incremental Delay, d2	113.2	0.3	0.2		138.9		5.1	0.1	0.5			0.2
Delay (s)	176.7	19.3	14.9		183.4		69.5	35.6	36.7			52.7
Level of Service	F	B	B		F		E	D	D			D
Approach Delay (s)		52.4			183.4			53.4			52.7	
Approach LOS		D			F			D			D	

Intersection Summary			
HCM 2000 Control Delay	109.6	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	25.0
Intersection Capacity Utilization	88.1%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	17	236	0	359	0	0	47	230
Future Volume (vph)	0	0	0	0	17	236	0	359	0	0	47	230
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					6.0	6.0		6.0			7.0	7.0
Lane Util. Factor					1.00	1.00		0.95			1.00	1.00
Frt					1.00	0.85		1.00			1.00	0.85
Flt Protected					1.00	1.00		1.00			1.00	1.00
Satd. Flow (prot)					1863	1583		3539			1863	1583
Flt Permitted					1.00	1.00		1.00			1.00	1.00
Satd. Flow (perm)					1863	1583		3539			1863	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	0	18	248	0	378	0	0	49	242
RTOR Reduction (vph)	0	0	0	0	0	147	0	0	0	0	0	202
Lane Group Flow (vph)	0	0	0	0	18	101	0	378	0	0	49	40
Turn Type					NA	Perm		NA			NA	Perm
Protected Phases					8			7			6	
Permitted Phases						8						6
Actuated Green, G (s)					61.0	61.0		23.0			24.8	24.8
Effective Green, g (s)					61.0	61.0		23.0			24.8	24.8
Actuated g/C Ratio					0.41	0.41		0.15			0.17	0.17
Clearance Time (s)					6.0	6.0		6.0			7.0	7.0
Vehicle Extension (s)					3.0	3.0		3.0			3.0	3.0
Lane Grp Cap (vph)					757	643		542			308	261
v/s Ratio Prot					0.01			c0.11			c0.03	
v/s Ratio Perm						c0.06						0.03
v/c Ratio					0.02	0.16		0.70			0.16	0.15
Uniform Delay, d1					26.7	28.2		60.2			53.7	53.6
Progression Factor					1.00	1.00		0.16			1.00	1.00
Incremental Delay, d2					0.0	0.1		0.4			1.1	1.2
Delay (s)					26.7	28.3		9.7			54.8	54.9
Level of Service					C	C		A			D	D
Approach Delay (s)		0.0			28.2			9.7			54.8	
Approach LOS		A			C			A			D	

Intersection Summary			
HCM 2000 Control Delay	29.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.24		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	25.0
Intersection Capacity Utilization	34.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	SBL	SBR	NET	NER	SWT
Lane Group Flow (vph)	160	155	1207	1854	2683
v/c Ratio	0.94	0.54	0.53	1.17	0.93
Control Delay	95.1	14.5	16.9	92.2	38.5
Queue Delay	210.0	0.0	0.2	0.0	45.7
Total Delay	305.1	14.5	17.1	92.2	84.1
Queue Length 50th (ft)	42	0	153	~286	411
Queue Length 95th (ft)	#100	31	192	#542	#471
Internal Link Dist (ft)			215		227
Turn Bay Length (ft)					
Base Capacity (vph)	171	286	2288	1583	2883
Starvation Cap Reductn	0	0	0	0	1042
Spillback Cap Reductn	165	0	311	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	26.67	0.54	0.61	1.17	1.46

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

No Build Alternative 2030 PM

30: PGA Blvd & East Ramps Corridor: PGA Boulevard

Lane Group	NBR	NET	SWT
Lane Group Flow (vph)	1472	1367	1612
v/c Ratio	0.80	0.98	0.63
Control Delay	17.7	60.1	20.6
Queue Delay	0.0	40.5	48.9
Total Delay	17.7	100.5	69.5
Queue Length 50th (ft)	200	278	182
Queue Length 95th (ft)	277	m#360	220
Internal Link Dist (ft)		227	250
Turn Bay Length (ft)			
Base Capacity (vph)	1836	1398	2563
Starvation Cap Reductn	0	184	0
Spillback Cap Reductn	0	0	1299
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.80	1.13	1.28

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

No Build Alternative 2030 PM
46: PGA Blvd & RCA Corridor: PGA Boulevard

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (veh/h)	0	506	2035	789	83	2195
Future Volume (Veh/h)	0	506	2035	789	83	2195
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	0	533	2142	831	87	2311
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			1299			
pX, platoon unblocked	0.85	0.85			0.85	
vC, conflicting volume	3502	951			2973	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	3046	30			2421	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	39			47	
cM capacity (veh/h)	4	878			163	

Direction, Lane #	NW 1	NE 1	NE 2	NE 3	NE 4	SW 1	SW 2	SW 3	SW 4
Volume Total	533	612	612	612	1137	87	770	770	770
Volume Left	0	0	0	0	0	87	0	0	0
Volume Right	533	0	0	0	831	0	0	0	0
cSH	878	1700	1700	1700	1700	163	1700	1700	1700
Volume to Capacity	0.61	0.36	0.36	0.36	0.67	0.53	0.45	0.45	0.45
Queue Length 95th (ft)	106	0	0	0	0	67	0	0	0
Control Delay (s)	15.2	0.0	0.0	0.0	0.0	49.8	0.0	0.0	0.0
Lane LOS	C					E			
Approach Delay (s)	15.2	0.0				1.8			
Approach LOS	C								

Intersection Summary			
Average Delay	2.1		
Intersection Capacity Utilization	80.7%	ICU Level of Service	D
Analysis Period (min)	15		

Lane Group	SBL	SBR	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	0	0	155	2542	1531	0
Future Volume (vph)	0	0	155	2542	1531	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	500			0
Storage Lanes	0	0	1			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.86	0.91	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	6408	5085	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	6408	5085	0
Link Speed (mph)	45			45	45	
Link Distance (ft)	247			189	328	
Travel Time (s)	3.7			2.9	5.0	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	163	2676	1612	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	163	2676	1612	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Free			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 99.3%		ICU Level of Service F	
Analysis Period (min) 15			

APPENDIX L

SYNCHRO REPORTS

NO BUILD 2040 AM

CENTRAL BOULEVARD CORRIDOR

Arterial Level of Service: NB Central Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
PGA Blvd	II	45	11.9	198.6	210.5	0.11	1.9	F
117th Ct	II	45	61.9	14.1	76.0	0.77	36.7	A
Hood Rd	II	45	101.7	40.0	141.7	1.27	32.3	B
Donald Ross	II	45	100.8	73.6	174.4	1.26	26.0	C
Total	II		276.3	326.3	602.6	3.41	20.4	D

Arterial Level of Service: SB Central Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Donald Ross	II	45	22.2	69.2	91.4	0.20	8.0	F
Hood Rd	II	45	100.8	31.8	132.6	1.26	34.2	B
117th Ct	II	45	101.7	9.8	111.5	1.27	41.0	A
PGA Blvd	II	45	61.9	150.8	212.7	0.77	13.1	E
Total	II		286.6	261.6	548.2	3.51	23.0	C

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	297	163	920	260	72	1148
Number	3	18	2	12	1	6
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	313	172	968	274	76	1208
Adj No. of Lanes	1	1	2	1	1	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	375	335	2048	916	346	2362
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.21	0.21	0.58	0.58	0.04	0.67
Ln Grp Delay, s/veh	36.0	30.0	10.8	9.7	7.5	7.7
Ln Grp LOS	D	C	B	A	A	A
Approach Vol, veh/h	485		1242			1284
Approach Delay, s/veh	33.9		10.6			7.7
Approach LOS	C		B			A

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	8			6		
Case No	1.2	7.0	9.0			4.0		
Phs Duration (G+Y+Rc), s	7.3	52.7	22.4			60.0		
Change Period (Y+Rc), s	4.0	5.0	5.0			5.0		
Max Green (Gmax), s	6.0	45.0	60.0			55.0		
Max Allow Headway (MAH), s	3.7	4.8	3.8			4.8		
Max Q Clear (g_c+I1), s	3.3	15.1	15.9			16.2		
Green Ext Time (g_e), s	0.0	20.0	1.5			23.5		
Prob of Phs Call (p_c)	0.82	1.00	1.00			1.00		
Prob of Max Out (p_x)	1.00	0.00	0.00			0.00		
Left-Turn Movement Data								
Assigned Mvmt	1	5	3					
Mvmt Sat Flow, veh/h	1774	0	1774					
Through Movement Data								
Assigned Mvmt		2	8			6		
Mvmt Sat Flow, veh/h		3632	0			3632		
Right-Turn Movement Data								
Assigned Mvmt		12	18			16		
Mvmt Sat Flow, veh/h		1583	1583			0		
Left Lane Group Data								
Assigned Mvmt	1	5	3	0	0	0	0	0
Lane Assignment	(Pr/Pm)							
Lanes in Grp	1	0	1	0	0	0	0	0

Grp Vol (v), veh/h	76	0	313	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1774	0	1774	0	0	0	0	0
Q Serve Time (g_s), s	1.3	0.0	13.9	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	1.3	0.0	13.9	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	446	0	1774	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	49.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	34.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	47.7	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	346	0	375	0	0	0	0	0
V/C Ratio (X)	0.22	0.00	0.83	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	404	0	1292	0	0	0	0	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	7.1	0.0	31.1	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.0	4.9	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	7.5	0.0	36.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.6	0.0	6.8	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	1.00	1.61	0.00	0.00	0.00	0.00	0.00
%ile Back of Q (95%), veh/ln	1.2	0.0	11.7	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.09	0.00	0.62	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	0	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	968	0	0	0	1208	0	0
Grp Sat Flow (s), veh/h/ln	0	1770	0	0	0	1770	0	0
Q Serve Time (g_s), s	0.0	13.1	0.0	0.0	0.0	14.2	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	13.1	0.0	0.0	0.0	14.2	0.0	0.0
Lane Grp Cap (c), veh/h	0	2048	0	0	0	2362	0	0
V/C Ratio (X)	0.00	0.47	0.00	0.00	0.00	0.51	0.00	0.00
Avail Cap (c_a), veh/h	0	2048	0	0	0	2362	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	10.1	0.0	0.0	0.0	6.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.8	0.0	0.0	0.0	0.8	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	10.8	0.0	0.0	0.0	7.7	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	6.3	0.0	0.0	0.0	6.9	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.0	0.0	0.3	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.64	1.00	0.00	0.00	1.61	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	10.7	0.0	0.0	0.0	11.5	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.47	0.00	0.00	0.00	0.58	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	18	0	0	16	0	0
Lane Assignment		R	R					
Lanes in Grp	0	1	1	0	0	0	0	0
Grp Vol (v), veh/h	0	274	172	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1583	1583	0	0	0	0	0
Q Serve Time (g_s), s	0.0	7.3	7.9	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	7.3	7.9	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	916	335	0	0	0	0	0
V/C Ratio (X)	0.00	0.30	0.51	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	916	1153	0	0	0	0	0
Upstream Filter (I)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	8.8	28.8	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.8	1.2	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	9.7	30.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	3.1	3.4	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.1	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	1.80	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	6.0	6.4	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.40	0.58	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	13.1
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	117	13	10	65	12	450	21	959	75	237	1158	40
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	0	-	336	280	-	-	350	-	350
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	123	14	11	68	13	474	22	1009	79	249	1219	42

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2273	2851	609	2208	2811	544	1219	0	0	1088	0	0
Stage 1	1718	1718	-	1093	1093	-	-	-	-	-	-	-
Stage 2	555	1133	-	1115	1718	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	~ 22	17	438	~ 24	18	483	568	-	-	637	-	-
Stage 1	~ 93	143	-	229	288	-	-	-	-	-	-	-
Stage 2	484	276	-	222	143	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	~ 10	438	-	~ 11	483	568	-	-	637	-	-
Mov Cap-2 Maneuver	-	~ 10	-	-	~ 11	-	-	-	-	-	-	-
Stage 1	~ 89	87	-	220	277	-	-	-	-	-	-	-
Stage 2	~ 9	265	-	111	87	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s			0.2	2.4
HCM LOS	-	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	568	-	-	-	17	-	228	637	-	-
HCM Lane V/C Ratio	0.039	-	-	-	1.424	-	2.133	0.392	-	-
HCM Control Delay (s)	11.6	-	-	-	$ 692.8	-	$ 558.8	14.2	-	-
HCM Lane LOS	B	-	-	-	F	-	F	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-	3.5	-	37.2	1.9	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

DONALD ROSS CORRIDOR

Arterial Level of Service: EB Donald Ross

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
West Ramp	II	45	46.0	36.1	82.1	0.52	22.9	C
East Ramp	II	45	15.7	68.2	83.9	0.14	6.2	F
Parkside Dr	II	45	42.7	47.2	89.9	0.53	21.4	D
Central Blvd	II	45	52.1	49.6	101.7	0.65	23.0	C
Military Trail	II	45	32.9	49.3	82.2	0.34	15.0	E
Total	II		189.4	250.4	439.8	2.19	18.0	D

Arterial Level of Service: WB Donald Ross

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Military Trail	II	45	21.4	72.6	94.0	0.20	7.5	F
Central Blvd	II	45	32.9	57.0	89.9	0.34	13.7	E
Parkside Dr	II	45	52.1	42.6	94.7	0.65	24.7	C
East Ramp	II	45	42.7	11.2	53.9	0.53	35.7	A
West Ramp	II	45	15.7	42.2	57.9	0.14	8.9	F
Total	II		164.8	225.6	390.4	1.87	17.2	D

HCM 2010 methodology does not support clustered intersections.

HCM 2010 methodology does not support clustered intersections.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	819	1671	752	530	936	66	405	110	568	84	174	808
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	862	1759	792	558	985	69	426	116	598	88	183	851
Adj No. of Lanes	2	3	1	2	3	1	2	1	1	1	1	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	796	1762	614	498	1125	533	398	359	671	245	302	854
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.23	0.35	0.35	0.14	0.22	0.22	0.12	0.19	0.19	0.04	0.16	0.16
Ln Grp Delay, s/veh	96.6	54.8	173.8	122.5	46.6	24.0	111.0	36.6	41.7	35.6	43.9	65.8
Ln Grp LOS	F	D	F	F	D	C	F	D	D	D	D	E
Approach Vol, veh/h		3413			1612			1140			1122	
Approach Delay, s/veh		93.0			71.9			67.1			59.8	
Approach LOS		F			E			E			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	1.1	3.0
Phs Duration (G+Y+Rc), s	32.0	31.5	16.0	24.3	19.0	44.5	12.8	27.5
Change Period (Y+Rc), s	8.0	* 8.5	4.0	* 7.5	4.0	8.5	8.5	7.5
Max Green (Gmax), s	24.0	* 24	12.0	* 17	15.0	35.7	4.3	16.5
Max Allow Headway (MAH), s	3.7	4.7	3.7	4.1	3.7	4.7	3.7	4.1
Max Q Clear (g_c+I1), s	26.0	21.4	14.0	18.8	17.0	38.0	6.3	22.0
Green Ext Time (g_e), s	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	0.92	1.00
Prob of Max Out (p_x)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3442		3442		3442		1774	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		5085		1863		5085		1863

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		2787		1583		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Pr/Pm)	
Lanes in Grp	2	0	2	0	2	0	1	0

Grp Vol (v), veh/h	862	0	426	0	558	0	88	0
Grp Sat Flow (s), veh/h/ln	1721	0	1721	0	1721	0	1774	0
Q Serve Time (g_s), s	24.0	0.0	12.0	0.0	15.0	0.0	4.3	0.0
Cycle Q Clear Time (g_c), s	24.0	0.0	12.0	0.0	15.0	0.0	4.3	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	733	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	16.8	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	14.4	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	796	0	398	0	498	0	245	0
V/C Ratio (X)	1.08	0.00	1.07	0.00	1.12	0.00	0.36	0.00
Avail Cap (c_a), veh/h	796	0	398	0	498	0	245	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	39.9	0.0	45.9	0.0	44.4	0.0	34.7	0.0
Incr Delay (d2), s/veh	56.7	0.0	65.1	0.0	78.1	0.0	0.9	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	96.6	0.0	111.0	0.0	122.5	0.0	35.6	0.0
1st-Term Q (Q1), veh/ln	11.3	0.0	5.6	0.0	7.0	0.0	2.1	0.0
2nd-Term Q (Q2), veh/ln	6.3	0.0	3.6	0.0	5.4	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (-26165%), veh/ln	17.5	0.0	9.2	0.0	12.4	0.0	2.1	0.0
%ile Storage Ratio (RQ%)	0.82	0.00	0.67	0.00	1.02	0.00	0.36	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	16.5	0.0	7.0	0.0	15.1	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.3	0.0	0.3	0.0	0.3	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	1	0	3	0	1
Grp Vol (v), veh/h	0	985	0	183	0	1759	0	116
Grp Sat Flow (s), veh/h/ln	0	1695	0	1863	0	1695	0	1863
Q Serve Time (g_s), s	0.0	19.4	0.0	9.5	0.0	35.9	0.0	5.6
Cycle Q Clear Time (g_c), s	0.0	19.4	0.0	9.5	0.0	35.9	0.0	5.6
Lane Grp Cap (c), veh/h	0	1125	0	302	0	1762	0	359
V/C Ratio (X)	0.00	0.88	0.00	0.61	0.00	1.00	0.00	0.32
Avail Cap (c_a), veh/h	0	1162	0	302	0	1762	0	359
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	39.0	0.0	40.4	0.0	33.9	0.0	36.1
Incr Delay (d2), s/veh	0.0	7.5	0.0	3.5	0.0	21.0	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	46.6	0.0	43.9	0.0	54.8	0.0	36.6
1st-Term Q (Q1), veh/ln	0.0	9.0	0.0	4.9	0.0	16.6	0.0	2.9
2nd-Term Q (Q2), veh/ln	0.0	0.8	0.0	0.3	0.0	3.4	0.0	0.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (-26165%), veh/ln	0.0	9.8	0.0	5.2	0.0	20.0	0.0	2.9
%ile Storage Ratio (RQ%)	0.00	0.08	0.00	0.22	0.00	0.19	0.00	0.06
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	2	0	1	0	1
Grp Vol (v), veh/h	0	69	0	851	0	792	0	598
Grp Sat Flow (s), veh/h/ln	0	1583	0	1393	0	1583	0	1583
Q Serve Time (g_s), s	0.0	3.1	0.0	16.8	0.0	36.0	0.0	20.0
Cycle Q Clear Time (g_c), s	0.0	3.1	0.0	16.8	0.0	36.0	0.0	20.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	1583.3	0.0	1393.3	0.0	1583.3	0.0	1583.3
Prot RT Eff Green (g_R), s	0.0	12.0	0.0	15.0	0.0	4.3	0.0	24.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	533	0	854	0	614	0	671
V/C Ratio (X)	0.00	0.13	0.00	1.00	0.00	1.29	0.00	0.89
Avail Cap (c_a), veh/h	0	545	0	854	0	614	0	671
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	23.8	0.0	35.9	0.0	31.8	0.0	27.7
Incr Delay (d2), s/veh	0.0	0.1	0.0	29.9	0.0	142.1	0.0	14.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	24.0	0.0	65.8	0.0	173.8	0.0	41.7
1st-Term Q (Q1), veh/ln	0.0	1.4	0.0	12.2	0.0	17.5	0.0	15.7
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	3.5	0.0	24.2	0.0	2.6
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (-26165%), veh/ln	0.0	1.4	0.0	15.7	0.0	41.7	0.0	18.4
%ile Storage Ratio (RQ%)	0.00	0.07	0.00	1.33	0.00	2.12	0.00	1.04
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	44.4	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	79.2
HCM 2010 LOS	E

Notes
User approved ignoring U-Turning movement.

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	546	1411	615	185	791	242	306	736	86	291	708	282
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	575	1485	647	195	833	255	322	775	91	306	745	297
Adj No. of Lanes	2	3	1	2	3	1	2	2	1	2	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	632	1677	522	216	1063	331	377	846	379	363	845	378
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.18	0.33	0.33	0.06	0.21	0.21	0.11	0.24	0.24	0.11	0.24	0.24
Ln Grp Delay, s/veh	66.8	46.5	165.9	95.1	53.5	63.3	69.4	61.7	39.4	68.3	57.2	55.6
Ln Grp LOS	E	D	F	F	D	E	E	E	D	E	E	E
Approach Vol, veh/h		2707			1283			1188			1348	
Approach Delay, s/veh		79.4			61.8			62.1			59.4	
Approach LOS		E			E			E			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	32.4	34.6	22.4	38.0	17.0	50.0	22.5	37.9
Change Period (Y+Rc), s	9.0	8.0	9.0	7.5	9.0	8.0	8.5	7.5
Max Green (Gmax), s	25.0	25.0	16.0	30.5	8.0	42.0	16.0	31.0
Max Allow Headway (MAH), s	3.7	4.6	3.7	4.7	3.7	4.6	3.7	4.7
Max Q Clear (g_c+I1), s	22.9	21.7	13.1	29.2	9.2	44.0	13.7	27.9
Green Ext Time (g_e), s	0.5	3.1	0.3	1.1	0.0	0.0	0.3	2.5
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3442		3442		3442		3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		5085		3539		5085		3539

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		1583		1583		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	
Lanes in Grp	2	0	2	0	2	0	2	0

Grp Vol (v), veh/h	575	0	306	0	195	0	322	0
Grp Sat Flow (s), veh/h/ln	1721	0	1721	0	1721	0	1721	0
Q Serve Time (g_s), s	20.9	0.0	11.1	0.0	7.2	0.0	11.7	0.0
Cycle Q Clear Time (g_c), s	20.9	0.0	11.1	0.0	7.2	0.0	11.7	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	632	0	363	0	216	0	377	0
V/C Ratio (X)	0.91	0.00	0.84	0.00	0.90	0.00	0.85	0.00
Avail Cap (c_a), veh/h	676	0	432	0	216	0	432	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	51.0	0.0	55.9	0.0	59.3	0.0	55.7	0.0
Incr Delay (d2), s/veh	15.9	0.0	12.4	0.0	35.8	0.0	13.8	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	66.8	0.0	68.3	0.0	95.1	0.0	69.4	0.0
1st-Term Q (Q1), veh/ln	9.9	0.0	5.3	0.0	3.4	0.0	5.6	0.0
2nd-Term Q (Q2), veh/ln	1.4	0.0	0.6	0.0	1.1	0.0	0.7	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (-26165%), veh/ln	11.3	0.0	5.9	0.0	4.5	0.0	6.3	0.0
%ile Storage Ratio (RQ%)	0.54	0.00	0.30	0.00	0.22	0.00	0.30	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	2	0	3	0	2
Grp Vol (v), veh/h	0	833	0	775	0	1485	0	745
Grp Sat Flow (s), veh/h/ln	0	1695	0	1770	0	1695	0	1770
Q Serve Time (g_s), s	0.0	19.7	0.0	27.2	0.0	35.2	0.0	25.9
Cycle Q Clear Time (g_c), s	0.0	19.7	0.0	27.2	0.0	35.2	0.0	25.9
Lane Grp Cap (c), veh/h	0	1063	0	846	0	1677	0	845
V/C Ratio (X)	0.00	0.78	0.00	0.92	0.00	0.89	0.00	0.88
Avail Cap (c_a), veh/h	0	1063	0	847	0	1677	0	861
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	47.7	0.0	47.2	0.0	40.4	0.0	46.8
Incr Delay (d2), s/veh	0.0	5.8	0.0	14.5	0.0	6.1	0.0	10.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	53.5	0.0	61.7	0.0	46.5	0.0	57.2
1st-Term Q (Q1), veh/ln	0.0	9.3	0.0	13.2	0.0	16.5	0.0	12.6
2nd-Term Q (Q2), veh/ln	0.0	0.6	0.0	1.7	0.0	0.9	0.0	1.2

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (-26165%), veh/ln	0.0	9.8	0.0	14.9	0.0	17.4	0.0	13.9
%ile Storage Ratio (RQ%)	0.00	0.15	0.00	0.65	0.00	0.13	0.00	0.51
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	255	0	91	0	647	0	297
Grp Sat Flow (s), veh/h/ln	0	1583	0	1583	0	1583	0	1583
Q Serve Time (g_s), s	0.0	19.3	0.0	5.9	0.0	42.0	0.0	22.4
Cycle Q Clear Time (g_c), s	0.0	19.3	0.0	5.9	0.0	42.0	0.0	22.4
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	331	0	379	0	522	0	378
V/C Ratio (X)	0.00	0.77	0.00	0.24	0.00	1.24	0.00	0.79
Avail Cap (c_a), veh/h	0	331	0	379	0	522	0	385
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	47.5	0.0	39.1	0.0	42.7	0.0	45.4
Incr Delay (d2), s/veh	0.0	15.8	0.0	0.3	0.0	123.3	0.0	10.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	63.3	0.0	39.4	0.0	165.9	0.0	55.6
1st-Term Q (Q1), veh/ln	0.0	8.5	0.0	2.6	0.0	18.3	0.0	9.8
2nd-Term Q (Q2), veh/ln	0.0	1.5	0.0	0.0	0.0	17.9	0.0	1.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (-26165%), veh/ln	0.0	9.9	0.0	2.6	0.0	36.2	0.0	10.9
%ile Storage Ratio (RQ%)	0.00	0.81	0.00	0.26	0.00	3.11	0.00	0.54
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	31.2	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	68.6
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	468	1349	120	87	963	166	22	1037	69	163	1392	368
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	493	1420	126	92	1014	175	23	1092	73	172	1465	387
Adj No. of Lanes	2	3	1	2	3	1	2	3	1	2	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	515	1641	511	125	1065	332	111	1264	394	445	1758	547
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.15	0.32	0.32	0.04	0.21	0.21	0.03	0.25	0.25	0.13	0.35	0.35
Ln Grp Delay, s/veh	81.3	45.7	32.0	78.9	66.4	49.3	59.2	49.1	36.8	51.8	42.0	42.5
Ln Grp LOS	F	D	C	E	E	D	E	D	D	D	D	D
Approach Vol, veh/h		2039			1281			1188			2024	
Approach Delay, s/veh		53.5			65.0			48.5			42.9	
Approach LOS		D			E			D			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	27.0	33.9	24.5	38.2	13.0	47.9	12.5	50.2
Change Period (Y+Rc), s	8.5	8.0	8.5	7.5	8.5	8.0	8.5	7.5
Max Green (Gmax), s	18.5	25.9	16.0	37.1	4.5	39.9	16.5	36.6
Max Allow Headway (MAH), s	3.7	4.8	3.7	4.8	3.7	4.8	3.7	4.8
Max Q Clear (g_c+I1), s	19.6	26.3	7.7	27.4	5.3	34.4	2.8	34.7
Green Ext Time (g_e), s	0.0	0.0	0.3	3.3	0.0	5.0	0.0	1.8
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	0.96	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	0.00	0.94	1.00	0.00	0.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3442		3442		3442		3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		5085		5085		5085		5085

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		1583		1583		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	
Lanes in Grp	2	0	2	0	2	0	2	0

Grp Vol (v), veh/h	493	0	172	0	92	0	23	0
Grp Sat Flow (s), veh/h/ln	1721	0	1721	0	1721	0	1721	0
Q Serve Time (g_s), s	17.6	0.0	5.7	0.0	3.3	0.0	0.8	0.0
Cycle Q Clear Time (g_c), s	17.6	0.0	5.7	0.0	3.3	0.0	0.8	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	515	0	445	0	125	0	111	0
V/C Ratio (X)	0.96	0.00	0.39	0.00	0.73	0.00	0.21	0.00
Avail Cap (c_a), veh/h	515	0	445	0	125	0	459	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	52.2	0.0	49.3	0.0	59.0	0.0	58.3	0.0
Incr Delay (d2), s/veh	29.1	0.0	2.5	0.0	19.9	0.0	0.9	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	81.3	0.0	51.8	0.0	78.9	0.0	59.2	0.0
1st-Term Q (Q1), veh/ln	8.4	0.0	2.7	0.0	1.6	0.0	0.4	0.0
2nd-Term Q (Q2), veh/ln	2.1	0.0	0.2	0.0	0.3	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (-26165%), veh/ln	10.4	0.0	2.9	0.0	1.9	0.0	0.4	0.0
%ile Storage Ratio (RQ%)	0.44	0.00	0.15	0.00	0.09	0.00	0.02	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	3	0	3	0	3
Grp Vol (v), veh/h	0	1014	0	1092	0	1420	0	1465
Grp Sat Flow (s), veh/h/ln	0	1695	0	1695	0	1695	0	1695
Q Serve Time (g_s), s	0.0	24.3	0.0	25.4	0.0	32.4	0.0	32.7
Cycle Q Clear Time (g_c), s	0.0	24.3	0.0	25.4	0.0	32.4	0.0	32.7
Lane Grp Cap (c), veh/h	0	1065	0	1264	0	1641	0	1758
V/C Ratio (X)	0.00	0.95	0.00	0.86	0.00	0.87	0.00	0.83
Avail Cap (c_a), veh/h	0	1065	0	1526	0	1641	0	1758
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	48.3	0.0	44.4	0.0	39.3	0.0	37.2
Incr Delay (d2), s/veh	0.0	18.2	0.0	4.6	0.0	6.4	0.0	4.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	66.4	0.0	49.1	0.0	45.7	0.0	42.0
1st-Term Q (Q1), veh/ln	0.0	11.4	0.0	11.9	0.0	15.1	0.0	15.3
2nd-Term Q (Q2), veh/ln	0.0	1.8	0.0	0.5	0.0	1.0	0.0	0.8

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (-26165%), veh/ln	0.0	13.2	0.0	12.5	0.0	16.1	0.0	16.1
%ile Storage Ratio (RQ%)	0.00	0.35	0.00	0.47	0.00	0.24	0.00	0.52
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	175	0	73	0	126	0	387
Grp Sat Flow (s), veh/h/ln	0	1583	0	1583	0	1583	0	1583
Q Serve Time (g_s), s	0.0	12.1	0.0	4.5	0.0	7.2	0.0	26.2
Cycle Q Clear Time (g_c), s	0.0	12.1	0.0	4.5	0.0	7.2	0.0	26.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	332	0	394	0	511	0	547
V/C Ratio (X)	0.00	0.53	0.00	0.19	0.00	0.25	0.00	0.71
Avail Cap (c_a), veh/h	0	332	0	475	0	511	0	547
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	43.4	0.0	36.6	0.0	30.8	0.0	35.0
Incr Delay (d2), s/veh	0.0	5.9	0.0	0.2	0.0	1.1	0.0	7.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	49.3	0.0	36.8	0.0	32.0	0.0	42.5
1st-Term Q (Q1), veh/ln	0.0	5.3	0.0	2.0	0.0	3.2	0.0	11.4
2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	0.0	0.0	0.2	0.0	1.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (-26165%), veh/ln	0.0	5.9	0.0	2.0	0.0	3.3	0.0	12.5
%ile Storage Ratio (RQ%)	0.00	0.48	0.00	0.09	0.00	0.12	0.00	0.41
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	51.6
HCM 2010 LOS	D

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	3	947	4	13	420	17	1	0	16	60	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	325	-	-	289	-	-	-	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	997	4	14	442	18	1	0	17	63	0	5

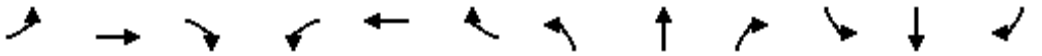
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	460	0	0	1001	0	0	1253	1492	501	983	1485	230
Stage 1	-	-	-	-	-	-	1005	1005	-	478	478	-
Stage 2	-	-	-	-	-	-	248	487	-	505	1007	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1097	-	-	687	-	-	129	122	515	203	124	772
Stage 1	-	-	-	-	-	-	259	317	-	537	554	-
Stage 2	-	-	-	-	-	-	734	549	-	518	317	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1097	-	-	687	-	-	126	119	515	193	121	772
Mov Cap-2 Maneuver	-	-	-	-	-	-	126	119	-	193	121	-
Stage 1	-	-	-	-	-	-	258	316	-	536	543	-
Stage 2	-	-	-	-	-	-	714	538	-	500	316	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.3	13.6	30.7
HCM LOS			B	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	436	1097	-	-	687	-	-	193	772
HCM Lane V/C Ratio	0.041	0.003	-	-	0.02	-	-	0.327	0.007
HCM Control Delay (s)	13.6	8.3	-	-	10.3	-	-	32.5	9.7
HCM Lane LOS	B	A	-	-	B	-	-	D	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0.1	-	-	1.3	0

No Build Alternative 2040 AM

2: West Ramp & Donald Ross Corridor: Donald Ross Road

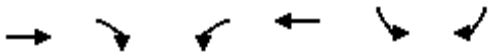


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	886	245	1613	403	0	0	0	0	840	0	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0	4.0	7.0	6.0					6.0		4.0
Lane Util. Factor		0.86	1.00	0.86	0.86					0.94		1.00
Frt		1.00	0.85	1.00	1.00					1.00		0.85
Flt Protected		1.00	1.00	0.95	0.97					0.95		1.00
Satd. Flow (prot)		6408	1583	3044	3115					4990		1583
Flt Permitted		1.00	1.00	0.95	0.52					0.95		1.00
Satd. Flow (perm)		6408	1583	3044	1679					4990		1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	933	258	1698	424	0	0	0	0	884	0	47
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	933	258	1138	984	0	0	0	0	884	0	47
Turn Type		NA	Free	Prot	NA					Prot		Free
Protected Phases		6		5	2					3		
Permitted Phases			Free									Free
Actuated Green, G (s)		49.2	141.2	49.0	105.2					24.0		141.2
Effective Green, g (s)		49.2	141.2	49.0	105.2					24.0		141.2
Actuated g/C Ratio		0.35	1.00	0.35	0.75					0.17		1.00
Clearance Time (s)		6.0		7.0	6.0					6.0		
Vehicle Extension (s)		3.0		3.0	3.0					3.0		
Lane Grp Cap (vph)		2232	1583	1056	1749					848		1583
v/s Ratio Prot		0.15		c0.37	0.20					c0.18		
v/s Ratio Perm			0.16		c0.22							0.03
v/c Ratio		0.42	0.16	1.08	0.97dl					1.04		0.03
Uniform Delay, d1		35.1	0.0	46.1	7.9					58.6		0.0
Progression Factor		1.00	1.00	0.77	0.76					1.00		1.00
Incremental Delay, d2		0.6	0.2	50.0	0.4					42.5		0.0
Delay (s)		35.7	0.2	85.4	6.4					101.1		0.0
Level of Service		D	A	F	A					F		A
Approach Delay (s)		28.0			48.8			0.0			96.0	
Approach LOS		C			D			A			F	

Intersection Summary			
HCM 2000 Control Delay	53.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	141.2	Sum of lost time (s)	19.0
Intersection Capacity Utilization	73.0%	ICU Level of Service	D
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

c Critical Lane Group



Lane Group	EBT	EBR	WBL	WBT	SBL	SBR
Lane Group Flow (vph)	933	258	1138	984	884	47
v/c Ratio	0.42	0.16	1.07	0.97dl	1.03	0.03
Control Delay	36.1	0.2	81.1	42.2	95.6	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	36.1	0.2	81.1	42.2	95.6	0.0
Queue Length 50th (ft)	189	0	~668	276	~305	0
Queue Length 95th (ft)	222	0	#790	#319	#396	0
Internal Link Dist (ft)	2056			679		
Turn Bay Length (ft)		433				
Base Capacity (vph)	2197	1583	1065	1112	855	1583
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.42	0.16	1.07	0.88	1.03	0.03

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

No Build Alternative 2040 AM

9: East Ramp & Donald Ross Corridor: Donald Ross Road

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	47	1679	0	0	1910	538	106	0	1312	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0			6.0	4.0	6.0		6.0			
Lane Util. Factor	0.97	0.91			0.86	1.00	0.97		0.76			
Frt	1.00	1.00			1.00	0.85	1.00		0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (prot)	3433	5085			6408	1583	3433		3610			
Flt Permitted	0.95	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (perm)	3433	5085			6408	1583	3433		3610			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	49	1767	0	0	2011	566	112	0	1381	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	976	0	0	0
Lane Group Flow (vph)	49	1767	0	0	2011	566	112	0	405	0	0	0
Turn Type	Prot	NA			NA	Free	Prot		Prot			
Protected Phases	1	6			2		7		7			
Permitted Phases						Free						
Actuated Green, G (s)	4.0	49.2			95.2	141.2	24.0		24.0			
Effective Green, g (s)	4.0	49.2			95.2	141.2	24.0		24.0			
Actuated g/C Ratio	0.03	0.35			0.67	1.00	0.17		0.17			
Clearance Time (s)	6.0	6.0			6.0		6.0		6.0			
Vehicle Extension (s)	3.0	3.0			3.0		3.0		3.0			
Lane Grp Cap (vph)	97	1771			4320	1583	583		613			
v/s Ratio Prot	0.01	c0.35			c0.31		0.03		c0.11			
v/s Ratio Perm						c0.36						
v/c Ratio	0.51	1.00			0.47	0.36	0.19		0.66			
Uniform Delay, d1	67.6	45.9			10.9	0.0	50.3		54.8			
Progression Factor	0.54	1.04			1.00	1.00	1.00		1.00			
Incremental Delay, d2	2.8	17.1			0.4	0.6	0.2		2.7			
Delay (s)	39.4	64.9			11.3	0.6	50.4		57.5			
Level of Service	D	E			B	A	D		E			
Approach Delay (s)		64.2			8.9			56.9			0.0	
Approach LOS		E			A			E			A	

Intersection Summary			
HCM 2000 Control Delay	38.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	141.2	Sum of lost time (s)	19.0
Intersection Capacity Utilization	73.0%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	WBT	WBR	NBL	NBR
Lane Group Flow (vph)	49	1767	2011	566	112	1381
v/c Ratio	0.40	1.01	0.46	0.36	0.19	0.87
Control Delay	42.6	68.2	11.2	0.6	50.7	15.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	42.6	68.2	11.2	0.6	50.7	15.1
Queue Length 50th (ft)	20	~629	242	0	45	76
Queue Length 95th (ft)	m29	m#659	267	0	74	163
Internal Link Dist (ft)		679	2740			
Turn Bay Length (ft)						
Base Capacity (vph)	122	1743	4357	1583	588	1593
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.40	1.01	0.46	0.36	0.19	0.87

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

HOOD ROAD CORRIDOR

Arterial Level of Service: EB Hood Road

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Central Blvd	II	45	133.7	36.8	170.5	1.67	35.3	A
Military Trail	II	45	31.0	59.4	90.4	0.31	12.5	F
Total	II		164.7	96.2	260.9	1.98	27.4	C

Arterial Level of Service: WB Hood Road

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Military Trail	II	45	14.9	34.3	49.2	0.14	10.0	F
Central Blvd	II	45	31.0	28.0	59.0	0.31	19.1	D
Total	II		45.9	62.3	108.2	0.45	15.0	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	238	518	171	367	116	8	156	807	411	434	817	165
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	251	545	180	386	122	8	164	849	433	457	860	174
Adj No. of Lanes	2	2	1	2	2	1	2	2	1	2	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	335	770	344	457	894	400	444	1020	456	527	1180	528
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.10	0.22	0.22	0.13	0.25	0.25	0.05	0.29	0.29	0.09	0.33	0.33
Ln Grp Delay, s/veh	42.2	33.2	31.8	50.6	25.7	24.9	22.6	37.4	62.0	38.1	29.9	23.8
Ln Grp LOS	D	C	C	D	C	C	C	D	E	D	C	C
Approach Vol, veh/h		976			516			1446			1491	
Approach Delay, s/veh		35.3			44.3			43.1			31.7	
Approach LOS		D			D			D			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	3.0	2.0	3.0	1.1	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	14.0	31.5	17.7	25.2	10.0	35.5	14.6	28.4
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green (Gmax), s	8.0	25.5	12.0	35.5	4.0	29.5	13.0	34.5
Max Allow Headway (MAH), s	3.7	4.6	3.7	4.7	3.7	4.6	3.7	4.7
Max Q Clear (g_c+I1), s	10.0	25.7	11.7	14.6	5.0	20.9	8.3	4.4
Green Ext Time (g_e), s	0.0	0.0	0.1	4.6	0.0	6.8	0.3	5.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	0.98	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.04	1.00	0.00	0.44	0.01

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3442		3442		3442		3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3539		3539		3539		3539

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		1583		1583		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Pr/Pm)		(Prot)		(Pr/Pm)		(Prot)	
Lanes in Grp	2	0	2	0	2	0	2	0

Grp Vol (v), veh/h	457	0	386	0	164	0	251	0
Grp Sat Flow (s), veh/h/ln	1721	0	1721	0	1721	0	1721	0
Q Serve Time (g_s), s	8.0	0.0	9.7	0.0	3.0	0.0	6.3	0.0
Cycle Q Clear Time (g_c), s	8.0	0.0	9.7	0.0	3.0	0.0	6.3	0.0
Perm LT Sat Flow (s_l), veh/h/ln	417	0	0	0	527	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	25.5	0.0	0.0	0.0	25.5	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	5.6	0.0	0.0	0.0	10.6	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	5.6	0.0	0.0	0.0	2.8	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	527	0	457	0	444	0	335	0
V/C Ratio (X)	0.87	0.00	0.84	0.00	0.37	0.00	0.75	0.00
Avail Cap (c_a), veh/h	527	0	467	0	444	0	506	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	23.8	0.0	37.5	0.0	22.1	0.0	38.9	0.0
Incr Delay (d2), s/veh	14.3	0.0	13.2	0.0	0.5	0.0	3.3	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	38.1	0.0	50.6	0.0	22.6	0.0	42.2	0.0
1st-Term Q (Q1), veh/ln	1.8	0.0	4.6	0.0	1.4	0.0	3.0	0.0
2nd-Term Q (Q2), veh/ln	1.0	0.0	0.8	0.0	0.0	0.0	0.2	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (-26165%), veh/ln	2.8	0.0	5.4	0.0	1.4	0.0	3.2	0.0
%ile Storage Ratio (RQ%)	0.24	0.00	0.09	0.00	0.10	0.00	0.15	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	2	0	2	0	2
Grp Vol (v), veh/h	0	849	0	545	0	860	0	122
Grp Sat Flow (s), veh/h/ln	0	1770	0	1770	0	1770	0	1770
Q Serve Time (g_s), s	0.0	19.9	0.0	12.6	0.0	18.9	0.0	2.4
Cycle Q Clear Time (g_c), s	0.0	19.9	0.0	12.6	0.0	18.9	0.0	2.4
Lane Grp Cap (c), veh/h	0	1020	0	770	0	1180	0	894
V/C Ratio (X)	0.00	0.83	0.00	0.71	0.00	0.73	0.00	0.14
Avail Cap (c_a), veh/h	0	1020	0	1420	0	1180	0	1380
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	29.5	0.0	32.0	0.0	26.0	0.0	25.6
Incr Delay (d2), s/veh	0.0	7.9	0.0	1.2	0.0	4.0	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	37.4	0.0	33.2	0.0	29.9	0.0	25.7
1st-Term Q (Q1), veh/ln	0.0	9.7	0.0	6.1	0.0	9.2	0.0	1.2
2nd-Term Q (Q2), veh/ln	0.0	1.1	0.0	0.1	0.0	0.7	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (-26165%), veh/ln	0.0	10.8	0.0	6.3	0.0	9.8	0.0	1.2
%ile Storage Ratio (RQ%)	0.00	0.63	0.00	0.21	0.00	0.26	0.00	0.02
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	433	0	180	0	174	0	8
Grp Sat Flow (s), veh/h/ln	0	1583	0	1583	0	1583	0	1583
Q Serve Time (g_s), s	0.0	23.7	0.0	8.9	0.0	7.3	0.0	0.3
Cycle Q Clear Time (g_c), s	0.0	23.7	0.0	8.9	0.0	7.3	0.0	0.3
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	456	0	344	0	528	0	400
V/C Ratio (X)	0.00	0.95	0.00	0.52	0.00	0.33	0.00	0.02
Avail Cap (c_a), veh/h	0	456	0	635	0	528	0	617
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	30.9	0.0	30.6	0.0	22.1	0.0	24.8
Incr Delay (d2), s/veh	0.0	31.1	0.0	1.2	0.0	1.7	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	62.0	0.0	31.8	0.0	23.8	0.0	24.9
1st-Term Q (Q1), veh/ln	0.0	10.3	0.0	3.9	0.0	3.2	0.0	0.1
2nd-Term Q (Q2), veh/ln	0.0	3.9	0.0	0.1	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (-26165%), veh/ln	0.0	14.3	0.0	4.0	0.0	3.4	0.0	0.1
%ile Storage Ratio (RQ%)	0.00	1.30	0.00	0.33	0.00	0.26	0.00	0.01
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	37.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	289	675	263	330	212	69	2	877	468	276	943	305
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	304	711	277	347	223	73	2	923	493	291	993	321
Adj No. of Lanes	2	2	1	2	2	1	2	3	1	2	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	516	747	334	402	629	281	153	1096	341	329	1356	422
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.15	0.21	0.21	0.12	0.18	0.18	0.04	0.22	0.22	0.10	0.27	0.27
Ln Grp Delay, s/veh	40.5	58.1	54.5	60.2	34.0	34.1	41.3	41.7	251.2	67.7	33.6	42.5
Ln Grp LOS	D	E	D	E	C	C	D	D	F	E	C	D
Approach Vol, veh/h		1292			643			1418			1605	
Approach Delay, s/veh		53.2			48.2			114.5			41.6	
Approach LOS		D			D			F			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	12.5	31.5	22.0	24.0	17.1	26.9	19.0	27.0
Change Period (Y+Rc), s	8.5	7.5	8.5	8.0	8.5	7.5	8.5	8.0
Max Green (Gmax), s	4.0	24.0	13.5	16.0	8.6	19.4	10.5	19.0
Max Allow Headway (MAH), s	3.7	4.6	3.7	4.6	3.7	4.6	3.7	4.6
Max Q Clear (g_c+I1), s	2.1	18.8	9.4	7.0	9.5	21.4	10.9	19.8
Green Ext Time (g_e), s	0.0	4.7	0.4	4.6	0.0	0.0	0.0	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3442		3442		3442		3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		5085		3539		5085		3539

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		1583		1583		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	
Lanes in Grp	2	0	2	0	2	0	2	0

Grp Vol (v), veh/h	2	0	304	0	291	0	347	0
Grp Sat Flow (s), veh/h/ln	1721	0	1721	0	1721	0	1721	0
Q Serve Time (g_s), s	0.1	0.0	7.4	0.0	7.5	0.0	8.9	0.0
Cycle Q Clear Time (g_c), s	0.1	0.0	7.4	0.0	7.5	0.0	8.9	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	153	0	516	0	329	0	402	0
V/C Ratio (X)	0.01	0.00	0.59	0.00	0.88	0.00	0.86	0.00
Avail Cap (c_a), veh/h	153	0	516	0	329	0	402	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	41.1	0.0	35.7	0.0	40.2	0.0	39.0	0.0
Incr Delay (d2), s/veh	0.2	0.0	4.9	0.0	27.5	0.0	21.2	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	41.3	0.0	40.5	0.0	67.7	0.0	60.2	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	3.5	0.0	3.6	0.0	4.2	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.3	0.0	1.3	0.0	1.2	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (-26165%), veh/ln	0.0	0.0	3.9	0.0	4.8	0.0	5.4	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.18	0.00	0.20	0.00	0.26	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	2	0	3	0	2
Grp Vol (v), veh/h	0	993	0	223	0	923	0	711
Grp Sat Flow (s), veh/h/ln	0	1695	0	1770	0	1695	0	1770
Q Serve Time (g_s), s	0.0	16.0	0.0	5.0	0.0	15.7	0.0	17.8
Cycle Q Clear Time (g_c), s	0.0	16.0	0.0	5.0	0.0	15.7	0.0	17.8
Lane Grp Cap (c), veh/h	0	1356	0	629	0	1096	0	747
V/C Ratio (X)	0.00	0.73	0.00	0.35	0.00	0.84	0.00	0.95
Avail Cap (c_a), veh/h	0	1356	0	629	0	1096	0	747
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	30.1	0.0	32.5	0.0	33.8	0.0	35.0
Incr Delay (d2), s/veh	0.0	3.5	0.0	1.6	0.0	7.9	0.0	23.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	33.6	0.0	34.0	0.0	41.7	0.0	58.1
1st-Term Q (Q1), veh/ln	0.0	7.4	0.0	2.4	0.0	7.3	0.0	8.7
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.1	0.0	0.8	0.0	2.4

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (-26165%), veh/ln	0.0	7.9	0.0	2.6	0.0	8.1	0.0	11.1
%ile Storage Ratio (RQ%)	0.00	0.21	0.00	0.10	0.00	0.27	0.00	0.19
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	321	0	73	0	493	0	277
Grp Sat Flow (s), veh/h/ln	0	1583	0	1583	0	1583	0	1583
Q Serve Time (g_s), s	0.0	16.8	0.0	3.6	0.0	19.4	0.0	15.1
Cycle Q Clear Time (g_c), s	0.0	16.8	0.0	3.6	0.0	19.4	0.0	15.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	422	0	281	0	341	0	334
V/C Ratio (X)	0.00	0.76	0.00	0.26	0.00	1.44	0.00	0.83
Avail Cap (c_a), veh/h	0	422	0	281	0	341	0	334
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	30.4	0.0	31.9	0.0	35.3	0.0	33.9
Incr Delay (d2), s/veh	0.0	12.2	0.0	2.2	0.0	215.9	0.0	20.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	42.5	0.0	34.1	0.0	251.2	0.0	54.5
1st-Term Q (Q1), veh/ln	0.0	7.3	0.0	1.6	0.0	8.5	0.0	6.5
2nd-Term Q (Q2), veh/ln	0.0	1.4	0.0	0.2	0.0	20.5	0.0	1.9
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (-26165%), veh/ln	0.0	8.7	0.0	1.7	0.0	29.0	0.0	8.4
%ile Storage Ratio (RQ%)	0.00	0.37	0.00	0.14	0.00	2.41	0.00	0.64
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	37.9	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		66.3						
HCM 2010 LOS		E						

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	28	968	397	61	29	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	399	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	29	1019	418	64	31	11

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	418	0	-	0	1496	418
Stage 1	-	-	-	-	418	-
Stage 2	-	-	-	-	1078	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1141	-	-	-	135	635
Stage 1	-	-	-	-	664	-
Stage 2	-	-	-	-	327	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1141	-	-	-	127	635
Mov Cap-2 Maneuver	-	-	-	-	127	-
Stage 1	-	-	-	-	664	-
Stage 2	-	-	-	-	308	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	35.1
HCM LOS			E

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1141	-	-	-	160
HCM Lane V/C Ratio	0.026	-	-	-	0.257
HCM Control Delay (s)	8.2	0	-	-	35.1
HCM Lane LOS	A	A	-	-	E
HCM 95th %tile Q(veh)	0.1	-	-	-	1

MILITARY TRAIL CORRIDOR

Arterial Level of Service: NB N Military Trail

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
PGA Blvd	II	45	18.9	71.7	90.6	0.17	6.9	F
Kyoto Gardens Dr	II	45	43.4	46.0	89.4	0.49	19.8	D
Hood Road	II	45	104.9	37.6	142.5	1.31	33.1	B
Donald Ross	II	45	102.8	38.3	141.1	1.29	32.8	B
Total	II		270.0	193.6	463.6	3.26	25.3	C

Arterial Level of Service: SB N Military Trail

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Donald Ross	II	45	22.3	32.3	54.6	0.20	13.5	E
Hood Road	II	45	102.8	32.0	134.8	1.29	34.3	B
Kyoto Gardens Dr	II	45	104.9	52.8	157.7	1.31	29.9	B
PGA Blvd	II	45	43.4	51.8	95.2	0.49	18.6	D
Total	II		273.4	168.9	442.3	3.29	26.8	C

Movement	WBL	WBR	WBR2	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SER
Lane Configurations											
Volume (veh/h)	314	83	58	46	1246	201	113	1307	1	0	0
Number	7	14	14	1	6	16	5	2	12		
Initial Q, veh	0	0	0	0	0	0	0	0	0		
Ped-Bike Adj (A_pbT)	1.00	1.00	1.00	1.00		1.00	1.00		1.00		
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900		
Adj Flow Rate, veh/h	331	61	61	48	1312	212	119	1376	1		
Adj No. of Lanes	2	1	1	1	3	1	1	3	0		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2		
Opposing Right Turn Influence	Yes			Yes			Yes				
Cap, veh/h	918	422	422	118	1331	414	142	1400	1		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Prop Arrive On Green	0.27	0.27	0.27	0.07	0.26	0.26	0.08	0.27	0.27		
Ln Grp Delay, s/veh	19.0	17.5	17.5	36.9	43.6	23.3	69.0	48.0	58.3		
Ln Grp LOS	B	B	B	D	D	C	E	D	E		

Approach Vol, veh/h	392				1572			1496			Timer:
Approach Delay, s/veh	18.7				40.7			53.0			Assigned Phs
Approach LOS	B				D			D			Case No
Phs Duration (G+Y+Rc), s		12.0	24.0		24.0	12.3	23.7				
Change Period (Y+Rc), s		8.0	8.0		8.0	7.5	8.0				
Max Green (Gmax), s		4.0	16.0		16.0	4.8	15.7				
Max Allow Headway (MAH), s		3.7	4.8		3.7	3.7	4.8				
Max Q Clear (g_c+I1), s		3.6	17.6		6.7	6.0	17.4				
Green Ext Time (g_e), s		0.0	0.0		0.9	0.0	0.0				
Prob of Phs Call (p_c)		1.00	1.00		1.00	1.00	1.00				
Prob of Max Out (p_x)		0.00	0.00		0.00	0.00	0.00				

Left-Turn Movement Data											
Assigned Mvmt		1			7	5					
Mvmt Sat Flow, veh/h		1774			3442	1774					

Through Movement Data											
Assigned Mvmt			2		4		6				
Mvmt Sat Flow, veh/h			5248		0		5085				

Right-Turn Movement Data											
Assigned Mvmt			12		14		16				
Mvmt Sat Flow, veh/h			4		1583		1583				

Left Lane Group Data											
Assigned Mvmt		1	0	0	7	5	0	0	0		
Lane Assignment		(Prot)				(Prot)					
Lanes in Grp		1	0	0	2	1	0	0	0		
Grp Vol (v), veh/h		48	0	0	331	119	0	0	0		
Grp Sat Flow (s), veh/h/ln		1774	0	0	1721	1774	0	0	0		
Q Serve Time (g_s), s		1.6	0.0	0.0	4.7	4.0	0.0	0.0	0.0		

Cycle Q Clear Time (g_c), s	1.6	0.0	0.0	4.7	4.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1721	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	118	0	0	918	142	0	0	0
V/C Ratio (X)	0.41	0.00	0.00	0.36	0.84	0.00	0.00	0.00
Avail Cap (c_a), veh/h	118	0	0	918	142	0	0	0
Upstream Filter (I)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	26.9	0.0	0.0	17.9	27.2	0.0	0.0	0.0
Incr Delay (d2), s/veh	10.0	0.0	0.0	1.1	41.8	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	36.9	0.0	0.0	19.0	69.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.8	0.0	0.0	2.2	2.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.3	0.0	0.0	0.1	1.6	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	0.00	1.80	1.80	0.00	0.00	0.00
%ile Back of Q (95%), veh/ln	2.0	0.0	0.0	4.2	6.5	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.17	0.00	0.00	0.15	0.44	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	3	0	0
Grp Vol (v), veh/h	0	889	0	0	0	1312	0	0
Grp Sat Flow (s), veh/h/ln	0	1695	0	0	0	1695	0	0
Q Serve Time (g_s), s	0.0	15.6	0.0	0.0	0.0	15.4	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	15.6	0.0	0.0	0.0	15.4	0.0	0.0
Lane Grp Cap (c), veh/h	0	904	0	0	0	1331	0	0
V/C Ratio (X)	0.00	0.98	0.00	0.00	0.00	0.99	0.00	0.00
Avail Cap (c_a), veh/h	0	904	0	0	0	1331	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	21.9	0.0	0.0	0.0	22.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	26.1	0.0	0.0	0.0	21.5	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	48.0	0.0	0.0	0.0	43.6	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	7.3	0.0	0.0	0.0	7.2	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	3.3	0.0	0.0	0.0	2.7	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.50	0.00	1.00	0.00	1.52	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	15.9	0.0	0.0	0.0	15.0	0.0	0.0

%ile Storage Ratio (RQ%)	0.00	0.06	0.00	0.00	0.00	0.95	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment		T+R		R		R		
Lanes in Grp	0	1	0	1	0	1	0	0
Grp Vol (v), veh/h	0	488	0	61	0	212	0	0
Grp Sat Flow (s), veh/h/ln	0	1862	0	1583	0	1583	0	0
Q Serve Time (g_s), s	0.0	15.6	0.0	1.8	0.0	6.8	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	15.6	0.0	1.8	0.0	6.8	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	497	0	422	0	414	0	0
V/C Ratio (X)	0.00	0.98	0.00	0.14	0.00	0.51	0.00	0.00
Avail Cap (c_a), veh/h	0	497	0	422	0	414	0	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	21.9	0.0	16.8	0.0	18.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	36.4	0.0	0.7	0.0	4.5	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	58.3	0.0	17.5	0.0	23.3	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	8.0	0.0	1.7	0.0	2.9	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	5.0	0.0	0.1	0.0	0.5	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.45	0.00	1.80	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	18.9	0.0	3.3	0.0	6.2	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.07	0.00	0.11	0.00	0.53	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	43.5
HCM 2010 LOS	D

NORTHLAKE BOULEVARD CORRIDOR

Arterial Level of Service: EB Northlake Blvd

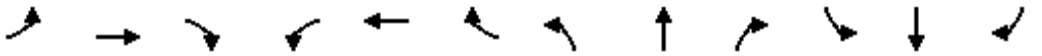
Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Keating Dr	II	45	17.3	60.7	78.0	0.16	7.3	F
West Ramps	II	45	12.7	43.7	56.4	0.12	7.4	F
East Ramps	II	45	11.1	54.0	65.1	0.10	5.6	F
Roan Ln	II	45	8.8	0.4	9.2	0.08	31.7	B
Sandtree Dr	II	45	13.5	36.3	49.8	0.12	9.0	F
Total	II		63.4	195.1	258.5	0.58	8.1	F

Arterial Level of Service: WB Northlake Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Sunrise Dr	II	45	15.3	28.3	43.6	0.14	11.6	F
Roan Ln	II	45	13.5	5.0	18.5	0.12	24.1	C
East Ramps	II	45	8.8	38.4	47.2	0.08	6.2	F
West Ramps	II	45	11.1	27.7	38.8	0.10	9.5	F
Keating Dr	II	45	12.7	8.8	21.5	0.12	19.4	D
Total	II		61.4	108.2	169.6	0.56	12.0	F

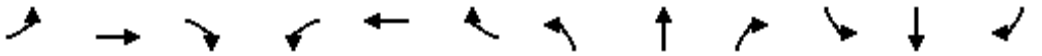
No Build Alternative 2040 AM

3: Keating Dr & Northlake Blvd Corridor: Northlake Boulevard



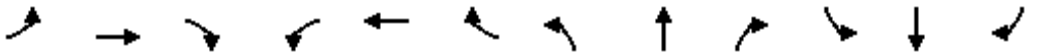
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	2476	105	298	1503	104	102	0	146	226	3	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0	4.0	5.0	5.0	6.0	6.0	6.0		6.0	
Lane Util. Factor		0.91	1.00	1.00	0.91	1.00	0.95	0.95	1.00		0.95	
Frt		1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85		1.00	
Flt Protected		1.00	1.00	0.95	1.00	1.00	0.95	0.95	1.00		0.95	
Satd. Flow (prot)		5085	1583	1770	5085	1583	1681	1681	1583		3373	
Flt Permitted		1.00	1.00	0.95	1.00	1.00	0.95	0.39	1.00		0.71	
Satd. Flow (perm)		5085	1583	1770	5085	1583	1681	684	1583		2525	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	2606	111	314	1582	109	107	0	154	238	3	0
RTOR Reduction (vph)	0	0	56	0	0	34	0	0	121	0	0	0
Lane Group Flow (vph)	0	2606	55	314	1582	75	53	54	33	0	241	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6			2			4			
Actuated Green, G (s)		59.0	59.0	20.0	83.0	83.0	4.0	26.0	26.0		16.0	
Effective Green, g (s)		59.0	59.0	20.0	83.0	83.0	4.0	26.0	26.0		16.0	
Actuated g/C Ratio		0.49	0.49	0.17	0.69	0.69	0.03	0.22	0.22		0.13	
Clearance Time (s)		5.0	5.0	4.0	5.0	5.0	6.0	6.0	6.0		6.0	
Vehicle Extension (s)		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)		2500	778	295	3517	1094	56	181	342		336	
v/s Ratio Prot		c0.51		c0.18	0.31		c0.03	0.01				
v/s Ratio Perm			0.03			0.05		0.05	0.02		c0.10	
v/c Ratio		1.04	0.07	1.06	0.45	0.07	0.95	0.30	0.10		0.72	
Uniform Delay, d1		30.5	16.1	50.0	8.3	6.0	57.9	39.4	37.6		49.8	
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	
Incremental Delay, d2		30.2	0.2	70.5	0.4	0.1	99.8	0.9	0.1		7.1	
Delay (s)		60.7	16.2	120.5	8.7	6.1	157.7	40.3	37.7		57.0	
Level of Service		E	B	F	A	A	F	D	D		E	
Approach Delay (s)		58.9			26.1			62.6			57.0	
Approach LOS		E			C			E			E	

Intersection Summary			
HCM 2000 Control Delay	46.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	21.0
Intersection Capacity Utilization	96.0%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



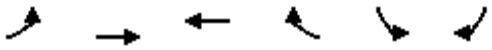
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	2016	886	1078	1159	0	0	0	0	601	0	566
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0	4.0	7.0	6.5					6.0		6.0
Lane Util. Factor		0.81	1.00	0.97	0.91					0.97		0.88
Frt		1.00	0.85	1.00	1.00					1.00		0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (prot)		7544	1583	3433	5085					3433		2787
Flt Permitted		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (perm)		7544	1583	3433	5085					3433		2787
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	2122	933	1135	1220	0	0	0	0	633	0	596
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	396
Lane Group Flow (vph)	0	2122	933	1135	1220	0	0	0	0	633	0	200
Turn Type		NA	Free	Prot	NA					Prot		Perm
Protected Phases		6		5	2					3		
Permitted Phases			Free									6
Actuated Green, G (s)		43.6	130.0	40.0	43.1					27.4		43.6
Effective Green, g (s)		43.6	130.0	40.0	43.1					27.4		43.6
Actuated g/C Ratio		0.34	1.00	0.31	0.33					0.21		0.34
Clearance Time (s)		6.0		7.0	6.5					6.0		6.0
Vehicle Extension (s)		3.0		3.0	3.0					3.0		3.0
Lane Grp Cap (vph)		2530	1583	1056	1685					723		934
v/s Ratio Prot		c0.28		c0.33	0.24					c0.18		
v/s Ratio Perm			0.59									0.07
v/c Ratio		0.84	0.59	1.07	0.72					0.88		0.21
Uniform Delay, d1		39.9	0.0	45.0	38.2					49.6		30.9
Progression Factor		1.00	1.00	1.43	0.67					1.00		1.00
Incremental Delay, d2		3.5	1.6	44.8	1.7					11.5		0.5
Delay (s)		43.5	1.6	109.1	27.3					61.2		31.5
Level of Service		D	A	F	C					E		C
Approach Delay (s)		30.7			66.7			0.0			46.8	
Approach LOS		C			E			A			D	

Intersection Summary			
HCM 2000 Control Delay	46.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	87.4%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



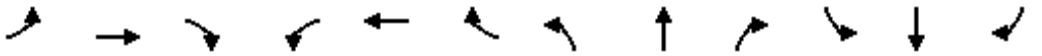
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	922	1695	0	0	1502	546	735	0	1264	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	6.0			6.5	4.0	6.0		6.5			
Lane Util. Factor	0.97	0.91			0.81	1.00	0.97		0.88			
Frt	1.00	1.00			1.00	0.85	1.00		0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (prot)	3433	5085			7544	1583	3433		2787			
Flt Permitted	0.95	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (perm)	3433	5085			7544	1583	3433		2787			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	971	1784	0	0	1581	575	774	0	1331	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	890	0	0	0
Lane Group Flow (vph)	971	1784	0	0	1581	575	774	0	441	0	0	0
Turn Type	Prot	NA			NA	Free	Prot		Perm			
Protected Phases	1	6			2		7					
Permitted Phases						Free			2			
Actuated Green, G (s)	40.0	43.6			43.1	130.0	27.4		43.1			
Effective Green, g (s)	40.0	43.6			43.1	130.0	27.4		43.1			
Actuated g/C Ratio	0.31	0.34			0.33	1.00	0.21		0.33			
Clearance Time (s)	7.0	6.0			6.5		6.0		6.5			
Vehicle Extension (s)	3.0	3.0			3.0		3.0		3.0			
Lane Grp Cap (vph)	1056	1705			2501	1583	723		923			
v/s Ratio Prot	c0.28	c0.35			0.21		c0.23					
v/s Ratio Perm						0.36			0.16			
v/c Ratio	0.92	1.05			0.63	0.36	1.07		0.48			
Uniform Delay, d1	43.4	43.2			36.7	0.0	51.3		34.5			
Progression Factor	1.50	0.54			1.00	1.00	1.00		1.00			
Incremental Delay, d2	7.0	29.4			1.2	0.6	54.0		1.8			
Delay (s)	72.0	52.8			38.0	0.6	105.3		36.3			
Level of Service	E	D			D	A	F		D			
Approach Delay (s)		59.6			28.0			61.7			0.0	
Approach LOS		E			C			E			A	

Intersection Summary			
HCM 2000 Control Delay	50.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.01		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	87.4%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



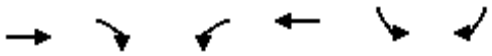
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	95	2679	1872	80	0	176
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	8.0	6.5	6.5	4.0		4.0
Lane Util. Factor	1.00	0.91	0.76	1.00		1.00
Frt	1.00	1.00	1.00	0.85		0.86
Flt Protected	0.95	1.00	1.00	1.00		1.00
Satd. Flow (prot)	1770	5085	8494	1583		1611
Flt Permitted	0.95	1.00	1.00	1.00		1.00
Satd. Flow (perm)	1770	5085	8494	1583		1611
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	100	2820	1971	84	0	185
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	100	2820	1971	84	0	185
Turn Type	Prot	NA	NA	Free		Free
Protected Phases	1	6	2			
Permitted Phases				Free		Free
Actuated Green, G (s)	3.6	43.2	25.1	43.2		43.2
Effective Green, g (s)	3.6	43.2	25.1	43.2		43.2
Actuated g/C Ratio	0.08	1.00	0.58	1.00		1.00
Clearance Time (s)	8.0	6.5	6.5			
Vehicle Extension (s)	3.0	3.0	3.0			
Lane Grp Cap (vph)	147	5085	4935	1583		1611
v/s Ratio Prot	0.06	c0.55	0.23			
v/s Ratio Perm				0.05		0.11
v/c Ratio	0.68	0.55	0.40	0.05		0.11
Uniform Delay, d1	19.2	0.0	4.9	0.0		0.0
Progression Factor	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	12.2	0.1	0.1	0.1		0.1
Delay (s)	31.4	0.1	5.0	0.1		0.1
Level of Service	C	A	A	A		A
Approach Delay (s)		1.2	4.8		0.1	
Approach LOS		A	A		A	

Intersection Summary			
HCM 2000 Control Delay	2.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	43.2	Sum of lost time (s)	14.5
Intersection Capacity Utilization	57.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	116	2262	301	133	1673	80	322	1	105	101	1	144
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.5	7.5	7.0	7.5		6.0	6.5	6.5	6.0	6.5	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91		0.97	0.95	0.95	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.85	0.85	1.00	0.85	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1583	3433	5051		3433	1509	1504	1770	1585	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1583	3433	5051		3433	1509	1504	1770	1585	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	122	2381	317	140	1761	84	339	1	111	106	1	152
RTOR Reduction (vph)	0	0	163	0	4	0	0	51	50	0	84	0
Lane Group Flow (vph)	122	2381	154	140	1841	0	339	6	5	106	69	0
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6						4			
Actuated Green, G (s)	9.0	51.1	51.1	5.0	47.1		11.0	10.3	10.3	11.9	11.2	
Effective Green, g (s)	9.0	51.1	51.1	5.0	47.1		11.0	10.3	10.3	11.9	11.2	
Actuated g/C Ratio	0.09	0.49	0.49	0.05	0.45		0.10	0.10	0.10	0.11	0.11	
Clearance Time (s)	7.0	7.5	7.5	7.0	7.5		6.0	6.5	6.5	6.0	6.5	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	151	2467	768	163	2259		358	147	147	200	168	
v/s Ratio Prot	c0.07	c0.47		0.04	0.36		c0.10	0.00		0.06	c0.04	
v/s Ratio Perm			0.10						0.00			
v/c Ratio	0.81	0.97	0.20	0.86	0.81		0.95	0.04	0.04	0.53	0.41	
Uniform Delay, d1	47.3	26.2	15.5	49.8	25.3		46.9	43.0	43.0	44.1	44.0	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	26.2	11.6	0.6	33.5	3.4		33.7	0.1	0.1	2.7	1.6	
Delay (s)	73.5	37.8	16.0	83.3	28.7		80.5	43.2	43.1	46.7	45.6	
Level of Service	E	D	B	F	C		F	D	D	D	D	
Approach Delay (s)		36.9			32.5			71.2			46.1	
Approach LOS		D			C			E			D	

Intersection Summary			
HCM 2000 Control Delay	38.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	105.3	Sum of lost time (s)	27.0
Intersection Capacity Utilization	88.2%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Lane Group	EBT	EBR	WBL	WBT	SBL	SBR
Lane Group Flow (vph)	2122	933	1135	1220	633	596
v/c Ratio	0.84	0.59	1.07	0.72	0.88	0.45
Control Delay	43.7	1.6	103.6	27.7	63.9	3.5
Queue Delay	1.1	0.0	10.5	0.1	7.3	0.0
Total Delay	44.7	1.6	114.0	27.7	71.2	3.5
Queue Length 50th (ft)	407	0	~564	149	268	0
Queue Length 95th (ft)	447	0	m#636	m158	#364	43
Internal Link Dist (ft)	533			458		
Turn Bay Length (ft)						
Base Capacity (vph)	2530	1583	1056	1684	723	1330
Starvation Cap Reductn	0	0	58	29	0	0
Spillback Cap Reductn	193	0	0	0	65	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.91	0.59	1.14	0.74	0.96	0.45

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

No Build Alternative 2040 AM

9: East Ramps & Northlake Blvd Corridor: Northlake Boulevard

Lane Group	EBL	EBT	WBT	WBR	NBL	NBR
Lane Group Flow (vph)	971	1784	1581	575	774	1331
v/c Ratio	0.92	1.05	0.63	0.36	1.07	0.73
Control Delay	72.4	54.0	38.4	0.6	102.3	4.5
Queue Delay	6.9	1.9	0.6	0.0	13.1	0.0
Total Delay	79.3	55.9	39.0	0.6	115.4	4.5
Queue Length 50th (ft)	452	~581	282	0	~372	0
Queue Length 95th (ft)	m#528	#669	317	0	#498	51
Internal Link Dist (ft)		458	348			
Turn Bay Length (ft)				400		
Base Capacity (vph)	1095	1705	2499	1583	723	1812
Starvation Cap Reductn	97	8	479	0	0	0
Spillback Cap Reductn	0	0	0	0	150	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.97	1.05	0.78	0.36	1.35	0.73

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

PGA BOULEVARD CORRIDOR

Arterial Level of Service: EB PGA Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Fairway Dr	II	45	16.8	60.0	76.8	0.15	7.2	F
Central Blvd	II	45	36.7	35.1	71.8	0.39	19.6	D
N Military Trail	II	45	81.7	89.8	171.5	1.02	21.4	D
West Ramps	II	45	20.5	19.3	39.8	0.19	17.0	D
East Ramps	II	45	6.3	176.1	182.4	0.06	1.1	F
Lake Victoria Gnds	II	45	56.6	41.1	97.7	0.71	26.0	C
Total	II		218.6	421.4	640.0	2.52	14.2	E

Arterial Level of Service: WB PGA Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Lake Victoria Gnds	II	45	13.7	38.2	51.9	0.13	8.7	F
East Ramps	II	45	56.6	32.1	88.7	0.71	28.7	B
West Ramps	II	45	6.3	43.5	49.8	0.06	4.2	F
N Military Trail	II	45	20.5	44.7	65.2	0.19	10.4	F
Central Blvd	II	45	25.0	111.7	136.7	0.24	6.3	F
FL Turnpike	II	45	36.7	92.4	129.1	0.39	10.9	F
Total	II		158.8	362.6	521.4	1.71	11.8	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	342	1439	1077	424	427	816	646	931	24	927	774	143
Future Volume (veh/h)	342	1439	1077	424	427	816	646	931	24	927	774	143
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	360	1515	0	446	449	0	680	980	0	976	815	151
Adj No. of Lanes	2	3	1	2	3	1	2	3	1	2	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	390	1441	449	321	1373	427	743	797	248	860	987	307
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.11	0.28	0.00	0.09	0.27	0.00	0.22	0.16	0.00	0.25	0.19	0.19
Ln Grp Delay, s/veh	93.1	92.3	0.0	261.0	44.5	0.0	70.8	177.7	0.0	131.0	63.8	55.1
Ln Grp LOS	F	F		F	D		E	F		F	E	E
Approach Vol, veh/h		1875			895			1660			1942	
Approach Delay, s/veh		92.4			152.3			133.9			96.9	
Approach LOS		F			F			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	25.0	48.0	46.0	31.0	23.0	50.0	40.4	36.6
Change Period (Y+Rc), s	8.0	7.5	8.5	7.5	9.0	7.5	8.0	7.5
Max Green (Gmax), s	17.0	40.5	37.5	23.5	14.0	42.5	37.0	24.5
Max Allow Headway (MAH), s	3.7	4.9	3.7	4.8	3.7	4.9	3.7	4.8
Max Q Clear (g_c+I1), s	17.5	12.6	39.5	25.5	16.0	44.5	31.0	25.1
Green Ext Time (g_e), s	0.0	16.0	0.0	0.0	0.0	0.0	1.4	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	1.00	1.00	0.00	0.40	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3442		3442		3442		3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		5085		5085		5085		5085

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		1583		1583		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	2	0	2	0
Grp Vol (v), veh/h	360	0	976	0	446	0	680	0
Grp Sat Flow (s), veh/h/ln	1721	0	1721	0	1721	0	1721	0
Q Serve Time (g_s), s	15.5	0.0	37.5	0.0	14.0	0.0	29.0	0.0
Cycle Q Clear Time (g_c), s	15.5	0.0	37.5	0.0	14.0	0.0	29.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	390	0	860	0	321	0	743	0
V/C Ratio (X)	0.92	0.00	1.13	0.00	1.39	0.00	0.92	0.00
Avail Cap (c_a), veh/h	390	0	860	0	321	0	849	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	65.9	0.0	56.3	0.0	68.0	0.0	57.5	0.0
Incr Delay (d2), s/veh	27.2	0.0	74.7	0.0	193.0	0.0	13.3	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	93.1	0.0	131.0	0.0	261.0	0.0	70.8	0.0
1st-Term Q (Q1), veh/ln	7.4	0.0	17.8	0.0	6.6	0.0	13.8	0.0
2nd-Term Q (Q2), veh/ln	1.5	0.0	8.9	0.0	8.6	0.0	1.4	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.55	0.00	1.80	0.00	1.80	0.00	1.42	0.00
%ile Back of Q (95%), veh/ln	13.8	0.0	48.1	0.0	27.5	0.0	21.6	0.0
%ile Storage Ratio (RQ%)	0.76	0.00	2.70	0.00	1.39	0.00	1.25	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	28.9	0.0	31.2	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.3	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	3	0	3	0	3
Grp Vol (v), veh/h	0	449	0	980	0	1515	0	815
Grp Sat Flow (s), veh/h/ln	0	1695	0	1695	0	1695	0	1695
Q Serve Time (g_s), s	0.0	10.6	0.0	23.5	0.0	42.5	0.0	23.1
Cycle Q Clear Time (g_c), s	0.0	10.6	0.0	23.5	0.0	42.5	0.0	23.1
Lane Grp Cap (c), veh/h	0	1373	0	797	0	1441	0	987
V/C Ratio (X)	0.00	0.33	0.00	1.23	0.00	1.05	0.00	0.83
Avail Cap (c_a), veh/h	0	1373	0	797	0	1441	0	987
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	43.8	0.0	63.3	0.0	53.8	0.0	58.0
Incr Delay (d2), s/veh	0.0	0.6	0.0	114.5	0.0	38.5	0.0	5.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	44.5	0.0	177.7	0.0	92.3	0.0	63.8
1st-Term Q (Q1), veh/ln	0.0	5.0	0.0	11.0	0.0	19.9	0.0	10.8

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	8.4	0.0	5.1	0.0	0.5
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.73	0.00	1.80	0.00	1.80	0.00	1.49
%ile Back of Q (95%), veh/ln	0.0	8.8	0.0	35.0	0.0	45.0	0.0	16.8
%ile Storage Ratio (RQ%)	0.00	0.54	0.00	1.19	0.00	1.08	0.00	0.49
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	45.8	0.0	18.5	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.3	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	0	0	0	0	151
Grp Sat Flow (s), veh/h/ln	0	1583	0	1583	0	1583	0	1583
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.7
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.7
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	427	0	248	0	449	0	307
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49
Avail Cap (c_a), veh/h	0	427	0	248	0	449	0	307
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	53.8
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55.1
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.6
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.69
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.6
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.54
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	113.0
HCM 2010 LOS	F

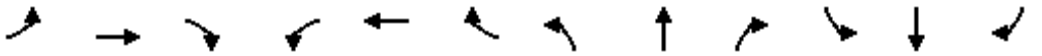
No Build Alternative 2040 AM

3: Fairway Dr/FL Turnpike & PGA Blvd Corridor: PGA Boulevard

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	53	991	33	240	1194	526	45	77	467	1382	159	165
Future Volume (vph)	53	991	33	240	1194	526	45	77	467	1382	159	165
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.5		7.5	8.0	8.0	7.5	7.5	7.5	7.5	7.5	4.0
Lane Util. Factor	0.97	0.91		0.97	0.95	0.88	1.00	0.95	0.95	0.91	0.91	1.00
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.89	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.97	1.00
Satd. Flow (prot)	3433	5061		3433	3539	2787	1770	1578	1504	3221	1638	1583
Flt Permitted	0.10	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.11	1.00
Satd. Flow (perm)	374	5061		3433	3539	2787	1770	1578	1504	3221	194	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	56	1043	35	253	1257	554	47	81	492	1455	167	174
RTOR Reduction (vph)	0	2	0	0	0	358	0	62	214	0	0	0
Lane Group Flow (vph)	56	1076	0	253	1257	196	47	231	66	1077	545	174
Turn Type	pm+pt	NA		Prot	NA	Perm	Prot	NA	Prot	Prot	NA	Free
Protected Phases	7	4		3	8		5	2	2	1	6	
Permitted Phases	4					8						Free
Actuated Green, G (s)	41.8	38.6		13.9	49.3	49.3	7.5	22.1	22.1	46.3	75.9	150.9
Effective Green, g (s)	41.8	38.6		13.9	49.3	49.3	7.5	22.1	22.1	46.3	75.9	150.9
Actuated g/C Ratio	0.28	0.26		0.09	0.33	0.33	0.05	0.15	0.15	0.31	0.50	1.00
Clearance Time (s)	7.0	7.5		7.5	8.0	8.0	7.5	7.5	7.5	7.5	7.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	168	1294		316	1156	910	87	231	220	988	540	1583
v/s Ratio Prot	0.01	0.21		c0.07	c0.36		0.03	0.15	0.04	c0.33	0.31	
v/s Ratio Perm	0.08					0.07					c0.20	0.11
v/c Ratio	0.33	0.83		0.80	1.09	0.22	0.54	1.00	0.30	1.09	1.01	0.11
Uniform Delay, d1	44.1	53.1		67.1	50.8	36.8	70.0	64.4	57.5	52.3	37.5	0.0
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.2	4.7		13.5	53.5	0.1	6.7	58.9	3.5	56.4	41.0	0.1
Delay (s)	45.3	57.8		80.7	104.3	36.9	76.7	123.3	60.9	108.7	78.5	0.1
Level of Service	D	E		F	F	D	E	F	E	F	E	A
Approach Delay (s)		57.2			83.3			91.6			89.0	
Approach LOS		E			F			F			F	

Intersection Summary			
HCM 2000 Control Delay	80.8	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.12		
Actuated Cycle Length (s)	150.9	Sum of lost time (s)	30.0
Intersection Capacity Utilization	103.3%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	832	1688	37	145	1191	332	43	48	186	332	33	936
Future Volume (vph)	832	1688	37	145	1191	332	43	48	186	332	33	936
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.5	8.5		7.0	8.0	8.0		8.5	8.5	8.5	8.5	7.5
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00		1.00	1.00	0.95	0.95	1.00
Frt	1.00	1.00		1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.98	1.00	0.95	0.96	1.00
Satd. Flow (prot)	3433	5069		1770	5085	1583		1820	1583	1681	1700	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.98	1.00	0.95	0.96	1.00
Satd. Flow (perm)	3433	5069		1770	5085	1583		1820	1583	1681	1700	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	876	1777	39	153	1254	349	45	51	196	349	35	985
RTOR Reduction (vph)	0	2	0	0	0	253	0	0	179	0	0	111
Lane Group Flow (vph)	876	1814	0	153	1254	96	0	96	17	192	192	874
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	pm+ov
Protected Phases	1	6		5	2		4	4		3	3	1
Permitted Phases						2			4			3
Actuated Green, G (s)	52.5	69.8		15.8	33.1	33.1		12.6	12.6	17.0	17.0	69.5
Effective Green, g (s)	52.5	69.8		15.8	33.1	33.1		12.6	12.6	17.0	17.0	69.5
Actuated g/C Ratio	0.36	0.47		0.11	0.22	0.22		0.09	0.09	0.12	0.12	0.47
Clearance Time (s)	7.5	8.5		7.0	8.0	8.0		8.5	8.5	8.5	8.5	7.5
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	1220	2395		189	1139	354		155	135	193	195	744
v/s Ratio Prot	0.26	0.36		0.09	c0.25			c0.05		0.11	0.11	c0.42
v/s Ratio Perm						0.06			0.01			0.14
v/c Ratio	0.72	0.76		0.81	1.10	0.27		0.62	0.12	0.99	0.98	1.18
Uniform Delay, d1	41.2	32.0		64.5	57.3	47.3		65.2	62.4	65.3	65.2	39.1
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.0	2.3		21.9	58.8	1.9		7.2	0.4	63.5	60.6	92.6
Delay (s)	43.2	34.3		86.4	116.1	49.2		72.4	62.9	128.8	125.8	131.7
Level of Service	D	C		F	F	D		E	E	F	F	F
Approach Delay (s)		37.2			100.2			66.0			130.5	
Approach LOS		D			F			E			F	

Intersection Summary			
HCM 2000 Control Delay	77.6	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.09		
Actuated Cycle Length (s)	147.7	Sum of lost time (s)	32.5
Intersection Capacity Utilization	105.9%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	0	0	0	454	0	356	0	849	1473	0	2264	0
Future Volume (vph)	0	0	0	454	0	356	0	849	1473	0	2264	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0		6.0		6.0	4.0		6.0	
Lane Util. Factor				0.97		0.88		0.91	1.00		0.86	
Frt				1.00		0.85		1.00	0.85		1.00	
Flt Protected				0.95		1.00		1.00	1.00		1.00	
Satd. Flow (prot)				3433		2787		5085	1583		6408	
Flt Permitted				0.95		1.00		1.00	1.00		1.00	
Satd. Flow (perm)				3433		2787		5085	1583		6408	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	478	0	375	0	894	1551	0	2383	0
RTOR Reduction (vph)	0	0	0	0	0	327	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	478	0	48	0	894	1551	0	2383	0
Turn Type				Prot		Prot		NA	Free		NA	
Protected Phases				3		3		6			2	
Permitted Phases									Free			
Actuated Green, G (s)				18.0		18.0		74.0	140.0		74.0	
Effective Green, g (s)				18.0		18.0		74.0	140.0		74.0	
Actuated g/C Ratio				0.13		0.13		0.53	1.00		0.53	
Clearance Time (s)				6.0		6.0		6.0			6.0	
Vehicle Extension (s)				3.0		3.0		3.0			3.0	
Lane Grp Cap (vph)				441		358		2687	1583		3387	
v/s Ratio Prot				0.14		0.02		0.18			0.37	
v/s Ratio Perm									c0.98			
v/c Ratio				1.08		0.13		0.33	0.98		0.70	
Uniform Delay, d1				61.0		54.1		18.9	0.0		24.8	
Progression Factor				1.00		1.00		1.00	1.00		1.69	
Incremental Delay, d2				67.3		0.2		0.3	18.3		1.2	
Delay (s)				128.3		54.3		19.2	18.3		43.2	
Level of Service				F		D		B	B		D	
Approach Delay (s)		0.0			95.8			18.6			43.2	
Approach LOS		A			F			B			D	

Intersection Summary			
HCM 2000 Control Delay	40.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.12		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	105.0%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	NBL	NBR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	0	2996	1303	0	0	972
Future Volume (vph)	0	2996	1303	0	0	972
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0	6.0			6.0
Lane Util. Factor		0.76	0.91			0.86
Frt		0.85	1.00			1.00
Flt Protected		1.00	1.00			1.00
Satd. Flow (prot)		3610	5085			6408
Flt Permitted		1.00	1.00			1.00
Satd. Flow (perm)		3610	5085			6408
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	3154	1372	0	0	1023
RTOR Reduction (vph)	0	440	0	0	0	0
Lane Group Flow (vph)	0	2714	1372	0	0	1023
Turn Type		Perm	NA			NA
Protected Phases			4			
Permitted Phases		2				8
Actuated Green, G (s)		74.0	30.0			54.0
Effective Green, g (s)		74.0	30.0			54.0
Actuated g/C Ratio		0.53	0.21			0.39
Clearance Time (s)		6.0	6.0			6.0
Vehicle Extension (s)		3.0	3.0			3.0
Lane Grp Cap (vph)		1908	1089			2471
v/s Ratio Prot			c0.27			
v/s Ratio Perm		c0.75				c0.16
v/c Ratio		1.42	1.26			0.41
Uniform Delay, d1		33.0	55.0			31.4
Progression Factor		1.00	1.25			1.00
Incremental Delay, d2		193.3	123.1			0.1
Delay (s)		226.3	191.7			31.5
Level of Service		F	F			C
Approach Delay (s)	226.3		191.7			31.5
Approach LOS	F		F			C

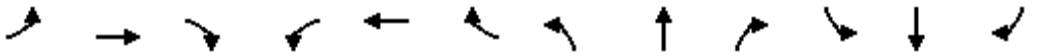
Intersection Summary			
HCM 2000 Control Delay	181.8	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.25		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	105.0%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	590	2943	512	0	1446	0	215	1	86	0	0	11
Future Volume (vph)	590	2943	512	0	1446	0	215	1	86	0	0	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0		6.0		6.0	6.0	6.0			7.0
Lane Util. Factor	0.97	0.91	1.00		0.91		0.91	0.86	0.95			1.00
Frt	1.00	1.00	0.85		1.00		1.00	0.97	0.85			0.86
Flt Protected	0.95	1.00	1.00		1.00		0.95	0.96	1.00			1.00
Satd. Flow (prot)	3433	5085	1583		5085		3221	1493	1504			1611
Flt Permitted	0.95	1.00	1.00		1.00		0.95	0.96	1.00			1.00
Satd. Flow (perm)	3433	5085	1583		5085		3221	1493	1504			1611
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	621	3098	539	0	1522	0	226	1	91	0	0	12
RTOR Reduction (vph)	0	0	188	0	0	0	0	7	53	0	0	10
Lane Group Flow (vph)	621	3098	351	0	1522	0	163	74	21	0	0	2
Turn Type	Prot	NA	Perm		NA		Prot	NA	Perm			Perm
Protected Phases	7	4			8		5	2				
Permitted Phases			4						2			6
Actuated Green, G (s)	20.0	60.0	60.0		34.0		5.0	28.0	28.0			16.0
Effective Green, g (s)	20.0	60.0	60.0		34.0		5.0	28.0	28.0			16.0
Actuated g/C Ratio	0.20	0.60	0.60		0.34		0.05	0.28	0.28			0.16
Clearance Time (s)	6.0	6.0	6.0		6.0		6.0	6.0	6.0			7.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0	3.0			3.0
Lane Grp Cap (vph)	686	3051	949		1728		161	418	421			257
v/s Ratio Prot	0.18	c0.61			0.30		c0.05	c0.01				
v/s Ratio Perm			0.22					0.04	0.01			0.00
v/c Ratio	0.91	1.02	0.37		0.88		1.01	0.18	0.05			0.01
Uniform Delay, d1	39.1	20.0	10.3		31.1		47.5	27.3	26.3			35.3
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00	1.00			1.00
Incremental Delay, d2	15.5	20.2	0.2		5.6		74.2	0.2	0.2			0.1
Delay (s)	54.5	40.2	10.5		36.7		121.7	27.5	26.5			35.4
Level of Service	D	D	B		D		F	C	C			D
Approach Delay (s)		38.6			36.7			75.6			35.4	
Approach LOS		D			D			E			D	

Intersection Summary			
HCM 2000 Control Delay	40.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	25.0
Intersection Capacity Utilization	71.4%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	38	93	0	349	0	0	11	61
Future Volume (vph)	0	0	0	0	38	93	0	349	0	0	11	61
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					6.0	6.0		6.0			7.0	7.0
Lane Util. Factor					1.00	1.00		0.95			1.00	1.00
Frt					1.00	0.85		1.00			1.00	0.85
Flt Protected					1.00	1.00		1.00			1.00	1.00
Satd. Flow (prot)					1863	1583		3539			1863	1583
Flt Permitted					1.00	1.00		1.00			1.00	1.00
Satd. Flow (perm)					1863	1583		3539			1863	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	0	40	98	0	367	0	0	12	64
RTOR Reduction (vph)	0	0	0	0	0	65	0	0	0	0	0	54
Lane Group Flow (vph)	0	0	0	0	40	33	0	367	0	0	12	10
Turn Type					NA	Perm		NA			NA	Perm
Protected Phases					8			7			6	
Permitted Phases						8						6
Actuated Green, G (s)					34.0	34.0		20.0			16.0	16.0
Effective Green, g (s)					34.0	34.0		20.0			16.0	16.0
Actuated g/C Ratio					0.34	0.34		0.20			0.16	0.16
Clearance Time (s)					6.0	6.0		6.0			7.0	7.0
Vehicle Extension (s)					3.0	3.0		3.0			3.0	3.0
Lane Grp Cap (vph)					633	538		707			298	253
v/s Ratio Prot					c0.02			c0.10			0.01	
v/s Ratio Perm						0.02						c0.01
v/c Ratio					0.06	0.06		0.52			0.04	0.04
Uniform Delay, d1					22.3	22.2		35.7			35.5	35.5
Progression Factor					1.00	1.00		0.14			1.00	1.00
Incremental Delay, d2					0.0	0.0		0.3			0.3	0.3
Delay (s)					22.3	22.3		5.4			35.8	35.8
Level of Service					C	C		A			D	D
Approach Delay (s)		0.0			22.3			5.4			35.8	
Approach LOS		A			C			A			D	

Intersection Summary			
HCM 2000 Control Delay	13.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.18		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	25.0
Intersection Capacity Utilization	25.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	SBL	SBR	NET	NER	SWT
Lane Group Flow (vph)	478	375	894	1551	2383
v/c Ratio	1.08	0.55	0.33	0.98	0.70
Control Delay	123.1	8.4	19.3	20.6	43.5
Queue Delay	625.2	0.0	0.7	0.0	48.4
Total Delay	748.4	8.4	20.0	20.6	91.9
Queue Length 50th (ft)	~250	0	165	0	576
Queue Length 95th (ft)	#363	51	197	#206	616
Internal Link Dist (ft)			215		227
Turn Bay Length (ft)					
Base Capacity (vph)	441	685	2687	1583	3387
Starvation Cap Reductn	0	0	0	0	1916
Spillback Cap Reductn	441	0	1331	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	478.00	0.55	0.66	0.98	1.62

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	NBR	NET	SWT
Lane Group Flow (vph)	3154	1372	1023
v/c Ratio	1.34	1.26	0.41
Control Delay	180.1	176.1	32.1
Queue Delay	0.0	2.4	52.3
Total Delay	180.1	178.5	84.4
Queue Length 50th (ft)	~1463	~589	196
Queue Length 95th (ft)	#1552	m#628	229
Internal Link Dist (ft)		227	250
Turn Bay Length (ft)			
Base Capacity (vph)	2347	1089	2471
Starvation Cap Reductn	0	395	0
Spillback Cap Reductn	0	0	1792
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	1.34	1.98	1.51

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (veh/h)	0	88	3559	1207	207	1039
Future Volume (Veh/h)	0	88	3559	1207	207	1039
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	0	93	3746	1271	218	1094
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			1299			
pX, platoon unblocked	0.84	0.84			0.84	
vC, conflicting volume	5182	1572			5017	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	5024	716			4827	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	0	70			0	
cM capacity (veh/h)	0	312			17	

Direction, Lane #	NW 1	NE 1	NE 2	NE 3	NE 4	SW 1	SW 2	SW 3	SW 4
Volume Total	93	1070	1070	1070	1806	218	365	365	365
Volume Left	0	0	0	0	0	218	0	0	0
Volume Right	93	0	0	0	1271	0	0	0	0
cSH	312	1700	1700	1700	1700	17	1700	1700	1700
Volume to Capacity	0.30	0.63	0.63	0.63	1.06	13.17	0.21	0.21	0.21
Queue Length 95th (ft)	30	0	0	0	0	Err	0	0	0
Control Delay (s)	21.4	0.0	0.0	0.0	0.0	5925.2	0.0	0.0	0.0
Lane LOS	C					F			
Approach Delay (s)	21.4	0.0				984.5			
Approach LOS	C								

Intersection Summary			
Average Delay	201.4		
Intersection Capacity Utilization	89.9%	ICU Level of Service	E
Analysis Period (min)	15		

Lane Group	SBL	SBR	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	0	0	8	4291	972	0
Future Volume (vph)	0	0	8	4291	972	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	500			0
Storage Lanes	0	0	1			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.86	0.91	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	6408	5085	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	6408	5085	0
Link Speed (mph)	45			45	45	
Link Distance (ft)	247			189	328	
Travel Time (s)	3.7			2.9	5.0	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	8	4517	1023	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	8	4517	1023	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 105.4%		ICU Level of Service G	
Analysis Period (min) 15			

APPENDIX M

SYNCHRO REPORTS

NO BUILD 2040 PM

CENTRAL BOULEVARD CORRIDOR

Arterial Level of Service: NB Central Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
PGA Blvd	II	45	11.9	283.8	295.7	0.11	1.3	F
117th Ct	II	45	61.9	15.8	77.7	0.77	35.9	A
Hood Rd	II	45	101.7	34.1	135.8	1.27	33.7	B
Donald Ross	II	45	100.8	98.1	198.9	1.26	22.8	C
Total	II		276.3	431.8	708.1	3.41	17.3	D

Arterial Level of Service: SB Central Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Donald Ross	II	45	22.2	85.5	107.7	0.20	6.8	F
Hood Rd	II	45	100.8	24.3	125.1	1.26	36.3	A
117th Ct	II	45	101.7	9.6	111.3	1.27	41.1	A
PGA Blvd	II	45	61.9	72.9	134.8	0.77	20.7	D
Total	II		286.6	192.3	478.9	3.51	26.4	C

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	299	144	1017	157	115	1112
Future Volume (veh/h)	299	144	1017	157	115	1112
Number	3	18	2	12	1	6
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	315	152	1071	165	121	1171
Adj No. of Lanes	1	1	2	1	1	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	376	335	2020	904	345	2361
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.21	0.21	0.57	0.57	0.05	0.67
Ln Grp Delay, s/veh	36.2	29.3	11.9	8.9	8.8	7.6
Ln Grp LOS	D	C	B	A	A	A
Approach Vol, veh/h	467		1236			1292
Approach Delay, s/veh	33.9		11.5			7.7
Approach LOS	C		B			A

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	8			6		
Case No	1.2	7.0	9.0			4.0		
Phs Duration (G+Y+Rc), s	7.9	52.1	22.5			60.0		
Change Period (Y+Rc), s	4.0	5.0	5.0			5.0		
Max Green (Gmax), s	6.0	45.0	60.0			55.0		
Max Allow Headway (MAH), s	3.7	4.8	3.8			4.8		
Max Q Clear (g_c+I1), s	4.2	17.4	16.0			15.6		
Green Ext Time (g_e), s	0.0	19.0	1.4			23.8		
Prob of Phs Call (p_c)	0.94	1.00	1.00			1.00		
Prob of Max Out (p_x)	1.00	0.00	0.00			0.00		

Left-Turn Movement Data								
Assigned Mvmt	1	5	3					
Mvmt Sat Flow, veh/h	1774	0	1774					

Through Movement Data								
Assigned Mvmt		2	8			6		
Mvmt Sat Flow, veh/h		3632	0			3632		

Right-Turn Movement Data								
Assigned Mvmt		12	18			16		
Mvmt Sat Flow, veh/h		1583	1583			0		

Left Lane Group Data								
Assigned Mvmt	1	5	3	0	0	0	0	0
Lane Assignment	(Pr/Pm)							

Lanes in Grp	1	0	1	0	0	0	0	0
Grp Vol (v), veh/h	121	0	315	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1774	0	1774	0	0	0	0	0
Q Serve Time (g_s), s	2.2	0.0	14.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	2.2	0.0	14.0	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	449	0	1774	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	49.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	31.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	6.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	47.1	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	345	0	376	0	0	0	0	0
V/C Ratio (X)	0.35	0.00	0.84	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	389	0	1291	0	0	0	0	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	8.1	0.0	31.1	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.6	0.0	5.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	8.8	0.0	36.2	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	1.0	0.0	6.8	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.5	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	1.00	1.60	0.00	0.00	0.00	0.00	0.00
%ile Back of Q (95%), veh/ln	1.9	0.0	11.8	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.14	0.00	0.63	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	0	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	1071	0	0	0	1171	0	0
Grp Sat Flow (s), veh/h/ln	0	1770	0	0	0	1770	0	0
Q Serve Time (g_s), s	0.0	15.4	0.0	0.0	0.0	13.6	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	15.4	0.0	0.0	0.0	13.6	0.0	0.0
Lane Grp Cap (c), veh/h	0	2020	0	0	0	2361	0	0
V/C Ratio (X)	0.00	0.53	0.00	0.00	0.00	0.50	0.00	0.00
Avail Cap (c_a), veh/h	0	2020	0	0	0	2361	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	10.9	0.0	0.0	0.0	6.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.0	0.0	0.0	0.0	0.7	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	11.9	0.0	0.0	0.0	7.6	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	7.4	0.0	0.0	0.0	6.5	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.0	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.59	1.00	0.00	0.00	1.63	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	12.3	0.0	0.0	0.0	11.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.54	0.00	0.00	0.00	0.55	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	18	0	0	16	0	0
Lane Assignment		R	R					
Lanes in Grp	0	1	1	0	0	0	0	0
Grp Vol (v), veh/h	0	165	152	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1583	1583	0	0	0	0	0
Q Serve Time (g_s), s	0.0	4.1	6.9	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	4.1	6.9	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	904	335	0	0	0	0	0
V/C Ratio (X)	0.00	0.18	0.45	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	904	1152	0	0	0	0	0
Upstream Filter (I)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	8.5	28.3	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.4	1.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	8.9	29.3	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	1.8	3.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	1.80	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	3.4	5.6	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.23	0.50	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	13.4
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	261	29	23	149	29	523	33	1011	69	211	1036	93
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	0	-	336	280	-	-	350	-	350
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	275	31	24	157	31	551	35	1064	73	222	1091	98

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2152	2741	545	2175	2705	568	1091	0	0	1137	0	0
Stage 1	1535	1535	-	1170	1170	-	-	-	-	-	-	-
Stage 2	617	1206	-	1005	1535	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	~ 27	~ 20	482	~ 26	~ 21	~ 466	635	-	-	610	-	-
Stage 1	~ 122	176	-	205	265	-	-	-	-	-	-	-
Stage 2	444	255	-	259	176	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	~ 12	482	-	~ 13	~ 466	635	-	-	610	-	-
Mov Cap-2 Maneuver	-	~ 12	-	-	~ 13	-	-	-	-	-	-	-
Stage 1	~ 115	112	-	194	250	-	-	-	-	-	-	-
Stage 2	-	241	-	~ 114	112	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s			0.3	2.2
HCM LOS	-	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	635	-	-	-	21	-	165	610	-	-
HCM Lane V/C Ratio	0.055	-	-	-	2.607	-	3.522	0.364	-	-
HCM Control Delay (s)	11	-	-	$ 1113.9		$ 1191.2		14.2	-	-
HCM Lane LOS	B	-	-	-	F	-	F	B	-	-
HCM 95th %tile Q(veh)	0.2	-	-	-	7.1	-	55.9	1.7	-	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

DONALD ROSS CORRIDOR

Arterial Level of Service: EB Donald Ross

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
West Ramp	II	45	46.0	33.0	79.0	0.52	23.8	C
East Ramp	II	45	15.7	35.8	51.5	0.14	10.0	F
Parkside Dr	II	45	42.7	72.3	115.0	0.53	16.7	E
Central Blvd	II	45	52.1	50.2	102.3	0.65	22.9	C
Military Trail	II	45	32.9	53.1	86.0	0.34	14.3	E
Total	II		189.4	244.4	433.8	2.19	18.2	D

Arterial Level of Service: WB Donald Ross

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Military Trail	II	45	21.4	65.3	86.7	0.20	8.1	F
Central Blvd	II	45	32.9	84.2	117.1	0.34	10.5	F
Parkside Dr	II	45	52.1	60.9	113.0	0.65	20.7	D
East Ramp	II	45	42.7	11.2	53.9	0.53	35.7	A
West Ramp	II	45	15.7	35.8	51.5	0.14	10.0	F
Total	II		164.8	257.4	422.2	1.87	15.9	E

HCM 2010 methodology does not support clustered intersections.

HCM 2010 methodology does not support clustered intersections.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	463	1238	316	762	1707	169	758	183	851	85	139	681
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	487	1303	333	802	1797	178	798	193	896	89	146	717
Adj No. of Lanes	2	3	1	2	3	1	2	1	1	1	1	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	453	1339	506	845	1777	893	738	443	585	207	206	993
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.13	0.26	0.26	0.25	0.35	0.35	0.21	0.24	0.24	0.06	0.11	0.11
Ln Grp Delay, s/veh	127.0	71.8	48.9	73.0	71.1	15.6	113.9	47.5	293.7	54.2	72.6	42.9
Ln Grp LOS	F	E	D	E	F	B	F	D	F	D	E	D
Approach Vol, veh/h		2123			2777			1887			952	
Approach Delay, s/veh		80.9			68.1			192.5			48.5	
Approach LOS		F			E			F			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	1.1	3.0
Phs Duration (G+Y+Rc), s	27.0	59.0	35.0	23.5	39.5	46.5	16.6	41.9
Change Period (Y+Rc), s	8.0	* 8.5	4.0	* 7.5	4.0	8.5	8.5	7.5
Max Green (Gmax), s	19.0	* 51	31.0	* 16	36.0	36.5	9.6	29.4
Max Allow Headway (MAH), s	3.7	4.8	3.7	4.1	3.7	4.8	3.7	4.1
Max Q Clear (g_c+I1), s	21.0	52.5	33.0	18.0	35.1	38.7	8.4	36.4
Green Ext Time (g_e), s	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	0.97	1.00
Prob of Max Out (p_x)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3442		3442		3442		1774	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		5085		1863		5085		1863

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		2787		1583		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Pr/Pm)	
Lanes in Grp	2	0	2	0	2	0	1	0

Grp Vol (v), veh/h	487	0	798	0	802	0	89	0
Grp Sat Flow (s), veh/h/ln	1721	0	1721	0	1721	0	1774	0
Q Serve Time (g_s), s	19.0	0.0	31.0	0.0	33.1	0.0	6.4	0.0
Cycle Q Clear Time (g_c), s	19.0	0.0	31.0	0.0	33.1	0.0	6.4	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	516	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	16.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	16.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	453	0	738	0	845	0	207	0
V/C Ratio (X)	1.08	0.00	1.08	0.00	0.95	0.00	0.43	0.00
Avail Cap (c_a), veh/h	453	0	738	0	857	0	225	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	62.8	0.0	56.8	0.0	53.6	0.0	52.8	0.0
Incr Delay (d2), s/veh	64.3	0.0	57.1	0.0	19.4	0.0	1.4	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	127.0	0.0	113.9	0.0	73.0	0.0	54.2	0.0
1st-Term Q (Q1), veh/ln	9.0	0.0	14.7	0.0	15.7	0.0	3.1	0.0
2nd-Term Q (Q2), veh/ln	4.0	0.0	5.9	0.0	2.3	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (-26165%), veh/ln	13.0	0.0	20.5	0.0	18.0	0.0	3.2	0.0
%ile Storage Ratio (RQ%)	0.61	0.00	1.49	0.00	1.48	0.00	0.54	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	8.6	0.0	14.9	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	1	0	3	0	1
Grp Vol (v), veh/h	0	1797	0	146	0	1303	0	193
Grp Sat Flow (s), veh/h/ln	0	1695	0	1863	0	1695	0	1863
Q Serve Time (g_s), s	0.0	50.5	0.0	10.9	0.0	36.7	0.0	12.7
Cycle Q Clear Time (g_c), s	0.0	50.5	0.0	10.9	0.0	36.7	0.0	12.7
Lane Grp Cap (c), veh/h	0	1777	0	206	0	1339	0	443
V/C Ratio (X)	0.00	1.01	0.00	0.71	0.00	0.97	0.00	0.44
Avail Cap (c_a), veh/h	0	1777	0	206	0	1339	0	443
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	47.0	0.0	62.0	0.0	52.7	0.0	46.8
Incr Delay (d2), s/veh	0.0	24.1	0.0	10.6	0.0	19.0	0.0	0.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	71.1	0.0	72.6	0.0	71.8	0.0	47.5
1st-Term Q (Q1), veh/ln	0.0	23.5	0.0	5.6	0.0	17.1	0.0	6.5
2nd-Term Q (Q2), veh/ln	0.0	4.0	0.0	0.6	0.0	2.4	0.0	0.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (-26165%), veh/ln	0.0	27.5	0.0	6.2	0.0	19.5	0.0	6.6
%ile Storage Ratio (RQ%)	0.00	0.21	0.00	0.27	0.00	0.18	0.00	0.23
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	4.9	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	2	0	1	0	1
Grp Vol (v), veh/h	0	178	0	717	0	333	0	896
Grp Sat Flow (s), veh/h/ln	0	1583	0	1393	0	1583	0	1583
Q Serve Time (g_s), s	0.0	8.0	0.0	16.0	0.0	26.2	0.0	34.4
Cycle Q Clear Time (g_c), s	0.0	8.0	0.0	16.0	0.0	26.2	0.0	34.4
Prot RT Sat Flow (s_R), veh/h/ln	0.0	1583.3	0.0	1393.3	0.0	1583.3	0.0	1583.3
Prot RT Eff Green (g_R), s	0.0	31.0	0.0	35.5	0.0	8.1	0.0	19.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	893	0	993	0	506	0	585
V/C Ratio (X)	0.00	0.20	0.00	0.72	0.00	0.66	0.00	1.53
Avail Cap (c_a), veh/h	0	893	0	993	0	506	0	585
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	15.5	0.0	40.3	0.0	42.4	0.0	45.6
Incr Delay (d2), s/veh	0.0	0.1	0.0	2.6	0.0	6.6	0.0	248.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	15.6	0.0	42.9	0.0	48.9	0.0	293.7
1st-Term Q (Q1), veh/ln	0.0	3.5	0.0	12.4	0.0	11.4	0.0	23.2
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.4	0.0	0.9	0.0	40.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (-26165%), veh/ln	0.0	3.5	0.0	12.7	0.0	12.3	0.0	63.6
%ile Storage Ratio (RQ%)	0.00	0.19	0.00	1.08	0.00	0.63	0.00	3.59
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	77.8
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4

Intersection Summary	
HCM 2010 Ctrl Delay	99.5
HCM 2010 LOS	F

Notes

User approved ignoring U-Turning movement.

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	491	1050	535	291	1320	156	527	728	352	585	725	451
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	517	1105	563	306	1389	164	555	766	371	616	763	475
Adj No. of Lanes	2	3	1	2	3	1	2	2	1	2	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	482	1551	483	350	1356	422	551	720	322	574	755	338
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.14	0.31	0.31	0.10	0.27	0.27	0.16	0.20	0.20	0.17	0.21	0.21
Ln Grp Delay, s/veh	126.5	47.8	147.3	86.1	85.8	47.7	103.3	111.8	157.9	121.5	94.4	258.7
Ln Grp LOS	F	D	F	F	F	D	F	F	F	F	F	F
Approach Vol, veh/h		2185			1859			1692			1854	
Approach Delay, s/veh		92.1			82.5			119.1			145.5	
Approach LOS		F			F			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	30.0	48.0	34.0	38.0	24.2	53.8	32.5	39.5
Change Period (Y+Rc), s	9.0	8.0	9.0	7.5	9.0	8.0	8.5	7.5
Max Green (Gmax), s	21.0	40.0	25.0	30.5	16.0	45.0	24.0	32.0
Max Allow Headway (MAH), s	3.7	4.7	3.7	4.6	3.7	4.7	3.7	4.6
Max Q Clear (g_c+I1), s	23.0	42.0	27.0	32.5	15.2	47.8	26.0	34.0
Green Ext Time (g_e), s	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3442		3442		3442		3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		5085		3539		5085		3539

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		1583		1583		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	
Lanes in Grp	2	0	2	0	2	0	2	0

Grp Vol (v), veh/h	517	0	616	0	306	0	555	0
Grp Sat Flow (s), veh/h/ln	1721	0	1721	0	1721	0	1721	0
Q Serve Time (g_s), s	21.0	0.0	25.0	0.0	13.2	0.0	24.0	0.0
Cycle Q Clear Time (g_c), s	21.0	0.0	25.0	0.0	13.2	0.0	24.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	482	0	574	0	350	0	551	0
V/C Ratio (X)	1.07	0.00	1.07	0.00	0.87	0.00	1.01	0.00
Avail Cap (c_a), veh/h	482	0	574	0	367	0	551	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	64.5	0.0	62.5	0.0	66.4	0.0	63.0	0.0
Incr Delay (d2), s/veh	62.0	0.0	59.0	0.0	19.7	0.0	40.3	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	126.5	0.0	121.5	0.0	86.1	0.0	103.3	0.0
1st-Term Q (Q1), veh/ln	10.0	0.0	11.9	0.0	6.2	0.0	11.4	0.0
2nd-Term Q (Q2), veh/ln	4.1	0.0	4.7	0.0	1.0	0.0	3.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (-26165%), veh/ln	14.1	0.0	16.6	0.0	7.2	0.0	14.5	0.0
%ile Storage Ratio (RQ%)	0.67	0.00	0.83	0.00	0.36	0.00	0.68	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	8.8	0.0	10.6	0.0	0.0	0.0	1.1	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.3	0.0	0.3	0.0	0.0	0.0	0.3	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	2	0	3	0	2
Grp Vol (v), veh/h	0	1389	0	766	0	1105	0	763
Grp Sat Flow (s), veh/h/ln	0	1695	0	1770	0	1695	0	1770
Q Serve Time (g_s), s	0.0	40.0	0.0	30.5	0.0	28.9	0.0	32.0
Cycle Q Clear Time (g_c), s	0.0	40.0	0.0	30.5	0.0	28.9	0.0	32.0
Lane Grp Cap (c), veh/h	0	1356	0	720	0	1551	0	755
V/C Ratio (X)	0.00	1.02	0.00	1.06	0.00	0.71	0.00	1.01
Avail Cap (c_a), veh/h	0	1356	0	720	0	1551	0	755
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	55.0	0.0	59.8	0.0	46.3	0.0	59.0
Incr Delay (d2), s/veh	0.0	30.8	0.0	52.0	0.0	1.6	0.0	35.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	85.8	0.0	111.8	0.0	47.8	0.0	94.4
1st-Term Q (Q1), veh/ln	0.0	18.7	0.0	14.9	0.0	13.5	0.0	15.6
2nd-Term Q (Q2), veh/ln	0.0	3.9	0.0	5.2	0.0	0.2	0.0	3.7

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (-26165%), veh/ln	0.0	22.6	0.0	20.1	0.0	13.7	0.0	19.3
%ile Storage Ratio (RQ%)	0.00	0.34	0.00	0.88	0.00	0.11	0.00	0.71
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	8.2	0.0	11.6	0.0	0.0	0.0	2.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.3	0.0	0.0	0.0	0.3
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	164	0	371	0	563	0	475
Grp Sat Flow (s), veh/h/ln	0	1583	0	1583	0	1583	0	1583
Q Serve Time (g_s), s	0.0	12.7	0.0	30.5	0.0	45.8	0.0	32.0
Cycle Q Clear Time (g_c), s	0.0	12.7	0.0	30.5	0.0	45.8	0.0	32.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	422	0	322	0	483	0	338
V/C Ratio (X)	0.00	0.39	0.00	1.15	0.00	1.17	0.00	1.41
Avail Cap (c_a), veh/h	0	422	0	322	0	483	0	338
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	45.0	0.0	59.8	0.0	52.1	0.0	59.0
Incr Delay (d2), s/veh	0.0	2.7	0.0	98.1	0.0	95.2	0.0	199.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	47.7	0.0	157.9	0.0	147.3	0.0	258.7
1st-Term Q (Q1), veh/ln	0.0	5.6	0.0	13.4	0.0	20.0	0.0	14.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	8.8	0.0	12.8	0.0	18.7
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (-26165%), veh/ln	0.0	5.9	0.0	22.1	0.0	32.8	0.0	32.7
%ile Storage Ratio (RQ%)	0.00	0.48	0.00	2.16	0.00	2.81	0.00	1.63
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	12.3	0.0	20.0	0.0	34.3
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.3	0.0	0.4

Intersection Summary	
HCM 2010 Ctrl Delay	108.8
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	641	856	46	586	1054	156	52	1017	118	344	986	512
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	675	901	48	617	1109	164	55	1071	124	362	1038	539
Adj No. of Lanes	2	3	1	2	3	1	2	3	1	2	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	649	1151	358	664	1174	365	109	1056	329	424	1521	473
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.19	0.23	0.23	0.19	0.23	0.23	0.03	0.21	0.21	0.12	0.30	0.30
Ln Grp Delay, s/veh	99.1	52.6	40.9	70.7	65.2	46.9	65.5	82.7	45.0	75.2	42.6	130.7
Ln Grp LOS	F	D	D	E	E	D	E	F	D	E	D	F
Approach Vol, veh/h		1624			1890			1250			1939	
Approach Delay, s/veh		71.6			65.4			78.2			73.2	
Approach LOS		E			E			E			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	33.0	38.0	24.5	34.5	33.6	37.4	12.6	46.4
Change Period (Y+Rc), s	8.5	8.0	8.5	7.5	8.5	8.0	8.5	7.5
Max Green (Gmax), s	24.5	30.0	16.0	27.0	25.5	29.0	16.5	26.5
Max Allow Headway (MAH), s	3.7	4.8	3.7	4.7	3.7	4.8	3.7	4.7
Max Q Clear (g_c+l1), s	26.5	29.9	15.4	29.0	24.9	23.7	4.0	40.9
Green Ext Time (g_e), s	0.0	0.1	0.1	0.0	0.2	4.5	0.1	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3442		3442		3442		3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		5085		5085		5085		5085

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		1583		1583		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	
Lanes in Grp	2	0	2	0	2	0	2	0

Grp Vol (v), veh/h	675	0	362	0	617	0	55	0
Grp Sat Flow (s), veh/h/ln	1721	0	1721	0	1721	0	1721	0
Q Serve Time (g_s), s	24.5	0.0	13.4	0.0	22.9	0.0	2.0	0.0
Cycle Q Clear Time (g_c), s	24.5	0.0	13.4	0.0	22.9	0.0	2.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	649	0	424	0	664	0	109	0
V/C Ratio (X)	1.04	0.00	0.85	0.00	0.93	0.00	0.50	0.00
Avail Cap (c_a), veh/h	649	0	424	0	675	0	437	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	52.8	0.0	55.9	0.0	51.6	0.0	61.9	0.0
Incr Delay (d2), s/veh	46.3	0.0	19.3	0.0	19.2	0.0	3.6	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	99.1	0.0	75.2	0.0	70.7	0.0	65.5	0.0
1st-Term Q (Q1), veh/ln	11.6	0.0	6.4	0.0	10.9	0.0	1.0	0.0
2nd-Term Q (Q2), veh/ln	4.2	0.0	1.1	0.0	1.8	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (-26165%), veh/ln	15.8	0.0	7.5	0.0	12.7	0.0	1.0	0.0
%ile Storage Ratio (RQ%)	0.67	0.00	0.40	0.00	0.57	0.00	0.05	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	6.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	3	0	3	0	3
Grp Vol (v), veh/h	0	1109	0	1071	0	901	0	1038
Grp Sat Flow (s), veh/h/ln	0	1695	0	1695	0	1695	0	1695
Q Serve Time (g_s), s	0.0	27.9	0.0	27.0	0.0	21.7	0.0	23.4
Cycle Q Clear Time (g_c), s	0.0	27.9	0.0	27.0	0.0	21.7	0.0	23.4
Lane Grp Cap (c), veh/h	0	1174	0	1056	0	1151	0	1521
V/C Ratio (X)	0.00	0.95	0.00	1.01	0.00	0.78	0.00	0.68
Avail Cap (c_a), veh/h	0	1174	0	1056	0	1151	0	1521
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	49.2	0.0	51.5	0.0	47.3	0.0	40.1
Incr Delay (d2), s/veh	0.0	16.0	0.0	31.2	0.0	5.4	0.0	2.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	65.2	0.0	82.7	0.0	52.6	0.0	42.6
1st-Term Q (Q1), veh/ln	0.0	13.0	0.0	12.6	0.0	10.2	0.0	11.0
2nd-Term Q (Q2), veh/ln	0.0	1.7	0.0	3.1	0.0	0.6	0.0	0.4

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (-26165%), veh/ln	0.0	14.8	0.0	15.7	0.0	10.7	0.0	11.3
%ile Storage Ratio (RQ%)	0.00	0.39	0.00	0.59	0.00	0.16	0.00	0.37
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	3.7	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	164	0	124	0	48	0	539
Grp Sat Flow (s), veh/h/ln	0	1583	0	1583	0	1583	0	1583
Q Serve Time (g_s), s	0.0	11.6	0.0	8.8	0.0	3.1	0.0	38.9
Cycle Q Clear Time (g_c), s	0.0	11.6	0.0	8.8	0.0	3.1	0.0	38.9
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	365	0	329	0	358	0	473
V/C Ratio (X)	0.00	0.45	0.00	0.38	0.00	0.13	0.00	1.14
Avail Cap (c_a), veh/h	0	365	0	329	0	358	0	473
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	42.9	0.0	44.3	0.0	40.1	0.0	45.6
Incr Delay (d2), s/veh	0.0	3.9	0.0	0.7	0.0	0.8	0.0	85.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	46.9	0.0	45.0	0.0	40.9	0.0	130.7
1st-Term Q (Q1), veh/ln	0.0	5.1	0.0	3.8	0.0	1.4	0.0	17.0
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.1	0.0	0.1	0.0	11.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (-26165%), veh/ln	0.0	5.5	0.0	3.9	0.0	1.5	0.0	28.2
%ile Storage Ratio (RQ%)	0.00	0.45	0.00	0.18	0.00	0.05	0.00	0.92
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.4
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3

Intersection Summary	
HCM 2010 Ctrl Delay	71.5
HCM 2010 LOS	E

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	3	660	0	45	948	53	6	0	30	28	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	325	-	-	289	-	-	-	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	695	0	47	998	56	6	0	32	29	0	0

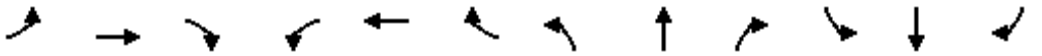
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1054	0	0	695	0	0	1295	1849	347	1475	1822	527
Stage 1	-	-	-	-	-	-	701	701	-	1121	1121	-
Stage 2	-	-	-	-	-	-	594	1148	-	354	701	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	656	-	-	897	-	-	120	74	649	88	77	496
Stage 1	-	-	-	-	-	-	395	439	-	220	280	-
Stage 2	-	-	-	-	-	-	458	272	-	636	439	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	656	-	-	897	-	-	115	70	649	80	73	496
Mov Cap-2 Maneuver	-	-	-	-	-	-	115	70	-	80	73	-
Stage 1	-	-	-	-	-	-	393	437	-	219	265	-
Stage 2	-	-	-	-	-	-	434	258	-	602	437	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.4	16	74.2
HCM LOS			C	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	366	656	-	-	897	-	-	80	-
HCM Lane V/C Ratio	0.104	0.005	-	-	0.053	-	-	0.368	-
HCM Control Delay (s)	16	10.5	-	-	9.2	-	-	74.2	0
HCM Lane LOS	C	B	-	-	A	-	-	F	A
HCM 95th %tile Q(veh)	0.3	0	-	-	0.2	-	-	1.4	-

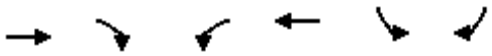
No Build Alternative 2040 PM

2: West Ramp & Donald Ross Corridor: Donald Ross Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	642	66	1272	971	0	0	0	0	455	0	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0	4.0	7.0	6.0					6.0		4.0
Lane Util. Factor		0.86	1.00	0.86	0.86					0.94		1.00
Frt		1.00	0.85	1.00	1.00					1.00		0.85
Flt Protected		1.00	1.00	0.95	0.99					0.95		1.00
Satd. Flow (prot)		6408	1583	3044	3179					4990		1583
Flt Permitted		1.00	1.00	0.95	0.62					0.95		1.00
Satd. Flow (perm)		6408	1583	3044	1977					4990		1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	676	69	1339	1022	0	0	0	0	479	0	54
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	676	69	1152	1209	0	0	0	0	479	0	54
Turn Type		NA	Free	Prot	NA					Prot		Free
Protected Phases		6		5	2					3		
Permitted Phases			Free									Free
Actuated Green, G (s)		31.3	110.4	41.0	79.3					19.1		110.4
Effective Green, g (s)		31.3	110.4	41.0	79.3					19.1		110.4
Actuated g/C Ratio		0.28	1.00	0.37	0.72					0.17		1.00
Clearance Time (s)		6.0		7.0	6.0					6.0		
Vehicle Extension (s)		3.0		3.0	3.0					3.0		
Lane Grp Cap (vph)		1816	1583	1130	1866					863		1583
v/s Ratio Prot		0.11		c0.38	0.24					c0.10		
v/s Ratio Perm			0.04		c0.22							0.03
v/c Ratio		0.37	0.04	1.02	0.65					0.56		0.03
Uniform Delay, d1		31.7	0.0	34.7	8.2					41.8		0.0
Progression Factor		1.00	1.00	0.76	0.72					1.00		1.00
Incremental Delay, d2		0.6	0.1	30.1	0.7					0.8		0.0
Delay (s)		32.3	0.1	56.5	6.6					42.5		0.0
Level of Service		C	A	E	A					D		A
Approach Delay (s)		29.3			31.0			0.0			38.2	
Approach LOS		C			C			A			D	

Intersection Summary			
HCM 2000 Control Delay	31.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	110.4	Sum of lost time (s)	19.0
Intersection Capacity Utilization	67.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Lane Group	EBT	EBR	WBL	WBT	SBL	SBR
Lane Group Flow (vph)	676	69	1152	1209	479	54
v/c Ratio	0.38	0.04	1.01	0.94	0.55	0.03
Control Delay	33.0	0.0	54.3	35.8	43.6	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	33.0	0.0	54.3	35.8	43.6	0.0
Queue Length 50th (ft)	112	0	~276	252	109	0
Queue Length 95th (ft)	142	0	#623	#586	145	0
Internal Link Dist (ft)	2056			679		
Turn Bay Length (ft)		433				
Base Capacity (vph)	1761	1583	1143	1281	914	1583
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.38	0.04	1.01	0.94	0.52	0.03

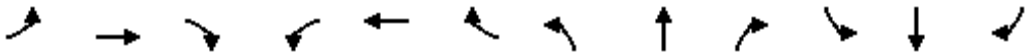
Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

No Build Alternative 2040 PM

9: East Ramp & Donald Ross Corridor: Donald Ross Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	44	1053	0	0	1904	1106	339	0	1594	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0			6.0	4.0	6.0		6.0			
Lane Util. Factor	0.97	0.91			0.86	1.00	0.97		0.76			
Frt	1.00	1.00			1.00	0.85	1.00		0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (prot)	3433	5085			6408	1583	3433		3610			
Flt Permitted	0.95	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (perm)	3433	5085			6408	1583	3433		3610			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	46	1108	0	0	2004	1164	357	0	1678	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	1111	0	0	0
Lane Group Flow (vph)	46	1108	0	0	2004	1164	357	0	567	0	0	0
Turn Type	Prot	NA			NA	Free	Prot		Prot			
Protected Phases	1	6			2		7		7			
Permitted Phases						Free						
Actuated Green, G (s)	3.2	31.3			70.1	110.4	19.1		19.1			
Effective Green, g (s)	3.2	31.3			70.1	110.4	19.1		19.1			
Actuated g/C Ratio	0.03	0.28			0.63	1.00	0.17		0.17			
Clearance Time (s)	6.0	6.0			6.0		6.0		6.0			
Vehicle Extension (s)	3.0	3.0			3.0		3.0		3.0			
Lane Grp Cap (vph)	99	1441			4068	1583	593		624			
v/s Ratio Prot	0.01	0.22			0.31		0.10		0.16			
v/s Ratio Perm						c0.74						
v/c Ratio	0.46	0.77			0.49	0.74	0.60		0.91			
Uniform Delay, d1	52.8	36.2			10.7	0.0	42.1		44.8			
Progression Factor	0.58	0.85			1.00	1.00	1.00		1.00			
Incremental Delay, d2	3.1	3.7			0.4	3.1	1.7		17.1			
Delay (s)	33.6	34.4			11.1	3.1	43.9		61.9			
Level of Service	C	C			B	A	D		E			
Approach Delay (s)		34.3			8.2			58.7			0.0	
Approach LOS		C			A			E			A	

Intersection Summary			
HCM 2000 Control Delay	29.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	110.4	Sum of lost time (s)	19.0
Intersection Capacity Utilization	67.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

No Build Alternative 2040 PM

9: East Ramp & Donald Ross Corridor: Donald Ross Road

Lane Group	EBL	EBT	WBT	WBR	NBL	NBR
Lane Group Flow (vph)	46	1108	2004	1164	357	1678
v/c Ratio	0.37	0.79	0.49	0.74	0.59	0.96
Control Delay	37.5	35.8	11.2	3.1	45.9	23.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	37.5	35.8	11.2	3.1	45.9	23.9
Queue Length 50th (ft)	17	147	212	0	119	114
Queue Length 95th (ft)	m34	170	240	0	168	#265
Internal Link Dist (ft)		679	2740			
Turn Bay Length (ft)						
Base Capacity (vph)	125	1397	4114	1583	629	1758
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.37	0.79	0.49	0.74	0.57	0.95

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

HOOD ROAD CORRIDOR

Arterial Level of Service: EB Hood Road

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Central Blvd	II	45	133.7	47.5	181.2	1.67	33.2	B
Military Trail	II	45	31.0	37.0	68.0	0.31	16.6	E
Total	II		164.7	84.5	249.2	1.98	28.7	B

Arterial Level of Service: WB Hood Road

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Military Trail	II	45	14.9	32.7	47.6	0.14	10.3	F
Central Blvd	II	45	31.0	40.9	71.9	0.31	15.7	E
Total	II		45.9	73.6	119.5	0.45	13.5	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	134	215	114	414	362	256	189	957	425	458	915	287
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	141	226	120	436	381	269	199	1007	447	482	963	302
Adj No. of Lanes	2	2	1	2	2	1	2	2	1	2	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	208	503	225	501	804	360	492	1329	594	589	1527	683
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.06	0.14	0.14	0.15	0.23	0.23	0.05	0.38	0.38	0.10	0.43	0.43
Ln Grp Delay, s/veh	51.3	41.2	43.0	57.1	35.0	40.2	20.4	32.2	36.6	29.9	24.9	22.7
Ln Grp LOS	D	D	D	E	C	D	C	C	D	C	C	C
Approach Vol, veh/h		487			1086			1653			1747	
Approach Delay, s/veh		44.6			45.1			32.0			25.9	
Approach LOS		D			D			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	3.0	2.0	3.0	1.1	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	16.8	44.7	21.0	20.7	11.0	50.5	12.2	29.4
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green (Gmax), s	12.0	37.5	16.0	35.5	5.0	44.5	9.0	42.5
Max Allow Headway (MAH), s	3.7	4.6	3.7	4.5	3.7	4.6	3.7	4.5
Max Q Clear (g_c+I1), s	10.5	27.6	14.8	9.3	5.6	23.9	6.1	18.3
Green Ext Time (g_e), s	0.3	8.4	0.2	5.2	0.0	15.5	0.1	5.1
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.02	1.00	0.00	1.00	0.03

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3442		3442		3442		3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3539		3539		3539		3539

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		1583		1583		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Pr/Pm)		(Prot)		(Pr/Pm)		(Prot)	
Lanes in Grp	2	0	2	0	2	0	2	0

Grp Vol (v), veh/h	482	0	436	0	199	0	141	0
Grp Sat Flow (s), veh/h/ln	1721	0	1721	0	1721	0	1721	0
Q Serve Time (g_s), s	8.5	0.0	12.8	0.0	3.6	0.0	4.1	0.0
Cycle Q Clear Time (g_c), s	8.5	0.0	12.8	0.0	3.6	0.0	4.1	0.0
Perm LT Sat Flow (s_l), veh/h/ln	353	0	0	0	423	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	40.5	0.0	0.0	0.0	38.7	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	13.1	0.0	0.0	0.0	22.6	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	13.1	0.0	0.0	0.0	5.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	589	0	501	0	492	0	208	0
V/C Ratio (X)	0.82	0.00	0.87	0.00	0.40	0.00	0.68	0.00
Avail Cap (c_a), veh/h	630	0	534	0	492	0	300	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	21.9	0.0	43.1	0.0	19.8	0.0	47.5	0.0
Incr Delay (d2), s/veh	8.0	0.0	13.9	0.0	0.5	0.0	3.8	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	29.9	0.0	57.1	0.0	20.4	0.0	51.3	0.0
1st-Term Q (Q1), veh/ln	3.9	0.0	6.1	0.0	1.7	0.0	2.0	0.0
2nd-Term Q (Q2), veh/ln	0.7	0.0	1.0	0.0	0.0	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (-26165%), veh/ln	4.6	0.0	7.0	0.0	1.8	0.0	2.1	0.0
%ile Storage Ratio (RQ%)	0.39	0.00	0.12	0.00	0.13	0.00	0.10	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	2	0	2	0	2
Grp Vol (v), veh/h	0	1007	0	226	0	963	0	381
Grp Sat Flow (s), veh/h/ln	0	1770	0	1770	0	1770	0	1770
Q Serve Time (g_s), s	0.0	25.6	0.0	6.0	0.0	21.9	0.0	9.6
Cycle Q Clear Time (g_c), s	0.0	25.6	0.0	6.0	0.0	21.9	0.0	9.6
Lane Grp Cap (c), veh/h	0	1329	0	503	0	1527	0	804
V/C Ratio (X)	0.00	0.76	0.00	0.45	0.00	0.63	0.00	0.47
Avail Cap (c_a), veh/h	0	1329	0	1218	0	1527	0	1458
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	28.1	0.0	40.6	0.0	22.9	0.0	34.5
Incr Delay (d2), s/veh	0.0	4.1	0.0	0.6	0.0	2.0	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	32.2	0.0	41.2	0.0	24.9	0.0	35.0
1st-Term Q (Q1), veh/ln	0.0	12.4	0.0	3.0	0.0	10.7	0.0	4.7
2nd-Term Q (Q2), veh/ln	0.0	0.8	0.0	0.0	0.0	0.4	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (-26165%), veh/ln	0.0	13.2	0.0	3.0	0.0	11.1	0.0	4.8
%ile Storage Ratio (RQ%)	0.00	0.77	0.00	0.10	0.00	0.30	0.00	0.08
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	447	0	120	0	302	0	269
Grp Sat Flow (s), veh/h/ln	0	1583	0	1583	0	1583	0	1583
Q Serve Time (g_s), s	0.0	25.3	0.0	7.3	0.0	13.8	0.0	16.3
Cycle Q Clear Time (g_c), s	0.0	25.3	0.0	7.3	0.0	13.8	0.0	16.3
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	594	0	225	0	683	0	360
V/C Ratio (X)	0.00	0.75	0.00	0.53	0.00	0.44	0.00	0.75
Avail Cap (c_a), veh/h	0	594	0	545	0	683	0	652
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	28.0	0.0	41.1	0.0	20.6	0.0	37.1
Incr Delay (d2), s/veh	0.0	8.5	0.0	2.0	0.0	2.1	0.0	3.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	36.6	0.0	43.0	0.0	22.7	0.0	40.2
1st-Term Q (Q1), veh/ln	0.0	11.0	0.0	3.2	0.0	6.0	0.0	7.2
2nd-Term Q (Q2), veh/ln	0.0	1.4	0.0	0.1	0.0	0.4	0.0	0.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (-26165%), veh/ln	0.0	12.4	0.0	3.3	0.0	6.4	0.0	7.5
%ile Storage Ratio (RQ%)	0.00	1.12	0.00	0.28	0.00	0.49	0.00	0.54
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	33.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	211	492	47	401	536	108	161	919	365	107	884	337
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	222	518	49	422	564	114	169	967	384	113	931	355
Adj No. of Lanes	2	2	1	2	2	1	2	3	1	2	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	323	708	317	443	832	372	202	1093	340	172	1049	327
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.09	0.20	0.20	0.13	0.23	0.23	0.06	0.22	0.22	0.05	0.21	0.21
Ln Grp Delay, s/veh	46.5	36.6	27.5	67.0	32.3	27.3	69.0	40.9	119.5	55.3	42.0	106.8
Ln Grp LOS	D	D	C	E	C	C	E	D	F	E	D	F
Approach Vol, veh/h		789			1100			1520			1399	
Approach Delay, s/veh		38.8			45.1			63.9			59.5	
Approach LOS		D			D			E			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	13.2	24.0	16.0	26.8	12.5	24.7	18.8	24.0
Change Period (Y+Rc), s	8.5	7.5	8.5	8.0	8.5	7.5	8.5	8.0
Max Green (Gmax), s	4.7	16.5	7.5	18.8	4.0	17.2	10.3	16.0
Max Allow Headway (MAH), s	3.7	4.6	3.7	4.8	3.7	4.6	3.7	4.8
Max Q Clear (g_c+I1), s	5.9	18.5	7.0	13.6	4.6	19.2	11.7	13.0
Green Ext Time (g_e), s	0.0	0.0	0.0	3.1	0.0	0.0	0.0	1.9
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3442		3442		3442		3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		5085		3539		5085		3539

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		1583		1583		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	
Lanes in Grp	2	0	2	0	2	0	2	0

Grp Vol (v), veh/h	169	0	222	0	113	0	422	0
Grp Sat Flow (s), veh/h/ln	1721	0	1721	0	1721	0	1721	0
Q Serve Time (g_s), s	3.9	0.0	5.0	0.0	2.6	0.0	9.7	0.0
Cycle Q Clear Time (g_c), s	3.9	0.0	5.0	0.0	2.6	0.0	9.7	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	202	0	323	0	172	0	443	0
V/C Ratio (X)	0.84	0.00	0.69	0.00	0.66	0.00	0.95	0.00
Avail Cap (c_a), veh/h	202	0	323	0	172	0	443	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	37.3	0.0	35.1	0.0	37.3	0.0	34.6	0.0
Incr Delay (d2), s/veh	31.7	0.0	11.4	0.0	17.9	0.0	32.4	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	69.0	0.0	46.5	0.0	55.3	0.0	67.0	0.0
1st-Term Q (Q1), veh/ln	1.9	0.0	2.4	0.0	1.2	0.0	4.6	0.0
2nd-Term Q (Q2), veh/ln	0.9	0.0	0.5	0.0	0.4	0.0	2.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (-26165%), veh/ln	2.7	0.0	2.9	0.0	1.7	0.0	6.6	0.0
%ile Storage Ratio (RQ%)	0.16	0.00	0.14	0.00	0.07	0.00	0.32	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	2	0	3	0	2
Grp Vol (v), veh/h	0	931	0	564	0	967	0	518
Grp Sat Flow (s), veh/h/ln	0	1695	0	1770	0	1695	0	1770
Q Serve Time (g_s), s	0.0	14.2	0.0	11.6	0.0	14.7	0.0	11.0
Cycle Q Clear Time (g_c), s	0.0	14.2	0.0	11.6	0.0	14.7	0.0	11.0
Lane Grp Cap (c), veh/h	0	1049	0	832	0	1093	0	708
V/C Ratio (X)	0.00	0.89	0.00	0.68	0.00	0.88	0.00	0.73
Avail Cap (c_a), veh/h	0	1049	0	832	0	1093	0	708
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	30.8	0.0	27.8	0.0	30.4	0.0	30.0
Incr Delay (d2), s/veh	0.0	11.1	0.0	4.4	0.0	10.5	0.0	6.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	42.0	0.0	32.3	0.0	40.9	0.0	36.6
1st-Term Q (Q1), veh/ln	0.0	6.6	0.0	5.6	0.0	6.9	0.0	5.3
2nd-Term Q (Q2), veh/ln	0.0	1.1	0.0	0.5	0.0	1.1	0.0	0.6

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (-26165%), veh/ln	0.0	7.7	0.0	6.2	0.0	8.0	0.0	6.0
%ile Storage Ratio (RQ%)	0.00	0.21	0.00	0.24	0.00	0.26	0.00	0.10
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	355	0	114	0	384	0	49
Grp Sat Flow (s), veh/h/ln	0	1583	0	1583	0	1583	0	1583
Q Serve Time (g_s), s	0.0	16.5	0.0	4.7	0.0	17.2	0.0	2.0
Cycle Q Clear Time (g_c), s	0.0	16.5	0.0	4.7	0.0	17.2	0.0	2.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	327	0	372	0	340	0	317
V/C Ratio (X)	0.00	1.09	0.00	0.31	0.00	1.13	0.00	0.15
Avail Cap (c_a), veh/h	0	327	0	372	0	340	0	317
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	31.8	0.0	25.2	0.0	31.4	0.0	26.4
Incr Delay (d2), s/veh	0.0	75.1	0.0	2.1	0.0	88.1	0.0	1.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	106.8	0.0	27.3	0.0	119.5	0.0	27.5
1st-Term Q (Q1), veh/ln	0.0	7.2	0.0	2.1	0.0	7.5	0.0	0.9
2nd-Term Q (Q2), veh/ln	0.0	6.8	0.0	0.2	0.0	8.3	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (-26165%), veh/ln	0.0	14.0	0.0	2.3	0.0	15.8	0.0	1.0
%ile Storage Ratio (RQ%)	0.00	0.59	0.00	0.19	0.00	1.31	0.00	0.08
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	7.1	0.0	0.0	0.0	10.9	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.3	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	54.2
HCM 2010 LOS	D

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	36	688	667	102	44	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	399	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	38	724	702	107	46	5

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	702	0	-	0	1502	702
Stage 1	-	-	-	-	702	-
Stage 2	-	-	-	-	800	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	895	-	-	-	134	438
Stage 1	-	-	-	-	491	-
Stage 2	-	-	-	-	442	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	895	-	-	-	124	438
Mov Cap-2 Maneuver	-	-	-	-	124	-
Stage 1	-	-	-	-	491	-
Stage 2	-	-	-	-	411	-

Approach	EB	WB	SB
HCM Control Delay, s	0.5	0	47.8
HCM LOS			E

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	895	-	-	-	134
HCM Lane V/C Ratio	0.042	-	-	-	0.385
HCM Control Delay (s)	9.2	0	-	-	47.8
HCM Lane LOS	A	A	-	-	E
HCM 95th %tile Q(veh)	0.1	-	-	-	1.6

MILITARY TRAIL CORRIDOR

Arterial Level of Service: NB N Military Trail

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
PGA Blvd	II	45	15.7	105.4	121.1	0.14	4.3	F
Kyoto Gardens Dr	II	45	43.4	33.8	77.2	0.49	23.0	C
Hood Road	II	45	104.9	44.3	149.2	1.31	31.6	B
Donald Ross	II	45	102.8	64.3	167.1	1.29	27.7	C
Total	II		266.8	247.8	514.6	3.23	22.6	C

Arterial Level of Service: SB N Military Trail

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Donald Ross	II	45	20.4	38.7	59.1	0.19	11.4	F
Hood Road	II	45	102.8	32.6	135.4	1.29	34.2	B
Kyoto Gardens Dr	II	45	104.9	45.4	150.3	1.31	31.4	B
PGA Blvd	II	45	43.4	75.4	118.8	0.49	14.9	E
Total	II		271.5	192.1	463.6	3.28	25.4	C

Movement	WBL	WBR	WBR2	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SER
Lane Configurations											
Volume (veh/h)	370	495	149	99	1453	362	25	1391	59	0	0
Number	7	14	14	1	6	16	5	2	12		
Initial Q, veh	0	0	0	0	0	0	0	0	0		
Ped-Bike Adj (A_pbT)	1.00	1.00	1.00	1.00		1.00	1.00		1.00		
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900		
Adj Flow Rate, veh/h	389	157	157	104	1529	381	26	1464	62		
Adj No. of Lanes	2	1	1	1	3	1	1	3	0		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2		
Opposing Right Turn Influence	Yes			Yes			Yes				
Cap, veh/h	934	430	430	117	1785	556	94	1657	70		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Prop Arrive On Green	0.27	0.27	0.27	0.07	0.35	0.35	0.05	0.33	0.33		
Ln Grp Delay, s/veh	24.0	24.6	24.6	91.4	28.3	27.7	41.5	34.1	40.9		
Ln Grp LOS	C	C	C	F	C	C	D	C	D		

Approach Vol, veh/h	546				2014			1552			Timer:
Approach Delay, s/veh	24.1				31.4			36.6			Assigned Phs
Approach LOS	C				C			D			Case No
Phs Duration (G+Y+Rc), s		13.0	33.5		29.0	11.5	35.0				
Change Period (Y+Rc), s		8.0	* 8.5		8.5	7.5	8.5				
Max Green (Gmax), s		5.0	* 25		20.5	4.0	26.0				
Max Allow Headway (MAH), s		3.7	4.8		3.8	3.7	4.8				
Max Q Clear (g_c+I1), s		6.4	22.9		9.0	3.1	23.1				
Green Ext Time (g_e), s		0.0	2.1		1.5	0.0	2.9				
Prob of Phs Call (p_c)		1.00	1.00		1.00	1.00	1.00				
Prob of Max Out (p_x)		0.00	0.00		0.00	0.00	0.00				

Left-Turn Movement Data											
Assigned Mvmt		1			7	5					
Mvmt Sat Flow, veh/h		1774			3442	1774					

Through Movement Data											
Assigned Mvmt			2		4		6				
Mvmt Sat Flow, veh/h			5004		0		5085				

Right-Turn Movement Data											
Assigned Mvmt			12		14		16				
Mvmt Sat Flow, veh/h			212		1583		1583				

Left Lane Group Data											
Assigned Mvmt		1	0	0	7	5	0	0	0		
Lane Assignment		(Prot)				(Prot)					
Lanes in Grp		1	0	0	2	1	0	0	0		
Grp Vol (v), veh/h		104	0	0	389	26	0	0	0		
Grp Sat Flow (s), veh/h/ln		1774	0	0	1721	1774	0	0	0		
Q Serve Time (g_s), s		4.4	0.0	0.0	7.0	1.1	0.0	0.0	0.0		

Cycle Q Clear Time (g_c), s	4.4	0.0	0.0	7.0	1.1	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1721	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	117	0	0	934	94	0	0	0
V/C Ratio (X)	0.89	0.00	0.00	0.42	0.28	0.00	0.00	0.00
Avail Cap (c_a), veh/h	117	0	0	934	94	0	0	0
Upstream Filter (I)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	35.0	0.0	0.0	22.6	34.4	0.0	0.0	0.0
Incr Delay (d2), s/veh	56.5	0.0	0.0	1.4	7.2	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	91.4	0.0	0.0	24.0	41.5	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	2.1	0.0	0.0	3.3	0.5	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	1.8	0.0	0.0	0.2	0.2	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	0.00	1.80	1.80	0.00	0.00	0.00
%ile Back of Q (95%), veh/ln	7.2	0.0	0.0	6.3	1.3	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.61	0.00	0.00	0.22	0.09	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	3	0	0
Grp Vol (v), veh/h	0	992	0	0	0	1529	0	0
Grp Sat Flow (s), veh/h/ln	0	1695	0	0	0	1695	0	0
Q Serve Time (g_s), s	0.0	20.9	0.0	0.0	0.0	21.1	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	20.9	0.0	0.0	0.0	21.1	0.0	0.0
Lane Grp Cap (c), veh/h	0	1123	0	0	0	1785	0	0
V/C Ratio (X)	0.00	0.88	0.00	0.00	0.00	0.86	0.00	0.00
Avail Cap (c_a), veh/h	0	1123	0	0	0	1785	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	23.9	0.0	0.0	0.0	22.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	10.2	0.0	0.0	0.0	5.5	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	34.1	0.0	0.0	0.0	28.3	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	9.6	0.0	0.0	0.0	9.8	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	1.6	0.0	0.0	0.0	0.9	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.49	0.00	1.00	0.00	1.50	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	16.7	0.0	0.0	0.0	16.0	0.0	0.0

%ile Storage Ratio (RQ%)	0.00	0.06	0.00	0.00	0.00	1.02	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment		T+R		R		R		
Lanes in Grp	0	1	0	1	0	1	0	0
Grp Vol (v), veh/h	0	534	0	157	0	381	0	0
Grp Sat Flow (s), veh/h/ln	0	1825	0	1583	0	1583	0	0
Q Serve Time (g_s), s	0.0	20.9	0.0	6.1	0.0	15.5	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	20.9	0.0	6.1	0.0	15.5	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.12	0.00	1.00	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	604	0	430	0	556	0	0
V/C Ratio (X)	0.00	0.88	0.00	0.37	0.00	0.69	0.00	0.00
Avail Cap (c_a), veh/h	0	604	0	430	0	556	0	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	23.9	0.0	22.2	0.0	20.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	17.1	0.0	2.4	0.0	6.7	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	40.9	0.0	24.6	0.0	27.7	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	10.4	0.0	5.7	0.0	6.8	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	2.9	0.0	0.3	0.0	1.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.45	0.00	1.67	0.00	1.59	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	19.2	0.0	10.0	0.0	12.4	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.07	0.00	0.34	0.00	1.05	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	32.4
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

NORTHLAKE BOULEVARD CORRIDOR

Arterial Level of Service: EB Northlake Blvd

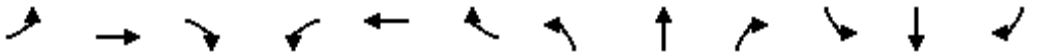
Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Keating Dr	II	45	17.3	42.0	59.3	0.16	9.6	F
West Ramps	II	45	12.7	72.7	85.4	0.12	4.9	F
East Ramps	II	45	11.1	97.4	108.5	0.10	3.4	F
Roan Ln	II	45	8.8	0.4	9.2	0.08	31.7	B
Sandtree Dr	II	45	13.5	27.0	40.5	0.12	11.0	F
Total	II		63.4	239.5	302.9	0.58	6.9	F

Arterial Level of Service: WB Northlake Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Sunrise Dr	II	45	15.3	106.8	122.1	0.14	4.1	F
Roan Ln	II	45	13.5	7.6	21.1	0.12	21.2	D
East Ramps	II	45	8.8	55.4	64.2	0.08	4.5	F
West Ramps	II	45	11.1	155.2	166.3	0.10	2.2	F
Keating Dr	II	45	12.7	20.4	33.1	0.12	12.6	F
Total	II		61.4	345.4	406.8	0.56	5.0	F

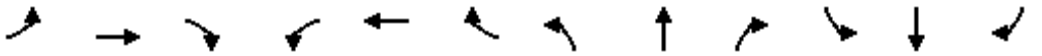
No Build Alternative 2040 PM

3: Keating Dr & Northlake Blvd Corridor: Northlake Boulevard



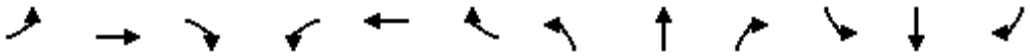
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	29	2410	71	182	2483	165	52	3	254	109	2	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.0	5.0	4.0	5.0	5.0	6.0	6.0	6.0		6.0	
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	0.95	0.95	1.00		0.95	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85		1.00	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.96	1.00		0.95	
Satd. Flow (prot)	1770	5085	1583	1770	5085	1583	1681	1694	1583		3373	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.76	1.00		0.73	
Satd. Flow (perm)	1770	5085	1583	1770	5085	1583	1681	1337	1583		2572	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	31	2537	75	192	2614	174	55	3	267	115	2	0
RTOR Reduction (vph)	0	0	38	0	0	72	0	0	133	0	0	0
Lane Group Flow (vph)	31	2537	37	192	2614	102	29	29	134	0	117	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6			2			4			
Actuated Green, G (s)	2.3	49.9	49.9	11.0	58.6	58.6	2.3	24.3	24.3		16.0	
Effective Green, g (s)	2.3	49.9	49.9	11.0	58.6	58.6	2.3	24.3	24.3		16.0	
Actuated g/C Ratio	0.02	0.50	0.50	0.11	0.58	0.58	0.02	0.24	0.24		0.16	
Clearance Time (s)	4.0	5.0	5.0	4.0	5.0	5.0	6.0	6.0	6.0		6.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)	40	2532	788	194	2973	925	38	332	383		410	
v/s Ratio Prot	0.02	c0.50		c0.11	0.51		0.02	0.00				
v/s Ratio Perm			0.02			0.06		0.02	c0.08		0.05	
v/c Ratio	0.78	1.00	0.05	0.99	0.88	0.11	0.76	0.09	0.35		0.29	
Uniform Delay, d1	48.7	25.2	12.9	44.5	17.8	9.2	48.7	29.4	31.4		37.1	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	
Incremental Delay, d2	61.5	18.4	0.1	61.0	4.1	0.2	60.7	0.1	0.6		0.4	
Delay (s)	110.2	43.5	13.0	105.5	21.9	9.5	109.4	29.5	32.0		37.5	
Level of Service	F	D	B	F	C	A	F	C	C		D	
Approach Delay (s)		43.4			26.5			38.7			37.5	
Approach LOS		D			C			D			D	

Intersection Summary			
HCM 2000 Control Delay	34.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	100.2	Sum of lost time (s)	21.0
Intersection Capacity Utilization	82.5%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



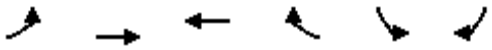
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	2058	689	1267	2112	0	0	0	0	525	0	783
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0	4.0	7.0	6.5					6.0		6.0
Lane Util. Factor		0.81	1.00	0.97	0.91					0.97		0.88
Frt		1.00	0.85	1.00	1.00					1.00		0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (prot)		7544	1583	3433	5085					3433		2787
Flt Permitted		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (perm)		7544	1583	3433	5085					3433		2787
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	2166	725	1334	2223	0	0	0	0	553	0	824
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	588
Lane Group Flow (vph)	0	2166	725	1334	2223	0	0	0	0	553	0	236
Turn Type		NA	Free	Prot	NA					Prot		Perm
Protected Phases		6		5	2					3		
Permitted Phases			Free									6
Actuated Green, G (s)		43.0	150.0	47.0	51.5					41.0		43.0
Effective Green, g (s)		43.0	150.0	47.0	51.5					41.0		43.0
Actuated g/C Ratio		0.29	1.00	0.31	0.34					0.27		0.29
Clearance Time (s)		6.0		7.0	6.5					6.0		6.0
Vehicle Extension (s)		3.0		3.0	3.0					3.0		3.0
Lane Grp Cap (vph)		2162	1583	1075	1745					938		798
v/s Ratio Prot		0.29		c0.39	c0.44					c0.16		
v/s Ratio Perm			0.46									0.08
v/c Ratio		1.00	0.46	1.24	1.27					0.59		0.30
Uniform Delay, d1		53.5	0.0	51.5	49.2					47.2		41.7
Progression Factor		1.00	1.00	1.53	0.70					1.00		1.00
Incremental Delay, d2		19.8	1.0	109.2	123.7					1.0		0.9
Delay (s)		73.3	1.0	188.2	158.4					48.2		42.6
Level of Service		E	A	F	F					D		D
Approach Delay (s)		55.2			169.5			0.0			44.9	
Approach LOS		E			F			A			D	

Intersection Summary			
HCM 2000 Control Delay	105.3	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.09		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	102.6%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1010	1573	0	0	2297	786	1082	0	1283	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	6.0			6.5	4.0	6.0		6.5			
Lane Util. Factor	0.97	0.91			0.81	1.00	0.97		0.88			
Frt	1.00	1.00			1.00	0.85	1.00		0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (prot)	3433	5085			7544	1583	3433		2787			
Flt Permitted	0.95	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (perm)	3433	5085			7544	1583	3433		2787			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1063	1656	0	0	2418	827	1139	0	1351	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	607	0	0	0
Lane Group Flow (vph)	1063	1656	0	0	2418	827	1139	0	744	0	0	0
Turn Type	Prot	NA			NA	Free	Prot		Perm			
Protected Phases	1	6			2		7					
Permitted Phases						Free			2			
Actuated Green, G (s)	38.0	43.0			51.5	150.0	41.0		51.5			
Effective Green, g (s)	38.0	43.0			51.5	150.0	41.0		51.5			
Actuated g/C Ratio	0.25	0.29			0.34	1.00	0.27		0.34			
Clearance Time (s)	7.0	6.0			6.5		6.0		6.5			
Vehicle Extension (s)	3.0	3.0			3.0		3.0		3.0			
Lane Grp Cap (vph)	869	1457			2590	1583	938		956			
v/s Ratio Prot	c0.31	c0.33			c0.32		c0.33					
v/s Ratio Perm						0.52			0.27			
v/c Ratio	1.22	1.14			0.93	0.52	1.21		0.78			
Uniform Delay, d1	56.0	53.5			47.6	0.0	54.5		44.1			
Progression Factor	1.39	0.62			1.00	1.00	1.00		1.00			
Incremental Delay, d2	104.6	65.2			7.8	1.2	106.3		6.2			
Delay (s)	182.3	98.6			55.4	1.2	160.8		50.3			
Level of Service	F	F			E	A	F		D			
Approach Delay (s)		131.3			41.6			100.9			0.0	
Approach LOS		F			D			F			A	

Intersection Summary			
HCM 2000 Control Delay	87.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.16		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	102.6%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

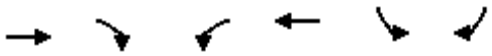


Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	120	2570	3319	89	0	103
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	8.0	6.5	6.5	4.0		4.0
Lane Util. Factor	1.00	0.91	0.76	1.00		1.00
Frt	1.00	1.00	1.00	0.85		0.86
Flt Protected	0.95	1.00	1.00	1.00		1.00
Satd. Flow (prot)	1770	5085	8494	1583		1611
Flt Permitted	0.95	1.00	1.00	1.00		1.00
Satd. Flow (perm)	1770	5085	8494	1583		1611
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	126	2705	3494	94	0	108
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	126	2705	3494	94	0	108
Turn Type	Prot	NA	NA	Free		Free
Protected Phases	1	6	2			
Permitted Phases				Free		Free
Actuated Green, G (s)	4.7	45.4	26.2	45.4		45.4
Effective Green, g (s)	4.7	45.4	26.2	45.4		45.4
Actuated g/C Ratio	0.10	1.00	0.58	1.00		1.00
Clearance Time (s)	8.0	6.5	6.5			
Vehicle Extension (s)	3.0	3.0	3.0			
Lane Grp Cap (vph)	183	5085	4901	1583		1611
v/s Ratio Prot	0.07	c0.53	c0.41			
v/s Ratio Perm				0.06		0.07
v/c Ratio	0.69	0.53	0.71	0.06		0.07
Uniform Delay, d1	19.6	0.0	6.9	0.0		0.0
Progression Factor	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	10.3	0.1	0.5	0.1		0.1
Delay (s)	29.9	0.1	7.4	0.1		0.1
Level of Service	C	A	A	A		A
Approach Delay (s)		1.4	7.2		0.1	
Approach LOS		A	A		A	

Intersection Summary			
HCM 2000 Control Delay	4.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	45.4	Sum of lost time (s)	14.5
Intersection Capacity Utilization	55.1%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	177	2052	341	134	2827	158	419	1	135	52	1	162
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.5	7.5	7.0	7.5		6.0	6.5	6.5	6.0	6.5	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91		0.97	0.95	0.95	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.85	0.85	1.00	0.85	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1583	3433	5045		3433	1508	1504	1770	1585	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1583	3433	5045		3433	1508	1504	1770	1585	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	186	2160	359	141	2976	166	441	1	142	55	1	171
RTOR Reduction (vph)	0	0	159	0	4	0	0	61	61	0	103	0
Lane Group Flow (vph)	186	2160	200	141	3138	0	441	11	10	55	69	0
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6						4			
Actuated Green, G (s)	13.0	81.5	81.5	9.6	78.1		16.0	20.7	20.7	7.6	12.3	
Effective Green, g (s)	13.0	81.5	81.5	9.6	78.1		16.0	20.7	20.7	7.6	12.3	
Actuated g/C Ratio	0.09	0.56	0.56	0.07	0.53		0.11	0.14	0.14	0.05	0.08	
Clearance Time (s)	7.0	7.5	7.5	7.0	7.5		6.0	6.5	6.5	6.0	6.5	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	157	2830	881	225	2691		375	213	212	91	133	
v/s Ratio Prot	c0.11	c0.42		0.04	c0.62		c0.13	0.01		0.03	c0.04	
v/s Ratio Perm			0.13						0.01			
v/c Ratio	1.18	0.76	0.23	0.63	1.17		1.18	0.05	0.05	0.60	0.52	
Uniform Delay, d1	66.7	25.0	16.5	66.7	34.2		65.2	54.4	54.3	67.9	64.2	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	130.1	2.0	0.6	5.4	79.2		103.7	0.1	0.1	10.8	3.7	
Delay (s)	196.8	27.0	17.1	72.0	113.4		168.9	54.5	54.4	78.8	67.9	
Level of Service	F	C	B	E	F		F	D	D	E	E	
Approach Delay (s)		37.4			111.6			140.9			70.5	
Approach LOS		D			F			F			E	

Intersection Summary			
HCM 2000 Control Delay	83.2	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.11		
Actuated Cycle Length (s)	146.4	Sum of lost time (s)	27.0
Intersection Capacity Utilization	112.5%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			



Lane Group	EBT	EBR	WBL	WBT	SBL	SBR
Lane Group Flow (vph)	2166	725	1334	2223	553	824
v/c Ratio	1.00	0.46	1.24	1.27	0.59	0.59
Control Delay	72.7	1.0	169.8	155.2	50.3	4.4
Queue Delay	36.9	0.0	1.1	0.1	12.5	0.0
Total Delay	109.6	1.0	170.9	155.2	62.7	4.4
Queue Length 50th (ft)	~527	0	~855	~983	243	0
Queue Length 95th (ft)	#603	0	m#844	m#953	306	52
Internal Link Dist (ft)	533			458		
Turn Bay Length (ft)						
Base Capacity (vph)	2162	1583	1075	1745	938	1386
Starvation Cap Reductn	0	0	210	31	0	0
Spillback Cap Reductn	267	0	0	0	363	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.14	0.46	1.54	1.30	0.96	0.59

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

No Build Alternative 2040 PM

9: East Ramps & Northlake Blvd Corridor: Northlake Boulevard

Lane Group	EBL	EBT	WBT	WBR	NBL	NBR
Lane Group Flow (vph)	1063	1656	2418	827	1139	1351
v/c Ratio	1.22	1.14	0.93	0.52	1.21	0.86
Control Delay	165.4	97.4	55.4	1.2	151.9	20.5
Queue Delay	0.0	0.0	45.2	0.0	3.2	0.0
Total Delay	165.4	97.5	100.6	1.2	155.1	20.5
Queue Length 50th (ft)	~675	~661	564	0	~700	259
Queue Length 95th (ft)	m#703	m#679	604	0	#837	388
Internal Link Dist (ft)		458	348			
Turn Bay Length (ft)				400		
Base Capacity (vph)	869	1457	2590	1583	938	1564
Starvation Cap Reductn	4	14	687	0	0	0
Spillback Cap Reductn	0	0	561	0	375	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.23	1.15	1.27	0.52	2.02	0.86

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

PGA BOULEVARD CORRIDOR

Arterial Level of Service: EB PGA Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
FL Turnpike	II	45	16.8	49.6	66.4	0.15	8.3	F
Central Blvd	II	45	36.7	35.5	72.2	0.39	19.5	D
N Military Trail	II	45	81.7	157.5	239.2	1.02	15.4	E
West Ramps	II	45	20.5	23.0	43.5	0.19	15.6	E
East Ramps	II	45	6.3	47.7	54.0	0.06	3.9	F
Lake Victoria Garden	II	45	56.6	22.0	78.6	0.71	32.4	B
Total	II		218.6	335.3	553.9	2.52	16.4	E

Arterial Level of Service: WB PGA Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Lake Victoria Garden	II	45	13.7	204.0	217.7	0.13	2.1	F
East Ramps	II	45	56.6	19.3	75.9	0.71	33.5	B
West Ramps	II	45	6.3	101.0	107.3	0.06	2.0	F
N Military Trail	II	45	20.5	49.8	70.3	0.19	9.6	F
Central Blvd	II	45	25.0	52.0	77.0	0.24	11.2	F
FL Turnpike	II	45	36.7	178.3	215.0	0.39	6.5	F
Total	II		158.8	604.4	763.2	1.71	8.1	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	192	1118	863	630	894	1140	958	794	657	1101	739	182
Future Volume (veh/h)	192	1118	863	630	894	1140	958	794	657	1101	739	182
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	202	1177	0	663	941	0	1008	836	0	1159	778	192
Adj No. of Lanes	2	3	1	2	3	1	2	3	1	2	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	161	1015	316	459	1489	464	1077	918	286	929	716	223
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.05	0.20	0.00	0.13	0.29	0.00	0.31	0.18	0.00	0.27	0.14	0.14
Ln Grp Delay, s/veh	228.0	143.1	0.0	277.2	48.1	0.0	63.1	72.5	0.0	175.1	124.3	90.4
Ln Grp LOS	F	F		F	D		E	E		F	F	F
Approach Vol, veh/h		1379			1604			1844			2129	
Approach Delay, s/veh		155.5			142.8			67.4			148.9	
Approach LOS		F			F			E			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	15.0	51.4	49.0	34.6	29.0	37.4	55.0	28.6
Change Period (Y+Rc), s	8.0	7.5	8.5	7.5	9.0	7.5	8.0	7.5
Max Green (Gmax), s	7.0	42.5	40.5	28.5	20.0	28.5	51.0	18.5
Max Allow Headway (MAH), s	3.7	4.9	3.7	4.8	3.7	4.9	3.7	4.8
Max Q Clear (g_c+I1), s	9.0	26.1	42.5	26.2	22.0	31.9	44.7	23.1
Green Ext Time (g_e), s	0.0	11.8	0.0	0.9	0.0	0.0	2.3	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	1.00	1.00	0.00	0.51	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3442		3442		3442		3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		5085		5085		5085		5085

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		1583		1583		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	2	0	2	0	2	0
Grp Vol (v), veh/h	202	0	1159	0	663	0	1008	0
Grp Sat Flow (s), veh/h/ln	1721	0	1721	0	1721	0	1721	0
Q Serve Time (g_s), s	7.0	0.0	40.5	0.0	20.0	0.0	42.7	0.0
Cycle Q Clear Time (g_c), s	7.0	0.0	40.5	0.0	20.0	0.0	42.7	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	161	0	929	0	459	0	1077	0
V/C Ratio (X)	1.26	0.00	1.25	0.00	1.44	0.00	0.94	0.00
Avail Cap (c_a), veh/h	161	0	929	0	459	0	1170	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	71.5	0.0	54.8	0.0	65.0	0.0	50.1	0.0
Incr Delay (d2), s/veh	156.5	0.0	120.3	0.0	212.2	0.0	13.1	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	228.0	0.0	175.1	0.0	277.2	0.0	63.1	0.0
1st-Term Q (Q1), veh/ln	3.3	0.0	19.2	0.0	9.5	0.0	20.3	0.0
2nd-Term Q (Q2), veh/ln	3.5	0.0	15.5	0.0	13.5	0.0	2.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	1.80	0.00	1.80	0.00	1.35	0.00
%ile Back of Q (95%), veh/ln	12.3	0.0	62.6	0.0	41.4	0.0	30.0	0.0
%ile Storage Ratio (RQ%)	0.67	0.00	3.52	0.00	2.10	0.00	1.74	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	10.3	0.0	57.4	0.0	51.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.3	0.0	0.3	0.0	0.4	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	3	0	3	0	3
Grp Vol (v), veh/h	0	941	0	836	0	1177	0	778
Grp Sat Flow (s), veh/h/ln	0	1695	0	1695	0	1695	0	1695
Q Serve Time (g_s), s	0.0	24.1	0.0	24.2	0.0	29.9	0.0	21.1
Cycle Q Clear Time (g_c), s	0.0	24.1	0.0	24.2	0.0	29.9	0.0	21.1
Lane Grp Cap (c), veh/h	0	1489	0	918	0	1015	0	716
V/C Ratio (X)	0.00	0.63	0.00	0.91	0.00	1.16	0.00	1.09
Avail Cap (c_a), veh/h	0	1489	0	966	0	1015	0	716
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	46.0	0.0	60.3	0.0	60.0	0.0	64.4
Incr Delay (d2), s/veh	0.0	2.0	0.0	12.2	0.0	83.0	0.0	59.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	48.1	0.0	72.5	0.0	143.1	0.0	124.3
1st-Term Q (Q1), veh/ln	0.0	11.2	0.0	11.4	0.0	14.0	0.0	9.9

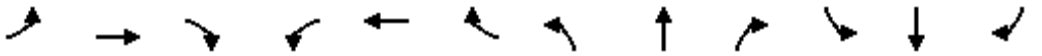
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	1.0	0.0	7.8	0.0	4.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.48	0.00	1.47	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	17.1	0.0	18.2	0.0	39.2	0.0	24.9
%ile Storage Ratio (RQ%)	0.00	1.06	0.00	0.62	0.00	0.94	0.00	0.73
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	40.5	0.0	15.6
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.3

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	0	0	0	0	192
Grp Sat Flow (s), veh/h/ln	0	1583	0	1583	0	1583	0	1583
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.8
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.8
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	464	0	286	0	316	0	223
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.86
Avail Cap (c_a), veh/h	0	464	0	301	0	316	0	223
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	63.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90.4
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.8
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.53
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.5
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.82
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	127.2
HCM 2010 LOS	F

No Build Alternative 2040 PM

3: FL Turnpike & PGA Blvd Corridor: PGA Boulevard



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	118	715	47	270	1538	768	65	230	710	945	70	161
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.5		7.5	8.0	8.0	7.5	7.5	7.5	7.5	7.5	4.0
Lane Util. Factor	0.97	0.91		0.97	0.95	0.88	1.00	0.95	0.95	0.91	0.91	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	0.92	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.96	1.00
Satd. Flow (prot)	3433	5039		3433	3539	2787	1770	1630	1504	3221	1630	1583
Flt Permitted	0.10	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.08	1.00
Satd. Flow (perm)	358	5039		3433	3539	2787	1770	1630	1504	3221	140	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	124	753	49	284	1619	808	68	242	747	995	74	169
RTOR Reduction (vph)	0	4	0	0	0	408	0	27	191	0	0	0
Lane Group Flow (vph)	124	798	0	284	1619	400	68	484	287	706	363	169
Turn Type	pm+pt	NA		Prot	NA	Perm	Prot	NA	Prot	Prot	NA	Free
Protected Phases	7	4		3	8		5	2	2	1	6	
Permitted Phases	4					8						Free
Actuated Green, G (s)	44.4	40.4		16.6	53.0	53.0	9.0	36.0	36.0	28.5	72.0	151.5
Effective Green, g (s)	44.4	40.4		16.6	53.0	53.0	9.0	36.0	36.0	28.5	72.0	151.5
Actuated g/C Ratio	0.29	0.27		0.11	0.35	0.35	0.06	0.24	0.24	0.19	0.48	1.00
Clearance Time (s)	7.0	7.5		7.5	8.0	8.0	7.5	7.5	7.5	7.5	7.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	186	1343		376	1238	974	105	387	357	605	346	1583
v/s Ratio Prot	0.02	0.16		c0.08	c0.46		0.04	c0.30	0.19	c0.22	0.20	
v/s Ratio Perm	0.18					0.14					0.30	0.11
v/c Ratio	0.67	0.59		0.76	1.31	0.41	0.65	1.25	0.80	1.17	1.05	0.11
Uniform Delay, d1	43.9	48.4		65.5	49.2	37.4	69.7	57.8	54.4	61.5	39.8	0.0
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	8.7	0.7		8.4	144.4	0.3	12.9	132.9	17.2	92.1	61.8	0.1
Delay (s)	52.6	49.1		73.9	193.7	37.7	82.6	190.6	71.6	153.6	101.6	0.1
Level of Service	D	D		E	F	D	F	F	E	F	F	A
Approach Delay (s)		49.6			134.6			129.9			117.4	
Approach LOS		D			F			F			F	

Intersection Summary			
HCM 2000 Control Delay	116.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.27		
Actuated Cycle Length (s)	151.5	Sum of lost time (s)	30.0
Intersection Capacity Utilization	116.1%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1147	961	26	263	1300	1130	56	60	178	270	37	963
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.5	8.5		7.0	8.0	8.0		8.5	8.5	8.5	8.5	7.5
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00		1.00	1.00	0.95	0.95	1.00
Frt	1.00	1.00		1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.98	1.00	0.95	0.96	1.00
Satd. Flow (prot)	3433	5065		1770	5085	1583		1819	1583	1681	1705	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.98	1.00	0.95	0.96	1.00
Satd. Flow (perm)	3433	5065		1770	5085	1583		1819	1583	1681	1705	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1207	1012	27	277	1368	1189	59	63	187	284	39	1014
RTOR Reduction (vph)	0	2	0	0	0	245	0	0	170	0	0	76
Lane Group Flow (vph)	1207	1037	0	277	1368	944	0	122	17	162	161	938
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	pm+ov
Protected Phases	1	6		5	2		4	4		3	3	1
Permitted Phases						2			4			3
Actuated Green, G (s)	42.5	67.1		29.4	54.0	54.0		14.4	14.4	16.0	16.0	58.5
Effective Green, g (s)	42.5	67.1		29.4	54.0	54.0		14.4	14.4	16.0	16.0	58.5
Actuated g/C Ratio	0.27	0.42		0.18	0.34	0.34		0.09	0.09	0.10	0.10	0.37
Clearance Time (s)	7.5	8.5		7.0	8.0	8.0		8.5	8.5	8.5	8.5	7.5
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	915	2132		326	1722	536		164	143	168	171	580
v/s Ratio Prot	0.35	0.20		0.16	0.27			c0.07		0.10	0.09	c0.43
v/s Ratio Perm						c0.60			0.01			0.16
v/c Ratio	1.32	0.49		0.85	0.79	1.76		0.74	0.12	0.96	0.94	1.62
Uniform Delay, d1	58.5	33.6		62.9	47.7	52.7		70.7	66.7	71.4	71.2	50.5
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	151.3	0.8		18.3	3.9	349.9		16.6	0.4	60.6	54.9	285.7
Delay (s)	209.8	34.4		81.1	51.6	402.6		87.3	67.0	132.0	126.1	336.1
Level of Service	F	C		F	D	F		F	E	F	F	F
Approach Delay (s)		128.6			201.7			75.0			286.1	
Approach LOS		F			F			E			F	

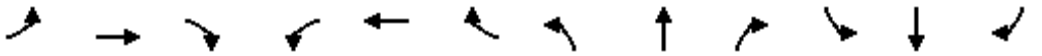
Intersection Summary			
HCM 2000 Control Delay	188.3	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.58		
Actuated Cycle Length (s)	159.4	Sum of lost time (s)	32.5
Intersection Capacity Utilization	128.9%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (vph)	0	0	0	183	0	148	0	1229	1949	0	2812	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0		6.0		6.0	4.0		6.0	
Lane Util. Factor				0.97		0.88		0.91	1.00		0.86	
Frt				1.00		0.85		1.00	0.85		1.00	
Flt Protected				0.95		1.00		1.00	1.00		1.00	
Satd. Flow (prot)				3433		2787		5085	1583		6408	
Flt Permitted				0.95		1.00		1.00	1.00		1.00	
Satd. Flow (perm)				3433		2787		5085	1583		6408	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	193	0	156	0	1294	2052	0	2960	0
RTOR Reduction (vph)	0	0	0	0	0	149	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	193	0	7	0	1294	2052	0	2960	0
Turn Type				Prot		Prot		NA	Free		NA	
Protected Phases				3		3		6			2	
Permitted Phases									Free			
Actuated Green, G (s)				4.0		4.0		36.7	90.0		36.7	
Effective Green, g (s)				4.0		4.0		36.7	90.0		36.7	
Actuated g/C Ratio				0.04		0.04		0.41	1.00		0.41	
Clearance Time (s)				6.0		6.0		6.0			6.0	
Vehicle Extension (s)				3.0		3.0		3.0			3.0	
Lane Grp Cap (vph)				152		123		2073	1583		2613	
v/s Ratio Prot				0.06		0.00		0.25			0.46	
v/s Ratio Perm									c1.30			
v/c Ratio				1.27		0.06		0.62	1.30		1.13	
Uniform Delay, d1				43.0		41.2		21.2	45.0		26.6	
Progression Factor				1.00		1.00		1.00	1.00		1.45	
Incremental Delay, d2				162.9		0.2		1.4	138.1		64.9	
Delay (s)				205.9		41.4		22.6	183.1		103.7	
Level of Service				F		D		C	F		F	
Approach Delay (s)		0.0			132.4			121.0			103.7	
Approach LOS		A			F			F			F	

Intersection Summary			
HCM 2000 Control Delay	113.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.62		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	72.9%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	NBL	NBR	NET	NER	SWL	SWT
Lane Configurations						
Volume (vph)	0	1526	1412	0	0	1701
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0	6.0			6.0
Lane Util. Factor		0.76	0.91			0.86
Frt		0.85	1.00			1.00
Flt Protected		1.00	1.00			1.00
Satd. Flow (prot)		3610	5085			6408
Flt Permitted		1.00	1.00			1.00
Satd. Flow (perm)		3610	5085			6408
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	1606	1486	0	0	1791
RTOR Reduction (vph)	0	168	0	0	0	0
Lane Group Flow (vph)	0	1438	1486	0	0	1791
Turn Type		Perm	NA			NA
Protected Phases			4			
Permitted Phases		2				8
Actuated Green, G (s)		36.7	31.3			41.3
Effective Green, g (s)		36.7	31.3			41.3
Actuated g/C Ratio		0.41	0.35			0.46
Clearance Time (s)		6.0	6.0			6.0
Vehicle Extension (s)		3.0	3.0			3.0
Lane Grp Cap (vph)		1472	1768			2940
v/s Ratio Prot			c0.29			
v/s Ratio Perm		c0.40				c0.28
v/c Ratio		0.98	0.84			0.61
Uniform Delay, d1		26.2	27.0			18.3
Progression Factor		1.00	1.62			1.00
Incremental Delay, d2		18.6	2.7			0.4
Delay (s)		44.9	46.5			18.7
Level of Service		D	D			B
Approach Delay (s)	44.9		46.5			18.7
Approach LOS	D		D			B

Intersection Summary			
HCM 2000 Control Delay	35.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	72.9%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	608	1997	451	0	2776	0	300	0	129	0	0	52
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0		6.0		6.0	6.0	6.0			7.0
Lane Util. Factor	0.97	0.91	1.00		0.91		0.91	0.86	0.95			1.00
Frt	1.00	1.00	0.85		1.00		1.00	0.96	0.85			0.86
Flt Protected	0.95	1.00	1.00		1.00		0.95	0.96	1.00			1.00
Satd. Flow (prot)	3433	5085	1583		5085		3221	1482	1504			1611
Flt Permitted	0.95	1.00	1.00		1.00		0.95	0.96	1.00			1.00
Satd. Flow (perm)	3433	5085	1583		5085		3221	1482	1504			1611
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	640	2102	475	0	2922	0	316	0	136	0	0	55
RTOR Reduction (vph)	0	0	163	0	0	0	0	77	44	0	0	46
Lane Group Flow (vph)	640	2102	312	0	2922	0	234	36	61	0	0	9
Turn Type	Prot	NA	Perm		NA		Prot	NA	Perm			Perm
Protected Phases	7	4			8		5	2				
Permitted Phases			4						2			6
Actuated Green, G (s)	21.0	90.0	90.0		63.0		16.2	48.0	48.0			24.8
Effective Green, g (s)	21.0	90.0	90.0		63.0		16.2	48.0	48.0			24.8
Actuated g/C Ratio	0.14	0.60	0.60		0.42		0.11	0.32	0.32			0.17
Clearance Time (s)	6.0	6.0	6.0		6.0		6.0	6.0	6.0			7.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0	3.0			3.0
Lane Grp Cap (vph)	480	3051	949		2135		347	474	481			266
v/s Ratio Prot	c0.19	0.41			c0.57		c0.07	0.01				
v/s Ratio Perm			0.20					0.02	c0.04			0.01
v/c Ratio	1.33	0.69	0.33		1.37		0.67	0.08	0.13			0.03
Uniform Delay, d1	64.5	20.5	15.0		43.5		64.4	35.5	36.1			52.5
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00	1.00			1.00
Incremental Delay, d2	163.7	0.7	0.2		169.0		5.1	0.1	0.5			0.2
Delay (s)	228.2	21.1	15.2		212.5		69.5	35.6	36.7			52.8
Level of Service	F	C	B		F		E	D	D			D
Approach Delay (s)		61.4			212.5			53.4			52.8	
Approach LOS		E			F			D			D	

Intersection Summary			
HCM 2000 Control Delay	127.2	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.03		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	25.0
Intersection Capacity Utilization	92.4%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	17	236	0	359	0	0	47	230
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					6.0	6.0		6.0			7.0	7.0
Lane Util. Factor					1.00	1.00		0.95			1.00	1.00
Frt					1.00	0.85		1.00			1.00	0.85
Flt Protected					1.00	1.00		1.00			1.00	1.00
Satd. Flow (prot)					1863	1583		3539			1863	1583
Flt Permitted					1.00	1.00		1.00			1.00	1.00
Satd. Flow (perm)					1863	1583		3539			1863	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	0	18	248	0	378	0	0	49	242
RTOR Reduction (vph)	0	0	0	0	0	144	0	0	0	0	0	202
Lane Group Flow (vph)	0	0	0	0	18	104	0	378	0	0	49	40
Turn Type					NA	Perm		NA			NA	Perm
Protected Phases					8			7			6	
Permitted Phases						8						6
Actuated Green, G (s)					63.0	63.0		21.0			24.8	24.8
Effective Green, g (s)					63.0	63.0		21.0			24.8	24.8
Actuated g/C Ratio					0.42	0.42		0.14			0.17	0.17
Clearance Time (s)					6.0	6.0		6.0			7.0	7.0
Vehicle Extension (s)					3.0	3.0		3.0			3.0	3.0
Lane Grp Cap (vph)					782	664		495			308	261
v/s Ratio Prot					0.01			c0.11			c0.03	
v/s Ratio Perm						c0.07						0.03
v/c Ratio					0.02	0.16		0.76			0.16	0.15
Uniform Delay, d1					25.5	27.0		62.1			53.7	53.6
Progression Factor					1.00	1.00		0.20			1.00	1.00
Incremental Delay, d2					0.0	0.1		0.7			1.1	1.2
Delay (s)					25.5	27.1		12.9			54.8	54.9
Level of Service					C	C		B			D	D
Approach Delay (s)		0.0			27.0			12.9			54.8	
Approach LOS		A			C			B			D	

Intersection Summary			
HCM 2000 Control Delay	30.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.24		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	25.0
Intersection Capacity Utilization	34.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

No Build Alternative 2040 PM

24: PGA Blvd & West Ramps Corridor: PGA Boulevard

Lane Group	SBL	SBR	NET	NER	SWT
Lane Group Flow (vph)	193	156	1294	2052	2960
v/c Ratio	1.27	0.57	0.62	1.30	1.13
Control Delay	200.6	16.2	23.0	148.7	101.0
Queue Delay	604.9	0.0	38.7	0.0	1.1
Total Delay	805.5	16.2	61.7	148.7	102.1
Queue Length 50th (ft)	~72	0	212	~561	~600
Queue Length 95th (ft)	#140	32	260	#822	#677
Internal Link Dist (ft)			215		227
Turn Bay Length (ft)					
Base Capacity (vph)	152	272	2075	1583	2614
Starvation Cap Reductn	0	0	0	0	909
Spillback Cap Reductn	152	0	871	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	193.00	0.57	1.07	1.30	1.74

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	NBR	NET	SWT
Lane Group Flow (vph)	1606	1486	1791
v/c Ratio	0.98	0.84	0.61
Control Delay	40.8	47.7	19.3
Queue Delay	0.0	48.6	49.6
Total Delay	40.8	96.3	68.9
Queue Length 50th (ft)	339	340	211
Queue Length 95th (ft)	#487	m373	248
Internal Link Dist (ft)		227	250
Turn Bay Length (ft)			
Base Capacity (vph)	1640	1808	2990
Starvation Cap Reductn	0	728	0
Spillback Cap Reductn	0	0	1895
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.98	1.38	1.64

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (veh/h)	0	565	2186	905	92	2439
Future Volume (Veh/h)	0	565	2186	905	92	2439
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	0	595	2301	953	97	2567
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			1299			
pX, platoon unblocked	0.81	0.81			0.81	
vC, conflicting volume	3827	1052			3254	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	3308	0			2598	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	32			27	
cM capacity (veh/h)	1	875			132	

Direction, Lane #	NW 1	NE 1	NE 2	NE 3	NE 4	SW 1	SW 2	SW 3	SW 4
Volume Total	595	657	657	657	1282	97	856	856	856
Volume Left	0	0	0	0	0	97	0	0	0
Volume Right	595	0	0	0	953	0	0	0	0
cSH	875	1700	1700	1700	1700	132	1700	1700	1700
Volume to Capacity	0.68	0.39	0.39	0.39	0.75	0.73	0.50	0.50	0.50
Queue Length 95th (ft)	138	0	0	0	0	105	0	0	0
Control Delay (s)	17.4	0.0	0.0	0.0	0.0	84.3	0.0	0.0	0.0
Lane LOS	C					F			
Approach Delay (s)	17.4	0.0				3.1			
Approach LOS	C								

Intersection Summary			
Average Delay	2.8		
Intersection Capacity Utilization	88.5%	ICU Level of Service	E
Analysis Period (min)	15		

Lane Group	SBL	SBR	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	0	0	156	2782	1701	0
Future Volume (vph)	0	0	156	2782	1701	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	500			0
Storage Lanes	0	0	1			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.86	0.91	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	6408	5085	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	6408	5085	0
Link Speed (mph)	45			45	45	
Link Distance (ft)	247			189	328	
Travel Time (s)	3.7			2.9	5.0	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	164	2928	1791	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	164	2928	1791	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Free			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	108.3%	ICU Level of Service	G
Analysis Period (min)	15		

APPENDIX N

HCS REPORTS

NO BUILD

APPENDIX N - NO BUILD HCS REPORTS

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	LRCB
Agency/Co.:	
Date performed:	3/26/2015
Analysis time period:	AM
Freeway/Dir of Travel:	I-95 Northbound
Junction:	NLake NB On Ramp
Jurisdiction:	FDOT D4
Analysis Year:	2020

Description: No Build 2020 - I-95 NB Merge at Nlake On-Ramp (N1 - N2)

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	5	
Free-flow speed on freeway	70.0	mph
Volume on freeway	5314	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	50.0	mph
Volume on ramp	1178	vph
Length of first accel/decel lane	400	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent Ramp		vph
Position of adjacent Ramp		
Type of adjacent Ramp		
Distance to adjacent Ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	5314	1178		vph
Peak-hour factor, PHF	0.95	0.92		
Peak 15-min volume, v15	1398	320		v
Trucks and buses	4	3		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

Heavy vehicle adjustment, fHV	0.980	0.985	
Driver population factor, fP	1.00	1.00	
Flow rate, vp	5706	1300	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 0.055 Using Equation 4

$v_{12} = v_F (P_{FM})$ = 240 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	5637	9600	No
v_3 or v_{av34}	2048 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	No	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	Yes	

If yes, v_{12A} = 1734 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	5637	4600	No

Level of Service Determination (if not F)

Density, $D_R = 5.475 + 0.00734\ v_R + 0.0078\ v_{12} - 0.00627\ L_A$ = 26.0 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable,	M_S = 0.362	
Space mean speed in ramp influence area,	S_R = 59.9	mph
Space mean speed in outer lanes,	S_0 = 67.1	mph
Space mean speed for all vehicles,	S = 63.0	mph

APPENDIX N - NO BUILD HCS REPORTS

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	LRCB
Agency or Company:	
Date Performed:	3/26/2015
Analysis Time Period:	AM Peak
Freeway/Direction:	I-95 Northbound
From/To:	NLake On-Rmp to PGA Off-Rmp
Jurisdiction:	FDOT D4
Analysis Year:	2020
Description:	No Build 2020 - I-95 NB Basic Nlake-On to PGA-Off (N2 - N3)

Flow Inputs and Adjustments

Volume, V	6492	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	1708	v
Trucks and buses	4	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.980	
Driver population factor, fp	1.00	
Flow rate, vp	1394	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	5	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	1394	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	69.6	mi/h
Number of lanes, N	5	
Density, D	20.0	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

APPENDIX N - NO BUILD HCS REPORTS

APPENDIX N - NO BUILD HCS REPORTS

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	LRCB
Agency/Co.:	
Date performed:	3/26/2015
Analysis time period:	AM Peak
Freeway/Dir of Travel:	I-95 Northbound
Junction:	EB PGA Off-Ramp
Jurisdiction:	FDOT D4
Analysis Year:	2020

Description: No Build 2020 - I-95 NB Diverge at EB PGA Off-Ramp (N3 - N4)

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	5	
Free-flow speed on freeway	70.0	mph
Volume on freeway	6492	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	2	
Free-Flow speed on ramp	55.0	mph
Volume on ramp	2405	vph
Length of first accel/decel lane	500	ft
Length of second accel/decel lane	500	ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent ramp		vph
Position of adjacent ramp		
Type of adjacent ramp		
Distance to adjacent ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	6492	2405		vph
Peak-hour factor, PHF	0.95	0.92		
Peak 15-min volume, v15	1708	654		v
Trucks and buses	4	3		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	0.00 %	0.00 %		%
Length	0.00 mi	0.00 mi		mi
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

Heavy vehicle adjustment, fHV	0.980	0.985	
Driver population factor, fP	1.00	1.00	
Flow rate, vp	6970	2653	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.260 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 3504 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	5925	9600	No
$v_{FO} = v_F - v_R$	3272	9600	No
v_R	2653	4400	No
v_3 or v_{av34}	1210 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	No	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	No	

If yes, v_{12A} = 3504 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3504	4400	No

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086 v_R - 0.009 L_{12}$ = 20.9 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable, D_S = 0.407

Space mean speed in ramp influence area, S_R = 58.6 mph

Space mean speed in outer lanes, S_0 = 76.0 mph

Space mean speed for all vehicles, S = 64.6 mph

APPENDIX N - NO BUILD HCS REPORTS

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	LRCB
Agency or Company:	
Date Performed:	3/26/2015
Analysis Time Period:	AM Peak
Freeway/Direction:	I-95 Northbound
From/To:	PGA EB Off to PGA WB Off
Jurisdiction:	FDOT D4
Analysis Year:	2020
Description:	No Build 2020 - I95NB Basic EB PGA Off to WB PGA (N4 - N5)

Flow Inputs and Adjustments

Volume, V	4087	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	1076	v
Trucks and buses	4	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.980	
Driver population factor, fp	1.00	
Flow rate, vp	878	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	5	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	878	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	5	
Density, D	12.5	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	LRCB
Agency/Co.:	
Date performed:	3/26/2015
Analysis time period:	AM Peak
Freeway/Dir of Travel:	I-95 Northbound
Junction:	WB PGA Off-Ramp
Jurisdiction:	FDOT D4
Analysis Year:	2020

Description: No Build 2020 - I-95 NB Diverge at WB PGA Off-Ramp (N5 - N6)

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	5	
Free-flow speed on freeway	70.0	mph
Volume on freeway	4087	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	35.0	mph
Volume on ramp	1038	vph
Length of first accel/decel lane	500	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent ramp		vph
Position of adjacent ramp		
Type of adjacent ramp		
Distance to adjacent ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	4087	1038		vph
Peak-hour factor, PHF	0.95	0.92		
Peak 15-min volume, v15	1076	282		v
Trucks and buses	4	3		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	0.00 %	0.00 %		%
Length	0.00 mi	0.00 mi		mi
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

Heavy vehicle adjustment, fHV	0.980	0.985	
Driver population factor, fP	1.00	1.00	
Flow rate, vp	4388	1145	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.436 Using Equation 8

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 2368 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	3950	9600	No
$v_{FO} = v_F - v_R$	2805	9600	No
v_R	1145	2000	No
v_3 or v_{av34}	791 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	No	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	No	

If yes, v_{12A} = 2368 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	2368	4400	No

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086 v_R - 0.009 L_{12}$ = 20.1 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable, D_S = 0.531

Space mean speed in ramp influence area, S_R = 55.1 mph

Space mean speed in outer lanes, S_0 = 76.8 mph

Space mean speed for all vehicles, S = 62.2 mph

APPENDIX N - NO BUILD HCS REPORTS

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	LRCB
Agency or Company:	
Date Performed:	3/26/2015
Analysis Time Period:	AM Peak
Freeway/Direction:	I-95 Northbound
From/To:	WB PGA Off to EB PGA On
Jurisdiction:	FDOT D4
Analysis Year:	2020
Description:	No Build 2020 - I-95 NB WB PGA Off to EB PGA On (N6 - N7)

Flow Inputs and Adjustments

Volume, V	3049	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	802	v
Trucks and buses	4	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.980	
Driver population factor, fp	1.00	
Flow rate, vp	655	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	5	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	655	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	5	
Density, D	9.4	pc/mi/ln
Level of service, LOS	A	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	LRCB
Agency/Co.:	
Date performed:	3/26/2015
Analysis time period:	AM
Freeway/Dir of Travel:	I-95 Northbound
Junction:	EB&WB PGA On Ramp
Jurisdiction:	FDOT D4
Analysis Year:	2020

Description: No Build 2020 - I-95 SB Merge at E/W PGA On-Ramp (N7 - N8)

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	5	
Free-flow speed on freeway	70.0	mph
Volume on freeway	3049	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	50.0	mph
Volume on ramp	134	vph
Length of first accel/decel lane	400	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent Ramp		vph
Position of adjacent Ramp		
Type of adjacent Ramp		
Distance to adjacent Ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	3049	134		vph
Peak-hour factor, PHF	0.95	0.92		
Peak 15-min volume, v15	802	36		v
Trucks and buses	4	3		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

Heavy vehicle adjustment, fHV 0.980 0.985
Driver population factor, fP 1.00 1.00
Flow rate, vp 3274 148 pcph

_____Estimation of V12 Merge Areas_____

L_{EQ} = (Equation 13-6 or 13-7)
P_{FM} = 0.289 Using Equation 4
$v_{12} = v_F (P_{FM})$ = 737 pc/h

_____Capacity Checks_____

	Actual	Maximum	LOS F?
v_{FO}	2702	9600	No
v_3 or v_{av34}	908 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	No	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	Yes	

If yes, v_{12A} = 1021 (Equation 13-15, 13-16, 13-18, or 13-19)

_____Flow Entering Merge Influence Area_____

	Actual	Max Desirable	Violation?
v_{12A}	2702	4600	No

_____Level of Service Determination (if not F)_____

Density, $D_R = 5.475 + 0.00734 v_R + 0.0078 v_{12} - 0.00627 L_A$ = 12.0 pc/mi/ln
Level of service for ramp-freeway junction areas of influence B

_____Speed Estimation_____

Intermediate speed variable, M_S = 0.294
Space mean speed in ramp influence area, S_R = 61.8 mph
Space mean speed in outer lanes, S_0 = 69.0 mph
Space mean speed for all vehicles, S = 65.7 mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	LRCB
Agency or Company:	
Date Performed:	3/26/2015
Analysis Time Period:	AM Peak
Freeway/Direction:	I-95 Northbound
From/To:	DRoss to MT
Jurisdiction:	FDOT D4
Analysis Year:	2020

Description: No Build 2020 - I-95 NB Basic E/W PGA-On to MT-On (N8 - N9)

Flow Inputs and Adjustments

Volume, V	3183	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	838	v
Trucks and buses	4	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.980	
Driver population factor, fp	1.00	
Flow rate, vp	684	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	5	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	684	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	5	
Density, D	9.8	pc/mi/ln
Level of service, LOS	A	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	LRCB
Agency/Co.:	
Date performed:	3/26/2015
Analysis time period:	AM
Freeway/Dir of Travel:	I-95 Northbound
Junction:	MT NB On Ramp
Jurisdiction:	FDOT D4
Analysis Year:	2020

Description: No Build 2020 - I-95 NB Merge at MT On-Ramp (N9 - N10)

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	5	
Free-flow speed on freeway	70.0	mph
Volume on freeway	3183	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	50.0	mph
Volume on ramp	104	vph
Length of first accel/decel lane	400	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent Ramp		vph
Position of adjacent Ramp		
Type of adjacent Ramp		
Distance to adjacent Ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	3183	104		vph
Peak-hour factor, PHF	0.95	0.92		
Peak 15-min volume, v15	838	28		v
Trucks and buses	4	3		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

Heavy vehicle adjustment, fHV 0.980 0.985
Driver population factor, fP 1.00 1.00
Flow rate, vp 3418 115 pcph

_____Estimation of V12 Merge Areas_____

L_{EQ} = (Equation 13-6 or 13-7)
P_{FM} = 0.293 Using Equation 4
$v_{12} = v_F (P_{FM})$ = 780 pc/h

_____Capacity Checks_____

	Actual	Maximum	LOS F?
v_{FO}	2782	9600	No
v_3 or v_{av34}	943 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	No	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	Yes	

If yes, v_{12A} = 1066 (Equation 13-15, 13-16, 18, or 13-19)

_____Flow Entering Merge Influence Area_____

	Actual	Max Desirable	Violation?
v_{12A}	2782	4600	No

_____Level of Service Determination (if not F)_____

Density, $D_R = 5.475 + 0.00734 v_R + 0.0078 v_{12} - 0.00627 L_A$ = 12.1 pc/mi/ln
Level of service for ramp-freeway junction areas of influence B

_____Speed Estimation_____

Intermediate speed variable, M_S = 0.294
Space mean speed in ramp influence area, S_R = 61.8 mph
Space mean speed in outer lanes, S_0 = 68.9 mph
Space mean speed for all vehicles, S = 65.7 mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	LRCB
Agency or Company:	
Date Performed:	3/26/2015
Analysis Time Period:	AM Peak
Freeway/Direction:	I-95 Northbound
From/To:	MT-On to DRoss-Off
Jurisdiction:	FDOT D4
Analysis Year:	2020
Description:	No Build 2020: I-95 NB Basic MT-On to DRoss-Off (N10 - N11)

Flow Inputs and Adjustments

Volume, V	3287	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	865	v
Trucks and buses	4	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.980	
Driver population factor, fp	1.00	
Flow rate, vp	706	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	5	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	706	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	5	
Density, D	10.1	pc/mi/ln
Level of service, LOS	A	

Overall results are not computed when free-flow speed is less than 55 mph.

APPENDIX N - NO BUILD HCS REPORTS

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	LRCB
Agency/Co.:	
Date performed:	3/26/2015
Analysis time period:	AM Peak
Freeway/Dir of Travel:	I-95 Northbound
Junction:	DRoss Off-Ramp
Jurisdiction:	FDOT D4
Analysis Year:	2020

Description: No Build 2020: I-95 NB Diverge at DRoss Off-Ramp (N11 - N12)

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	5	
Free-flow speed on freeway	70.0	mph
Volume on freeway	3287	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	2	
Free-Flow speed on ramp	50.0	mph
Volume on ramp	1139	vph
Length of first accel/decel lane	500	ft
Length of second accel/decel lane	500	ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent ramp		vph
Position of adjacent ramp		
Type of adjacent ramp		
Distance to adjacent ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	3287	1139		vph
Peak-hour factor, PHF	0.95	0.92		
Peak 15-min volume, v15	865	310		v
Trucks and buses	4	3		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	0.00 %	0.00 %		%
Length	0.00 mi	0.00 mi		mi
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

Heavy vehicle adjustment, fHV	0.980	0.985	
Driver population factor, fP	1.00	1.00	
Flow rate, vp	3529	1257	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.260 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 1848 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	3529	9600	No
$v_{FO} = v_F - v_R$	2272	9600	No
v_R	1257	4200	No
v_3 or v_{av34}	840 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	No	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	No	

If yes, v_{12A} = 1848 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	1848	4400	No

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086 v_R - 0.009 L_D$ = 6.6 pc/mi/ln

Level of service for ramp-freeway junction areas of influence A

Speed Estimation

Intermediate speed variable,	D_S = 0.346	
Space mean speed in ramp influence area,	S_R = 60.3	mph
Space mean speed in outer lanes,	S_0 = 76.8	mph
Space mean speed for all vehicles,	S = 67.2	mph

APPENDIX N - NO BUILD HCS REPORTS

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	LRCB
Agency/Co.:	
Date performed:	3/26/2015
Analysis time period:	AM
Freeway/Dir of Travel:	I-95 Southbound
Junction:	DRoss SB On Ramp
Jurisdiction:	FDOT D4
Analysis Year:	2020

Description: No Build 2020 - I-95 SB Merge at DRoss On-Ramp (S1 - S2)

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	5	
Free-flow speed on freeway	70.0	mph
Volume on freeway	3953	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	50.0	mph
Volume on ramp	1577	vph
Length of first accel/decel lane	400	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent Ramp		vph
Position of adjacent Ramp		
Type of adjacent Ramp		
Distance to adjacent Ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	3953	1577		vph
Peak-hour factor, PHF	0.95	0.92		
Peak 15-min volume, v15	1040	429		v
Trucks and buses	4	3		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

```
Heavy vehicle adjustment, fHV          0.980       0.985
Driver population factor, fP           1.00        1.00
Flow rate, vp                          4244        1740                    pcph
```

_____Estimation of V12 Merge Areas_____

```
                  L  =            (Equation 13-6 or 13-7)
                   EQ
                  P  =    0.089   Using Equation  4
                   FM
                  v  = v  (P  ) =  296    pc/h
                   12   F   FM
```

_____Capacity Checks_____

	Actual	Maximum	LOS F?
v_{FO}	5051	9600	No
v_3 or v_{av34}	1507 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	No	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	Yes	

If yes, v_{12A} = 1324 (Equation 13-15, 13-16, 13-18, or 13-19)

_____Flow Entering Merge Influence Area_____

	Actual	Max Desirable	Violation?
v_{12A}	5051	4600	No

_____Level of Service Determination (if not F)_____

```
Density, D = 5.475 + 0.00734 v  + 0.0078 v   - 0.00627 L   =   26.1    pc/mi/ln
          R                   R          12            A
Level of service for ramp-freeway junction areas of influence  C
```

_____Speed Estimation_____

```
Intermediate speed variable,                M  = 0.365
                                             S
Space mean speed in ramp influence area,    S  = 59.8    mph
                                             R
Space mean speed in outer lanes,            S  = 68.2    mph
                                             0
Space mean speed for all vehicles,          S  = 62.8    mph
```

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	LRCB
Agency or Company:	
Date Performed:	3/26/2015
Analysis Time Period:	AM Peak
Freeway/Direction:	I-95 Southbound
From/To:	DRoss to MT
Jurisdiction:	FDOT D4
Analysis Year:	2020

Description: No Build 2020 - I-95 SB Basict DRoss to Military (S2 - S3)

Flow Inputs and Adjustments

Volume, V	5530	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	1455	v
Trucks and buses	4	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.980	
Driver population factor, fp	1.00	
Flow rate, vp	1187	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	5	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	1187	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	5	
Density, D	17.0	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	LRCB
Agency/Co.:	
Date performed:	3/26/2015
Analysis time period:	AM Peak
Freeway/Dir of Travel:	I-95 Southbound
Junction:	MT Off-Ramp
Jurisdiction:	FDOT D4
Analysis Year:	2020

Description: No Build 2020 - I-95 SB Diverge at MT Off-Ramp (S3 - S4)

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	5	
Free-flow speed on freeway	70.0	mph
Volume on freeway	5530	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	50.0	mph
Volume on ramp	348	vph
Length of first accel/decel lane	500	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent ramp		vph
Position of adjacent ramp		
Type of adjacent ramp		
Distance to adjacent ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	5530	348		vph
Peak-hour factor, PHF	0.95	0.92		
Peak 15-min volume, v15	1455	95		v
Trucks and buses	4	3		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	0.00 %	0.00 %		%
Length	0.00 mi	0.00 mi		mi
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

Heavy vehicle adjustment, fHV 0.980 0.985
Driver population factor, fP 1.00 1.00
Flow rate, vp 5937 384 pcph

_____Estimation of V12 Diverge Areas_____

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.436 Using Equation 8

$v_{12} = v_R + (v - v_F) P_{FD}$ = 2417 pc/h

_____Capacity Checks_____

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	5047	9600	No
$v_{FO} = v - v_F - v_R$	4663	9600	No
v_R	384	2100	No
v_3 or v_{av34}	1315 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	No	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	No	

If yes, v_{12A} = 2417 (Equation 13-15, 13-16, 13-18, or 13-19)

_____Flow Entering Diverge Influence Area_____

	Actual	Max Desirable	Violation?
v_{12}	2417	4400	No

_____Level of Service Determination (if not F)_____

Density, $D = 4.252 + 0.0086 v_R - 0.009 L_D$ = 20.5 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

_____Speed Estimation_____

Intermediate speed variable, D_S = 0.268

Space mean speed in ramp influence area, S_R = 62.5 mph

Space mean speed in outer lanes, S_0 = 75.6 mph

Space mean speed for all vehicles, S = 68.7 mph

APPENDIX N - NO BUILD HCS REPORTS

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	LRCB
Agency or Company:	
Date Performed:	3/26/2015
Analysis Time Period:	AM Peak
Freeway/Direction:	I-95 Southbound
From/To:	MT to PGA
Jurisdiction:	FDOT D4
Analysis Year:	2020
Description:	No Build 2020 - I-95 SB Basic Military to PGA (S4 - S5)

Flow Inputs and Adjustments

Volume, V	5182	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	1364	v
Trucks and buses	4	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.980	
Driver population factor, fp	1.00	
Flow rate, vp	1113	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	5	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	1113	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	5	
Density, D	15.9	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	LRCB
Agency/Co.:	
Date performed:	3/26/2015
Analysis time period:	AM Peak
Freeway/Dir of Travel:	I-95 Southbound
Junction:	PGA Off Ramp
Jurisdiction:	FDOT D4
Analysis Year:	2020

Description: No Build 2020 - I-95 SB Diverge at PGA Off-Ramp (S5 - S6)

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	5	
Free-flow speed on freeway	70.0	mph
Volume on freeway	5182	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	2	
Free-Flow speed on ramp	60.0	mph
Volume on ramp	688	vph
Length of first accel/decel lane	500	ft
Length of second accel/decel lane	500	ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent ramp		vph
Position of adjacent ramp		
Type of adjacent ramp		
Distance to adjacent ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	5182	688		vph
Peak-hour factor, PHF	0.95	0.92		
Peak 15-min volume, v15	1364	187		v
Trucks and buses	4	3		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	0.00 %	0.00 %		%
Length	0.00 mi	0.00 mi		mi
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

Heavy vehicle adjustment, fHV	0.980	0.985	
Driver population factor, fP	1.00	1.00	
Flow rate, vp	5564	759	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.260 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 1791 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	4730	9600	No
$v_{FO} = v_F - v_R$	3971	9600	No
v_R	759	4400	No
v_3 or v_{av34}	1469 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	No	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	Yes	

If yes, v_{12A} = 1892 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	1892	4400	No

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086 v_R - 0.009 L_D$ = 7.0 pc/mi/ln

Level of service for ramp-freeway junction areas of influence A

Speed Estimation

Intermediate speed variable, D_S = 0.171

Space mean speed in ramp influence area, S_R = 65.2 mph

Space mean speed in outer lanes, S_0 = 75.2 mph

Space mean speed for all vehicles, S = 70.8 mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	LRCB
Agency or Company:	
Date Performed:	3/26/2015
Analysis Time Period:	AM Peak
Freeway/Direction:	I-95 Southbound
From/To:	PGA-Off to WB_PGA On
Jurisdiction:	FDOT D4
Analysis Year:	2020

Description: No Build 2020 - I-95SB Basic PGA-Off to WB PGA-On (S6 - S7)

Flow Inputs and Adjustments

Volume, V	4494	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	1183	v
Trucks and buses	4	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.980	
Driver population factor, fp	1.00	
Flow rate, vp	965	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	5	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	965	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	5	
Density, D	13.8	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	LRCB
Agency/Co.:	
Date performed:	3/26/2015
Analysis time period:	AM
Freeway/Dir of Travel:	I-95 Southbound
Junction:	WB PGA SB On Ramp
Jurisdiction:	FDOT D4
Analysis Year:	2020

Description: No Build 2020 - I-95 SB Merge at WB PGA On-Ramp (S7 - S8)

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	5	
Free-flow speed on freeway	70.0	mph
Volume on freeway	4494	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	40.0	mph
Volume on ramp	1246	vph
Length of first accel/decel lane	400	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent Ramp		vph
Position of adjacent Ramp		
Type of adjacent Ramp		
Distance to adjacent Ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	4494	1246		vph
Peak-hour factor, PHF	0.95	0.92		
Peak 15-min volume, v15	1183	339		v
Trucks and buses	4	3		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

```
Heavy vehicle adjustment, fHV          0.980       0.985
Driver population factor, fP           1.00        1.00
Flow rate, vp                          4825        1375                    pcph
```

_____Estimation of V12 Merge Areas_____

```
                  L  =            (Equation 13-6 or 13-7)
                   EQ
                  P  =    0.046   Using Equation  4
                   FM
                  v  = v  (P  ) =  173    pc/h
                   12   F   FM
```

_____Capacity Checks_____

```
                          Actual        Maximum         LOS F?
     v                    5139          9600            No
      FO
     v  or v              1795 pc/h     (Equation 13-14 or 13-17)
      3     av34
Is   v  or v      > 2700 pc/h?          No
      3     av34
Is   v  or v      > 1.5 v  /2           Yes
      3     av34         12
If yes, v    = 1505                  (Equation 13-15, 13-16, 13-18, or 13-19)
         12A
```

_____Flow Entering Merge Influence Area_____

```
                     Actual        Max Desirable         Violation?
     v               5139          4600                  No
      12A
```

_____Level of Service Determination (if not F)_____

```
Density, D = 5.475 + 0.00734 v  + 0.0078 v   - 0.00627 L   =   24.8    pc/mi/ln
          R                    R           12            A
Level of service for ramp-freeway junction areas of influence  C
```

_____Speed Estimation_____

```
Intermediate speed variable,                M  = 0.358
                                             S
Space mean speed in ramp influence area,    S  = 60.0    mph
                                             R
Space mean speed in outer lanes,            S  = 67.7    mph
                                             0
Space mean speed for all vehicles,          S  = 63.1    mph
```

APPENDIX N - NO BUILD HCS REPORTS

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	LRCB
Agency or Company:	
Date Performed:	3/26/2015
Analysis Time Period:	AM Peak
Freeway/Direction:	I-95 Southbound
From/To:	WB PGA On to EB PGA On
Jurisdiction:	FDOT D4
Analysis Year:	2020
Description:	No Build 2020 I95SB Basic WB PGA On to EB PGA On (S8 - S9)

Flow Inputs and Adjustments

Volume, V	5740	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	1511	v
Trucks and buses	4	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.980	
Driver population factor, fp	1.00	
Flow rate, vp	1233	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	5	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	1233	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	5	
Density, D	17.6	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	LRCB
Agency/Co.:	
Date performed:	3/26/2015
Analysis time period:	AM
Freeway/Dir of Travel:	I-95 Southbound
Junction:	EB PGA SB On Ramp
Jurisdiction:	FDOT D4
Analysis Year:	2020
Description:	No Build 2020 - I-95 SB Merge at WB PGA On-Ramp (S9 - S10)

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	5	
Free-flow speed on freeway	70.0	mph
Volume on freeway	5740	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	50.0	mph
Volume on ramp	1250	vph
Length of first accel/decel lane	400	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent Ramp		vph
Position of adjacent Ramp		
Type of adjacent Ramp		
Distance to adjacent Ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	5740	1250		vph
Peak-hour factor, PHF	0.95	0.92		
Peak 15-min volume, v15	1511	340		v
Trucks and buses	4	3		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

```
Heavy vehicle adjustment, fHV          0.980       0.985
Driver population factor, fP           1.00        1.00
Flow rate, vp                          6163        1379                    pcph
```

_____Estimation of V12 Merge Areas_____

```
                  L  =            (Equation 13-6 or 13-7)
                   EQ
                  P  =    0.045   Using Equation  4
                   FM
                  v  = v  (P  ) =  213    pc/h
                   12   F   FM
```

_____Capacity Checks_____

	Actual	Maximum	LOS F?
v_{FO}	6063	9600	No
v_3 or v_{av34}	2235 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	No	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	Yes	

If yes, v_{12A} = 1873 (Equation 13-15, 13-16, 13-18, or 13-19)

_____Flow Entering Merge Influence Area_____

	Actual	Max Desirable	Violation?
v_{12A}	6063	4600	No

_____Level of Service Determination (if not F)_____

Density, $D_R = 5.475 + 0.00734\ v_R + 0.0078\ v_{12} - 0.00627\ L_A$ = 27.7 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

_____Speed Estimation_____

```
Intermediate speed variable,                M  = 0.382
                                             S
Space mean speed in ramp influence area,    S  = 59.3    mph
                                             R
Space mean speed in outer lanes,            S  = 66.7    mph
                                             0
Space mean speed for all vehicles,          S  = 62.5    mph
```

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	LRCB
Agency or Company:	
Date Performed:	3/26/2015
Analysis Time Period:	AM Peak
Freeway/Direction:	I-95 Southbound
From/To:	EB PGA On to NLake Off
Jurisdiction:	FDOT D4
Analysis Year:	2020
Description:	No Build 2020 I95SB: EB-PGA_On_to_NLake_SB_Off (S10 - S11)

Flow Inputs and Adjustments

Volume, V	6990	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	1839	v
Trucks and buses	4	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.980	
Driver population factor, fp	1.00	
Flow rate, vp	1501	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	5	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	1501	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	68.9	mi/h
Number of lanes, N	5	
Density, D	21.8	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	LRCB
Agency/Co.:	
Date performed:	3/26/2015
Analysis time period:	AM Peak
Freeway/Dir of Travel:	I-95 Southbound
Junction:	Nlake Off Ramp
Jurisdiction:	FDOT D4
Analysis Year:	2020

Description: No Build 2020 - I-95SB Diverge at Nlake Off-Ramp (S11 - S12)

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	5	
Free-flow speed on freeway	70.0	mph
Volume on freeway	6990	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	2	
Free-Flow speed on ramp	50.0	mph
Volume on ramp	991	vph
Length of first accel/decel lane	500	ft
Length of second accel/decel lane	500	ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent ramp		vph
Position of adjacent ramp		
Type of adjacent ramp		
Distance to adjacent ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	6990	991		vph
Peak-hour factor, PHF	0.95	0.92		
Peak 15-min volume, v15	1839	269		v
Trucks and buses	4	3		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	0.00 %	0.00 %		%
Length	0.00 mi	0.00 mi		mi
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

Heavy vehicle adjustment, fHV 0.980 0.985
Driver population factor, fP 1.00 1.00
Flow rate, vp 7505 1093 pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)
P_{FD} = 0.260 Using Equation 0
$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 2370 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	6004	9600	No
$v_{FO} = v_F - v_R$	4911	9600	No
v_R	1093	4200	No
v_3 or v_{av34}	1817 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	No	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	Yes	

If yes, v_{12A} = 2401 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	2401	4400	No

Level of Service Determination (if not F)

Density, $D_D = 4.252 + 0.0086 v_R - 0.009 L_{12}$ = 11.4 pc/mi/ln
Level of service for ramp-freeway junction areas of influence B

Speed Estimation

Intermediate speed variable, D_S = 0.331
Space mean speed in ramp influence area, S_R = 60.7 mph
Space mean speed in outer lanes, S_0 = 73.7 mph
Space mean speed for all vehicles, S = 67.9 mph

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	LRCB
Agency/Co.:	
Date performed:	3/26/2015
Analysis time period:	PM
Freeway/Dir of Travel:	I-95 Northbound
Junction:	NLake NB On Ramp
Jurisdiction:	FDOT D4
Analysis Year:	2020

Description: No Build 2020 - I-95 NB Merge at Nlake On-Ramp (N1 - N2)

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	5	
Free-flow speed on freeway	70.0	mph
Volume on freeway	4652	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	50.0	mph
Volume on ramp	1480	vph
Length of first accel/decel lane	400	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent Ramp		vph
Position of adjacent Ramp		
Type of adjacent Ramp		
Distance to adjacent Ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	4652	1480		vph
Peak-hour factor, PHF	0.95	0.92		
Peak 15-min volume, v15	1224	402		v
Trucks and buses	4	3		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

```
Heavy vehicle adjustment, fHV          0.980       0.985
Driver population factor, fP           1.00        1.00
Flow rate, vp                          4995        1633                    pcph
```

_____Estimation of V12 Merge Areas_____

```
                  L  =            (Equation 13-6 or 13-7)
                   EQ
                  P  =    0.014   Using Equation  4
                   FM
                  v  = v  (P  ) =  53     pc/h
                   12   F   FM
```

_____Capacity Checks_____

```
                          Actual        Maximum         LOS F?
     v                    5530          9600            No
      FO
     v  or v              1922 pc/h     (Equation 13-14 or 13-17)
      3     av34
Is   v  or v      > 2700 pc/h?          No
      3     av34
Is   v  or v      > 1.5 v  /2           Yes
      3     av34         12
If yes, v    = 1558                  (Equation 13-15, 13-16, 13-18, or 13-19)
         12A
```

_____Flow Entering Merge Influence Area_____

```
                     Actual        Max Desirable         Violation?
     v               5530          4600                  No
      12A
```

_____Level of Service Determination (if not F)_____

```
Density, D = 5.475 + 0.00734 v  + 0.0078 v   - 0.00627 L   =   27.1    pc/mi/ln
          R                   R           12            A
Level of service for ramp-freeway junction areas of influence  C
```

_____Speed Estimation_____

```
Intermediate speed variable,                M  = 0.376
                                             S
Space mean speed in ramp influence area,    S  = 59.5    mph
                                             R
Space mean speed in outer lanes,            S  = 67.6    mph
                                             0
Space mean speed for all vehicles,          S  = 62.7    mph
```

APPENDIX N - NO BUILD HCS REPORTS

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	LRCB
Agency or Company:	
Date Performed:	3/26/2015
Analysis Time Period:	PM Peak
Freeway/Direction:	I-95 Northbound
From/To:	NLake On-Rmp to PGA Off-Rmp
Jurisdiction:	FDOT D4
Analysis Year:	2020
Description:	No Build 2020 - I-95 NB Basic Nlake-On to PGA-Off (N2 - N3)

Flow Inputs and Adjustments

Volume, V	6132	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	1614	v
Trucks and buses	4	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.980	
Driver population factor, fp	1.00	
Flow rate, vp	1317	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	5	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	1317	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	69.8	mi/h
Number of lanes, N	5	
Density, D	18.9	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	LRCB
Agency/Co.:	
Date performed:	3/26/2015
Analysis time period:	PM Peak
Freeway/Dir of Travel:	I-95 Northbound
Junction:	EB PGA Off-Ramp
Jurisdiction:	FDOT D4
Analysis Year:	2020

Description: No Build 2020 - I-95 NB Diverge at EB PGA Off-Ramp (N3 - N4)

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	5	
Free-flow speed on freeway	70.0	mph
Volume on freeway	6132	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	2	
Free-Flow speed on ramp	55.0	mph
Volume on ramp	1258	vph
Length of first accel/decel lane	500	ft
Length of second accel/decel lane	500	ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent ramp		vph
Position of adjacent ramp		
Type of adjacent ramp		
Distance to adjacent ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	6132	1258		vph
Peak-hour factor, PHF	0.95	0.92		
Peak 15-min volume, v15	1614	342		v
Trucks and buses	4	3		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	0.00 %	0.00 %		%
Length	0.00 mi	0.00 mi		mi
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

Heavy vehicle adjustment, fHV	0.980	0.985	
Driver population factor, fP	1.00	1.00	
Flow rate, vp	6584	1388	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.260 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 2482 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	5597	9600	No
$v_{FO} = v_F - v_R$	4209	9600	No
v_R	1388	4400	No
v_3 or v_{av34}	1557 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	No	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	No	

If yes, v_{12A} = 2482 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	2482	4400	No

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086 v_R - 0.009 L_{12}$ = 12.1 pc/mi/ln D

Level of service for ramp-freeway junction areas of influence B

Speed Estimation

Intermediate speed variable, D_S = 0.293

Space mean speed in ramp influence area, S_R = 61.8 mph

Space mean speed in outer lanes, S_0 = 74.6 mph

Space mean speed for all vehicles, S = 68.3 mph

APPENDIX N - NO BUILD HCS REPORTS

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	LRCB
Agency or Company:	
Date Performed:	3/26/2015
Analysis Time Period:	PM Peak
Freeway/Direction:	I-95 Northbound
From/To:	PGA EB Off to PGA WB Off
Jurisdiction:	FDOT D4
Analysis Year:	2020
Description:	No Build 2020 - I95NB Basic EB PGA Off to WB PGA (N4 - N5)

Flow Inputs and Adjustments

Volume, V	4874	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	1283	v
Trucks and buses	4	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.980	
Driver population factor, fp	1.00	
Flow rate, vp	1047	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	5	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	1047	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	5	
Density, D	15.0	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	LRCB
Agency/Co.:	
Date performed:	3/26/2015
Analysis time period:	PM Peak
Freeway/Dir of Travel:	I-95 Northbound
Junction:	WB PGA Off-Ramp
Jurisdiction:	FDOT D4
Analysis Year:	2020

Description: No Build 2020 - I-95 NB Diverge at WB PGA Off-Ramp (N5 - N6)

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	5	
Free-flow speed on freeway	70.0	mph
Volume on freeway	4874	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	35.0	mph
Volume on ramp	916	vph
Length of first accel/decel lane	500	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent ramp		vph
Position of adjacent ramp		
Type of adjacent ramp		
Distance to adjacent ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	4874	916		vph
Peak-hour factor, PHF	0.95	0.92		
Peak 15-min volume, v15	1283	249		v
Trucks and buses	4	3		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	0.00 %	0.00 %		%
Length	0.00 mi	0.00 mi		mi
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

Heavy vehicle adjustment, fHV	0.980	0.985	
Driver population factor, fP	1.00	1.00	
Flow rate, vp	5233	1011	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.436 Using Equation 8

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 2624 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	4710	9600	No
$v_{FO} = v_F - v_R$	3699	9600	No
v_R	1011	2000	No
v_3 or v_{av34}	1043 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	No	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	No	

If yes, v_{12A} = 2624 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	2624	4400	No

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086 v_R - 0.009 L_D$ = 22.3 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable, D_S = 0.519

Space mean speed in ramp influence area, S_R = 55.5 mph

Space mean speed in outer lanes, S_0 = 76.6 mph

Space mean speed for all vehicles, S = 63.2 mph

APPENDIX N - NO BUILD HCS REPORTS

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	LRCB
Agency or Company:	
Date Performed:	3/26/2015
Analysis Time Period:	AM Peak
Freeway/Direction:	I-95 Northbound
From/To:	WB PGA Off to EB PGA On
Jurisdiction:	FDOT D4
Analysis Year:	2020
Description:	No Build 2020 - I-95 NB WB PGA Off to EB PGA On (N6 - N7)

Flow Inputs and Adjustments

Volume, V	3958	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	1042	v
Trucks and buses	4	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.980	
Driver population factor, fp	1.00	
Flow rate, vp	850	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	5	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	850	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	5	
Density, D	12.1	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	LRCB
Agency/Co.:	
Date performed:	3/26/2015
Analysis time period:	PM
Freeway/Dir of Travel:	I-95 Northbound
Junction:	EB&WB PGA On Ramp
Jurisdiction:	FDOT D4
Analysis Year:	2020

Description: No Build 2020 - I-95 SB Merge at E/W PGA On-Ramp (N7 - N8)

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	5	
Free-flow speed on freeway	70.0	mph
Volume on freeway	3958	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	50.0	mph
Volume on ramp	702	vph
Length of first accel/decel lane	400	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent Ramp		vph
Position of adjacent Ramp		
Type of adjacent Ramp		
Distance to adjacent Ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	3958	702		vph
Peak-hour factor, PHF	0.95	0.92		
Peak 15-min volume, v15	1042	191		v
Trucks and buses	4	3		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

```
Heavy vehicle adjustment, fHV          0.980       0.985
Driver population factor, fP           1.00        1.00
Flow rate, vp                          4250        774                    pcph
```

_____Estimation of V12 Merge Areas_____

```
                  L  =            (Equation 13-6 or 13-7)
                   EQ
                  P  =    0.210   Using Equation  4
                   FM
                  v  = v  (P  ) =  697    pc/h
                   12   F   FM
```

_____Capacity Checks_____

	Actual	Maximum	LOS F?
v_{FO}	4090	9600	No
v_3 or v_{av34}	1309 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	No	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	Yes	

If yes, v_{12A} = 1326 (Equation 13-15, 13-16, 13-18, or 13-19)

_____Flow Entering Merge Influence Area_____

	Actual	Max Desirable	Violation?
v_{12A}	4090	4600	No

_____Level of Service Determination (if not F)_____

```
Density, D = 5.475 + 0.00734 v  + 0.0078 v   - 0.00627 L   =   19.0    pc/mi/ln
          R                   R           12            A
Level of service for ramp-freeway junction areas of influence  B
```

_____Speed Estimation_____

```
Intermediate speed variable,                M  = 0.313
                                             S
Space mean speed in ramp influence area,    S  = 61.2    mph
                                             R
Space mean speed in outer lanes,            S  = 68.2    mph
                                             0
Space mean speed for all vehicles,          S  = 64.4    mph
```

APPENDIX N - NO BUILD HCS REPORTS

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	LRCB
Agency or Company:	
Date Performed:	3/26/2015
Analysis Time Period:	AM Peak
Freeway/Direction:	I-95 Northbound
From/To:	DRoss to MT
Jurisdiction:	FDOT D4
Analysis Year:	2020
Description:	No Build 2020 - I-95 NB Basic E/W PGA-On to MT-On (N8 - N9)

Flow Inputs and Adjustments

Volume, V	4660	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	1226	v
Trucks and buses	4	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.980	
Driver population factor, fp	1.00	
Flow rate, vp	1001	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	5	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	1001	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	5	
Density, D	14.3	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

APPENDIX N - NO BUILD HCS REPORTS

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	LRCB
Agency/Co.:	
Date performed:	3/26/2015
Analysis time period:	PM
Freeway/Dir of Travel:	I-95 Northbound
Junction:	MT NB On Ramp
Jurisdiction:	FDOT D4
Analysis Year:	2020

Description: No Build 2020 - I-95 NB Merge at MT On-Ramp (N9 - N10)

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	5	
Free-flow speed on freeway	70.0	mph
Volume on freeway	4660	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	50.0	mph
Volume on ramp	539	vph
Length of first accel/decel lane	400	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent Ramp		vph
Position of adjacent Ramp		
Type of adjacent Ramp		
Distance to adjacent Ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	4660	539		vph
Peak-hour factor, PHF	0.95	0.92		
Peak 15-min volume, v15	1226	146		v
Trucks and buses	4	3		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

Heavy vehicle adjustment, fHV	0.980	0.985	
Driver population factor, fP	1.00	1.00	
Flow rate, vp	5003	595	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 0.143 Using Equation 4

$v_{12} = v_F (P_{FM})$ = 560 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	4498	9600	No
v_3 or v_{av34}	1671 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	No	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	Yes	

If yes, v_{12A} = 1561 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	4498	4600	No

Level of Service Determination (if not F)

Density, $D_R = 5.475 + 0.00734\ v_R + 0.0078\ v_{12} - 0.00627\ L_A$ = 19.5 pc/mi/ln

Level of service for ramp-freeway junction areas of influence B

Speed Estimation

Intermediate speed variable,	M_S = 0.315	
Space mean speed in ramp influence area,	S_R = 61.2	mph
Space mean speed in outer lanes,	S_0 = 67.6	mph
Space mean speed for all vehicles,	S = 64.4	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	LRCB
Agency or Company:	
Date Performed:	3/26/2015
Analysis Time Period:	PM Peak
Freeway/Direction:	I-95 Northbound
From/To:	MT-On to DRoss-Off
Jurisdiction:	FDOT D4
Analysis Year:	2020
Description:	No Build 2020: I-95 NB Basic MT-On to DRoss-Off (N10 - N11)

Flow Inputs and Adjustments

Volume, V	5199	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	1368	v
Trucks and buses	4	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.980	
Driver population factor, fp	1.00	
Flow rate, vp	1116	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	5	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	1116	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	5	
Density, D	15.9	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	LRCB
Agency/Co.:	
Date performed:	3/26/2015
Analysis time period:	PM Peak
Freeway/Dir of Travel:	I-95 Northbound
Junction:	DRoss Off-Ramp
Jurisdiction:	FDOT D4
Analysis Year:	2020

Description: No Build 2020: I-95 NB Diverge at DRoss Off-Ramp (N11 - N12)

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	5	
Free-flow speed on freeway	70.0	mph
Volume on freeway	5199	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	2	
Free-Flow speed on ramp	50.0	mph
Volume on ramp	1594	vph
Length of first accel/decel lane	500	ft
Length of second accel/decel lane	500	ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent ramp		vph
Position of adjacent ramp		
Type of adjacent ramp		
Distance to adjacent ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	5199	1594		vph
Peak-hour factor, PHF	0.95	0.92		
Peak 15-min volume, v15	1368	433		v
Trucks and buses	4	3		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	0.00 %	0.00 %		%
Length	0.00 mi	0.00 mi		mi
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

Heavy vehicle adjustment, fHV	0.980	0.985	
Driver population factor, fP	1.00	1.00	
Flow rate, vp	5582	1759	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.260 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 2535 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	4745	9600	No
$v_{FO} = v_F - v_R$	2986	9600	No
v_R	1759	4200	No
v_3 or v_{av34}	1105 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	No	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	No	

If yes, v_{12A} = 2535 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	2535	4400	No

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086 v_R - 0.009 L_{12}$ = 12.6 pc/mi/ln

Level of service for ramp-freeway junction areas of influence B

Speed Estimation

Intermediate speed variable, D_S = 0.391

Space mean speed in ramp influence area, S_R = 59.0 mph

Space mean speed in outer lanes, S_0 = 76.4 mph

Space mean speed for all vehicles, S = 66.0 mph

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	LRCB
Agency/Co.:	
Date performed:	3/26/2015
Analysis time period:	PM
Freeway/Dir of Travel:	I-95 Southbound
Junction:	DRoss SB On Ramp
Jurisdiction:	FDOT D4
Analysis Year:	2020

Description: No Build 2020 - I-95 SB Merge at DRoss On-Ramp (S1 - S2)

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	5	
Free-flow speed on freeway	70.0	mph
Volume on freeway	2819	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	50.0	mph
Volume on ramp	1080	vph
Length of first accel/decel lane	400	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent Ramp		vph
Position of adjacent Ramp		
Type of adjacent Ramp		
Distance to adjacent Ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	2819	1080		vph
Peak-hour factor, PHF	0.95	0.92		
Peak 15-min volume, v15	742	293		v
Trucks and buses	4	3		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

Heavy vehicle adjustment, fHV	0.980	0.985	
Driver population factor, fP	1.00	1.00	
Flow rate, vp	3027	1192	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 0.158 Using Equation 4

$v_{12} = v_F (P_{FM})$ = 373 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	3554	9600	No
v_3 or v_{av34}	994 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34} > 2700 pc/h?		No	
Is v_3 or v_{av34} > 1.5 v_{12} /2		Yes	

If yes, v_{12A} = 944 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	3554	4600	No

Level of Service Determination (if not F)

Density, $D_R = 5.475 + 0.00734\ v_R + 0.0078\ v_{12} - 0.00627\ L_A$ = 19.1 pc/mi/ln

Level of service for ramp-freeway junction areas of influence B

Speed Estimation

Intermediate speed variable,	M_S = 0.314	
Space mean speed in ramp influence area,	S_R = 61.2	mph
Space mean speed in outer lanes,	S_0 = 69.2	mph
Space mean speed for all vehicles,	S = 64.2	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	LRCB
Agency or Company:	
Date Performed:	3/26/2015
Analysis Time Period:	PM Peak
Freeway/Direction:	I-95 Southbound
From/To:	DRoss to MT
Jurisdiction:	FDOT D4
Analysis Year:	2020

Description: No Build 2020 - I-95 SB Basict DRoss to Military (S2 - S3)

Flow Inputs and Adjustments

Volume, V	3899	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	1026	v
Trucks and buses	4	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.980	
Driver population factor, fp	1.00	
Flow rate, vp	837	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	5	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	837	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	5	
Density, D	12.0	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	LRCB
Agency/Co.:	
Date performed:	3/26/2015
Analysis time period:	PM Peak
Freeway/Dir of Travel:	I-95 Southbound
Junction:	MT Off-Ramp
Jurisdiction:	FDOT D4
Analysis Year:	2020

Description: No Build 2020 - I-95 SB Diverge at MT Off-Ramp (S3 - S4)

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	5	
Free-flow speed on freeway	70.0	mph
Volume on freeway	3899	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	50.0	mph
Volume on ramp	176	vph
Length of first accel/decel lane	500	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent ramp		vph
Position of adjacent ramp		
Type of adjacent ramp		
Distance to adjacent ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	3899	176		vph
Peak-hour factor, PHF	0.95	0.92		
Peak 15-min volume, v15	1026	48		v
Trucks and buses	4	3		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	0.00 %	0.00 %		%
Length	0.00 mi	0.00 mi		mi
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

Heavy vehicle adjustment, fHV	0.980	0.985	
Driver population factor, fP	1.00	1.00	
Flow rate, vp	4186	194	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.436 Using Equation 8

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 1752 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	3768	9600	No
$v_{FO} = v_F - v_R$	3574	9600	No
v_R	194	2100	No
v_3 or v_{av34}	1008 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	No	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	No	

If yes, v_{12A} = 1752 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	1752	4400	No

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086 v_R - 0.009 L_{12}$ = 14.8 pc/mi/ln

Level of service for ramp-freeway junction areas of influence B

Speed Estimation

Intermediate speed variable, D_S = 0.250

Space mean speed in ramp influence area, S_R = 63.0 mph

Space mean speed in outer lanes, S_0 = 76.8 mph

Space mean speed for all vehicles, S = 69.7 mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	LRCB
Agency or Company:	
Date Performed:	3/26/2015
Analysis Time Period:	PM Peak
Freeway/Direction:	I-95 Southbound
From/To:	MT to PGA
Jurisdiction:	FDOT D4
Analysis Year:	2020

Description: No Build 2020 - I-95 SB Basic Military to PGA (S4 - S5)

Flow Inputs and Adjustments

Volume, V	3723	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	980	v
Trucks and buses	4	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.980	
Driver population factor, fp	1.00	
Flow rate, vp	799	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	5	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	799	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	5	
Density, D	11.4	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	LRCB
Agency/Co.:	
Date performed:	3/26/2015
Analysis time period:	PM Peak
Freeway/Dir of Travel:	I-95 Southbound
Junction:	PGA Off Ramp
Jurisdiction:	FDOT D4
Analysis Year:	2020

Description: No Build 2020 - I-95 SB Diverge at PGA Off-Ramp (S5 - S6)

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	5	
Free-flow speed on freeway	70.0	mph
Volume on freeway	3723	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	2	
Free-Flow speed on ramp	60.0	mph
Volume on ramp	267	vph
Length of first accel/decel lane	500	ft
Length of second accel/decel lane	500	ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent ramp		vph
Position of adjacent ramp		
Type of adjacent ramp		
Distance to adjacent ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	3723	267		vph
Peak-hour factor, PHF	0.95	0.92		
Peak 15-min volume, v15	980	73		v
Trucks and buses	4	3		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	0.00 %	0.00 %	%	
Length	0.00 mi	0.00 mi	mi	
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

Heavy vehicle adjustment, fHV 0.980 0.985
Driver population factor, fP 1.00 1.00
Flow rate, vp 3997 295 pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)
P_{FD} = 0.260 Using Equation 0
$v_{12} = v_R + (v - v_F) P_{FD}$ = 1258 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	3997	9600	No
$v_{FO} = v - v_R$	3702	9600	No
v_R	295	4400	No
v_3 or v_{av34}	1369 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	No	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	Yes	

If yes, v_{12A} = 1598 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	1598	4400	No

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086 v_R - 0.009 L_D$ = 4.5 pc/mi/ln
Level of service for ramp-freeway junction areas of influence A

Speed Estimation

Intermediate speed variable, D_S = 0.130
Space mean speed in ramp influence area, S_R = 66.4 mph
Space mean speed in outer lanes, S_0 = 76.0 mph
Space mean speed for all vehicles, S = 71.8 mph

APPENDIX N - NO BUILD HCS REPORTS

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	LRCB
Agency or Company:	
Date Performed:	3/26/2015
Analysis Time Period:	PM Peak
Freeway/Direction:	I-95 Southbound
From/To:	PGA-Off to WB_PGA On
Jurisdiction:	FDOT D4
Analysis Year:	2020
Description:	No Build 2020 - I-95SB Basic PGA-Off to WB PGA-On (S6 - S7)

Flow Inputs and Adjustments

Volume, V	3456	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	909	v
Trucks and buses	4	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.980	
Driver population factor, fp	1.00	
Flow rate, vp	742	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	5	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	742	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	5	
Density, D	10.6	pc/mi/ln
Level of service, LOS	A	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	LRCB
Agency/Co.:	
Date performed:	3/26/2015
Analysis time period:	PM
Freeway/Dir of Travel:	I-95 Southbound
Junction:	WB PGA SB On Ramp
Jurisdiction:	FDOT D4
Analysis Year:	2020

Description: No Build 2020 - I-95 SB Merge at WB PGA On-Ramp (S7 - S8)

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	5	
Free-flow speed on freeway	70.0	mph
Volume on freeway	3456	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	40.0	mph
Volume on ramp	2233	vph
Length of first accel/decel lane	400	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent Ramp		vph
Position of adjacent Ramp		
Type of adjacent Ramp		
Distance to adjacent Ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	3456	2233		vph
Peak-hour factor, PHF	0.95	0.92		
Peak 15-min volume, v15	909	607		v
Trucks and buses	4	3		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

Heavy vehicle adjustment, fHV	0.980	0.985	
Driver population factor, fP	1.00	1.00	
Flow rate, vp	3711	2464	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = -0.090 Using Equation 4

$v_{12} = v_F (P_{FM})$ = -260 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	5359	9600	No
v_3 or v_{av34}	1577 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 Yes

If yes, v_{12A} = 1158 (Equation 13-15, 13-16, 18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	5359	4600	No

Level of Service Determination (if not F)

Density, $D_R = 5.475 + 0.00734 v_R + 0.0078 v_{12} - 0.00627 L_A$ = 30.1 pc/mi/ln

Level of service for ramp-freeway junction areas of influence D

Speed Estimation

Intermediate speed variable,	M_S = 0.435	
Space mean speed in ramp influence area,	S_R = 57.8	mph
Space mean speed in outer lanes,	S_0 = 68.7	mph
Space mean speed for all vehicles,	S = 60.9	mph

APPENDIX N - NO BUILD HCS REPORTS

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	LRCB
Agency or Company:	
Date Performed:	3/26/2015
Analysis Time Period:	PM Peak
Freeway/Direction:	I-95 Southbound
From/To:	WB PGA On to EB PGA On
Jurisdiction:	FDOT D4
Analysis Year:	2020

Description: No Build 2020 I95SB Basic WB PGA On to EB PGA On (S8 - S9)

Flow Inputs and Adjustments

Volume, V	5689	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	1497	v
Trucks and buses	4	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.980	
Driver population factor, fp	1.00	
Flow rate, vp	1222	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	5	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	1222	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	5	
Density, D	17.5	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	LRCB
Agency/Co.:	
Date performed:	3/26/2015
Analysis time period:	PM
Freeway/Dir of Travel:	I-95 Southbound
Junction:	EB PGA SB On Ramp
Jurisdiction:	FDOT D4
Analysis Year:	2020

Description: No Build 2020 - I-95 SB Merge at WB PGA On-Ramp (S9 - S10)

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	5	
Free-flow speed on freeway	70.0	mph
Volume on freeway	5689	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	50.0	mph
Volume on ramp	1574	vph
Length of first accel/decel lane	400	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent Ramp		vph
Position of adjacent Ramp		
Type of adjacent Ramp		
Distance to adjacent Ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	5689	1574		vph
Peak-hour factor, PHF	0.95	0.92		
Peak 15-min volume, v15	1497	428		v
Trucks and buses	4	3		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

```
Heavy vehicle adjustment, fHV          0.980       0.985
Driver population factor, fP           1.00        1.00
Flow rate, vp                          6108        1737                    pcph
```

Estimation of V12 Merge Areas

```
                  L  =            (Equation 13-6 or 13-7)
                   EQ
                  P  =    0.001   Using Equation  4
                   FM
                  v  = v  (P  ) =  3      pc/h
                   12   F   FM
```

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	6380	9600	No
v_3 or v_{av34}	2320 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	No	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	Yes	

If yes, v_{12A} = 1857 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	6380	4600	No

Level of Service Determination (if not F)

Density, $D_R = 5.475 + 0.00734\ v_R + 0.0078\ v_{12} - 0.00627\ L_A$ = 30.2 pc/mi/ln

Level of service for ramp-freeway junction areas of influence D

Speed Estimation

```
Intermediate speed variable,                M  = 0.423
                                             S
Space mean speed in ramp influence area,    S  = 58.2    mph
                                             R
Space mean speed in outer lanes,            S  = 66.8    mph
                                             0
Space mean speed for all vehicles,          S  = 61.6    mph
```

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	LRCB
Agency or Company:	
Date Performed:	3/26/2015
Analysis Time Period:	PM Peak
Freeway/Direction:	I-95 Southbound
From/To:	EB PGA On to NLake Off
Jurisdiction:	FDOT D4
Analysis Year:	2020
Description:	No Build 2020 I95SB: EB-PGA_On_to_NLake_SB_Off (S10 - S11)

Flow Inputs and Adjustments

Volume, V	7263	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	1911	v
Trucks and buses	4	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.980	
Driver population factor, fp	1.00	
Flow rate, vp	1560	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	5	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	1560	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	68.5	mi/h
Number of lanes, N	5	
Density, D	22.8	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	LRCB
Agency/Co.:	
Date performed:	3/26/2015
Analysis time period:	PM Peak
Freeway/Dir of Travel:	I-95 Southbound
Junction:	Nlake Off Ramp
Jurisdiction:	FDOT D4
Analysis Year:	2020

Description: No Build 2020 - I-95SB Diverge at Nlake Off-Ramp (S11 - S12)

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	5	
Free-flow speed on freeway	70.0	mph
Volume on freeway	7263	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	2	
Free-Flow speed on ramp	50.0	mph
Volume on ramp	1057	vph
Length of first accel/decel lane	500	ft
Length of second accel/decel lane	500	ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent ramp		vph
Position of adjacent ramp		
Type of adjacent ramp		
Distance to adjacent ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	7263	1057		vph
Peak-hour factor, PHF	0.95	0.92		
Peak 15-min volume, v15	1911	287		v
Trucks and buses	4	3		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	0.00 %	0.00 %		%
Length	0.00 mi	0.00 mi		mi
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

Heavy vehicle adjustment, fHV	0.980	0.985	
Driver population factor, fP	1.00	1.00	
Flow rate, vp	7798	1166	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.260 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 2485 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	6239	9600	No
$v_{FO} = v_F - v_R$	5073	9600	No
v_R	1166	4200	No
v_3 or v_{av34}	1877 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	No	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	Yes	

If yes, v_{12A} = 2495 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	2495	4400	No

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086 v_R - 0.009 L_{12}$ = 12.2 pc/mi/ln

Level of service for ramp-freeway junction areas of influence B

Speed Estimation

Intermediate speed variable, D_S = 0.338

Space mean speed in ramp influence area, S_R = 60.5 mph

Space mean speed in outer lanes, S_0 = 73.4 mph

Space mean speed for all vehicles, S = 67.6 mph

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	LRCB
Agency/Co.:	
Date performed:	3/26/2015
Analysis time period:	AM
Freeway/Dir of Travel:	I-95 Northbound
Junction:	NLake NB On Ramp
Jurisdiction:	FDOT D4
Analysis Year:	2030

Description: No Build 2030 - I-95 NB Merge at Nlake On-Ramp (N1 - N2)

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	5	
Free-flow speed on freeway	70.0	mph
Volume on freeway	5942	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	50.0	mph
Volume on ramp	1317	vph
Length of first accel/decel lane	400	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent Ramp		vph
Position of adjacent Ramp		
Type of adjacent Ramp		
Distance to adjacent Ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	5942	1317		vph
Peak-hour factor, PHF	0.95	0.92		
Peak 15-min volume, v15	1564	358		v
Trucks and buses	4	3		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

Heavy vehicle adjustment, fHV 0.980 0.985
Driver population factor, fP 1.00 1.00
Flow rate, vp 6380 1453 pcph

_____Estimation of V12 Merge Areas_____

L_{EQ} = (Equation 13-6 or 13-7)
P_{FM} = 0.036 Using Equation 4
$v_{12} = v_F (P_{FM})$ = 175 pc/h

_____Capacity Checks_____

	Actual	Maximum	LOS F?
v_{FO}	6302	9600	No
v_3 or v_{av34}	2337 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No
Is v_3 or v_{av34} > 1.5 v_{12} /2 Yes
If yes, v_{12A} = 1939 (Equation 13-15, 13-16, 18, or 19)

_____Flow Entering Merge Influence Area_____

	Actual	Max Desirable	Violation?
v_{12A}	6302	4600	No

_____Level of Service Determination (if not F)_____

Density, $D_R = 5.475 + 0.00734 v_R + 0.0078 v_{12} - 0.00627 L_A$ = 28.8 pc/mi/ln
Level of service for ramp-freeway junction areas of influence D

_____Speed Estimation_____

Intermediate speed variable, M_S = 0.397
Space mean speed in ramp influence area, S_R = 58.9 mph
Space mean speed in outer lanes, S_0 = 66.6 mph
Space mean speed for all vehicles, S = 62.2 mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	LRCB
Agency or Company:	
Date Performed:	3/26/2015
Analysis Time Period:	AM Peak
Freeway/Direction:	I-95 Northbound
From/To:	NLake On-Rmp to PGA Off-Rmp
Jurisdiction:	FDOT D4
Analysis Year:	2030
Description:	No Build 2030 - I-95 NB Basic Nlake-On to PGA-Off (N2 - N3)

Flow Inputs and Adjustments

Volume, V	7259	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	1910	v
Trucks and buses	4	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.980	
Driver population factor, fp	1.00	
Flow rate, vp	1559	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	5	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	1559	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	68.5	mi/h
Number of lanes, N	5	
Density, D	22.8	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	LRCB
Agency/Co.:	
Date performed:	3/26/2015
Analysis time period:	AM Peak
Freeway/Dir of Travel:	I-95 Northbound
Junction:	EB PGA Off-Ramp
Jurisdiction:	FDOT D4
Analysis Year:	2030

Description: No Build 2030 - I-95 NB Diverge at EB PGA Off-Ramp (N3 - N4)

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	5	
Free-flow speed on freeway	70.0	mph
Volume on freeway	7259	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	2	
Free-Flow speed on ramp	55.0	mph
Volume on ramp	2689	vph
Length of first accel/decel lane	500	ft
Length of second accel/decel lane	500	ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent ramp		vph
Position of adjacent ramp		
Type of adjacent ramp		
Distance to adjacent ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	7259	2689		vph
Peak-hour factor, PHF	0.95	0.92		
Peak 15-min volume, v15	1910	731		v
Trucks and buses	4	3		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	0.00 %	0.00 %		%
Length	0.00 mi	0.00 mi		mi
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

Heavy vehicle adjustment, fHV	0.980	0.985	
Driver population factor, fP	1.00	1.00	
Flow rate, vp	7794	2967	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.260 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 3817 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	6236	9600	No
$v_{FO} = v_F - v_R$	3269	9600	No
v_R	2967	4400	No
v_3 or v_{av34}	1209 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	No	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	No	

If yes, v_{12A} = 3817 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3817	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 23.6 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable,	D_S = 0.435	
Space mean speed in ramp influence area,	S_R = 57.8	mph
Space mean speed in outer lanes,	S_0 = 76.0	mph
Space mean speed for all vehicles,	S = 63.7	mph

APPENDIX N - NO BUILD HCS REPORTS

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	LRCB
Agency or Company:	
Date Performed:	3/26/2015
Analysis Time Period:	AM Peak
Freeway/Direction:	I-95 Northbound
From/To:	PGA EB Off to PGA WB Off
Jurisdiction:	FDOT D4
Analysis Year:	2030
Description:	No Build 2030 - I95NB Basic EB PGA Off to WB PGA (N4 - N5)

Flow Inputs and Adjustments

Volume, V	4570	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	1203	v
Trucks and buses	4	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.980	
Driver population factor, fp	1.00	
Flow rate, vp	981	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	5	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	981	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	5	
Density, D	14.0	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	LRCB
Agency/Co.:	
Date performed:	3/26/2015
Analysis time period:	AM Peak
Freeway/Dir of Travel:	I-95 Northbound
Junction:	WB PGA Off-Ramp
Jurisdiction:	FDOT D4
Analysis Year:	2030

Description: No Build 2030 - I-95 NB Diverge at WB PGA Off-Ramp (N5 - N6)

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	5	
Free-flow speed on freeway	70.0	mph
Volume on freeway	4570	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	35.0	mph
Volume on ramp	1160	vph
Length of first accel/decel lane	500	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent ramp		vph
Position of adjacent ramp		
Type of adjacent ramp		
Distance to adjacent ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	4570	1160		vph
Peak-hour factor, PHF	0.95	0.92		
Peak 15-min volume, v15	1203	315		v
Trucks and buses	4	3		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	0.00 %	0.00 %		%
Length	0.00 mi	0.00 mi		mi
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

Heavy vehicle adjustment, fHV 0.980 0.985
Driver population factor, fP 1.00 1.00
Flow rate, vp 4907 1280 pcph

_____Estimation of V12 Diverge Areas_____

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.436 Using Equation 8

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 2648 pc/h

_____Capacity Checks_____

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	4417	9600	No
$v_{FO} = v_F - v_R$	3137	9600	No
v_R	1280	2000	No
v_3 or v_{av34}	884 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	No	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	No	

If yes, v_{12A} = 2648 (Equation 13-15, 13-16, 13-18, or 13-19)

_____Flow Entering Diverge Influence Area_____

	Actual	Max Desirable	Violation?
v_{12}	2648	4400	No

_____Level of Service Determination (if not F)_____

Density, $D = 4.252 + 0.0086 v_R - 0.009 L_D$ = 22.5 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

_____Speed Estimation_____

Intermediate speed variable, D_S = 0.543

Space mean speed in ramp influence area, S_R = 54.8 mph

Space mean speed in outer lanes, S_0 = 76.8 mph

Space mean speed for all vehicles, S = 61.9 mph

APPENDIX N - NO BUILD HCS REPORTS

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	LRCB
Agency or Company:	
Date Performed:	3/26/2015
Analysis Time Period:	AM Peak
Freeway/Direction:	I-95 Northbound
From/To:	WB PGA Off to EB PGA On
Jurisdiction:	FDOT D4
Analysis Year:	2030
Description:	No Build 2030 - I-95 NB WB PGA Off to EB PGA On (N6 - N7)

Flow Inputs and Adjustments

Volume, V	3410	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	897	v
Trucks and buses	4	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.980	
Driver population factor, fp	1.00	
Flow rate, vp	732	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	5	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	732	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	5	
Density, D	10.5	pc/mi/ln
Level of service, LOS	A	

Overall results are not computed when free-flow speed is less than 55 mph.

APPENDIX N - NO BUILD HCS REPORTS

APPENDIX N - NO BUILD HCS REPORTS

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	LRCB
Agency/Co.:	
Date performed:	3/26/2015
Analysis time period:	AM
Freeway/Dir of Travel:	I-95 Northbound
Junction:	EB&WB PGA On Ramp
Jurisdiction:	FDOT D4
Analysis Year:	2030

Description: No Build 2030 - I-95 SB Merge at E/W PGA On-Ramp (N7 - N8)

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	5	
Free-flow speed on freeway	70.0	mph
Volume on freeway	3410	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	50.0	mph
Volume on ramp	149	vph
Length of first accel/decel lane	400	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent Ramp		vph
Position of adjacent Ramp		
Type of adjacent Ramp		
Distance to adjacent Ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	3410	149		vph
Peak-hour factor, PHF	0.95	0.92		
Peak 15-min volume, v15	897	40		v
Trucks and buses	4	3		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

Heavy vehicle adjustment, fHV 0.980 0.985
Driver population factor, fP 1.00 1.00
Flow rate, vp 3661 164 pcph

_____Estimation of V12 Merge Areas_____

L_{EQ} = (Equation 13-6 or 13-7)
P_{FM} = 0.287 Using Equation 4
$v_{12} = v_F (P_{FM})$ = 818 pc/h

_____Capacity Checks_____

	Actual	Maximum	LOS F?
v_{FO}	3020	9600	No
v_3 or v_{av34}	1019 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	No	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	Yes	

If yes, v_{12A} = 1142 (Equation 13-15, 13-16, 13-18, or 13-19)

_____Flow Entering Merge Influence Area_____

	Actual	Max Desirable	Violation?
v_{12A}	3020	4600	No

_____Level of Service Determination (if not F)_____

Density, $D_R = 5.475 + 0.00734\ v_R + 0.0078\ v_{12} - 0.00627\ L_A$ = 13.1 pc/mi/ln
Level of service for ramp-freeway junction areas of influence B

_____Speed Estimation_____

Intermediate speed variable, M_S = 0.295
Space mean speed in ramp influence area, S_R = 61.7 mph
Space mean speed in outer lanes, S_0 = 68.7 mph
Space mean speed for all vehicles, S = 65.5 mph

APPENDIX N - NO BUILD HCS REPORTS

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	LRCB
Agency or Company:	
Date Performed:	3/26/2015
Analysis Time Period:	AM Peak
Freeway/Direction:	I-95 Northbound
From/To:	DRoss to MT
Jurisdiction:	FDOT D4
Analysis Year:	2030

Description: No Build 2030 - I-95 NB Basic E/W PGA-On to MT-On (N8 - N9)

Flow Inputs and Adjustments

Volume, V	3559	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	937	v
Trucks and buses	4	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.980	
Driver population factor, fp	1.00	
Flow rate, vp	764	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	5	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	764	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	5	
Density, D	10.9	pc/mi/ln
Level of service, LOS	A	

Overall results are not computed when free-flow speed is less than 55 mph.

APPENDIX N - NO BUILD HCS REPORTS

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	LRCB
Agency/Co.:	
Date performed:	3/26/2015
Analysis time period:	AM
Freeway/Dir of Travel:	I-95 Northbound
Junction:	MT NB On Ramp
Jurisdiction:	FDOT D4
Analysis Year:	2030

Description: No Build 2030 - I-95 NB Merge at MT On-Ramp (N9 - N10)

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	5	
Free-flow speed on freeway	70.0	mph
Volume on freeway	3559	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	50.0	mph
Volume on ramp	116	vph
Length of first accel/decel lane	400	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent Ramp		vph
Position of adjacent Ramp		
Type of adjacent Ramp		
Distance to adjacent Ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	3559	116		vph
Peak-hour factor, PHF	0.95	0.92		
Peak 15-min volume, v15	937	32		v
Trucks and buses	4	3		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

Heavy vehicle adjustment, fHV 0.980 0.985
Driver population factor, fP 1.00 1.00
Flow rate, vp 3821 128 pcph

_____Estimation of V12 Merge Areas_____

L_{EQ} = (Equation 13-6 or 13-7)
P_{FM} = 0.291 Using Equation 4
$v_{12} = v_F (P_{FM})$ = 867 pc/h

_____Capacity Checks_____

	Actual	Maximum	LOS F?
v_{FO}	3109	9600	No
v_3 or v_{av34}	1057 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	No	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	Yes	

If yes, v_{12A} = 1192 (Equation 13-15, 13-16, 18, or 13-19)

_____Flow Entering Merge Influence Area_____

	Actual	Max Desirable	Violation?
v_{12A}	3109	4600	No

_____Level of Service Determination (if not F)_____

Density, $D_R = 5.475 + 0.00734 v_R + 0.0078 v_{12} - 0.00627 L_A$ = 13.2 pc/mi/ln
Level of service for ramp-freeway junction areas of influence B

_____Speed Estimation_____

Intermediate speed variable, M_S = 0.296
Space mean speed in ramp influence area, S_R = 61.7 mph
Space mean speed in outer lanes, S_0 = 68.6 mph
Space mean speed for all vehicles, S = 65.5 mph

APPENDIX N - NO BUILD HCS REPORTS

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	LRCB
Agency or Company:	
Date Performed:	3/26/2015
Analysis Time Period:	AM Peak
Freeway/Direction:	I-95 Northbound
From/To:	MT-On to DRoss-Off
Jurisdiction:	FDOT D4
Analysis Year:	2030
Description:	No Build 2030: I-95 NB Basic MT-On to DRoss-Off (N10 - N11)

Flow Inputs and Adjustments

Volume, V	3675	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	967	v
Trucks and buses	4	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.980	
Driver population factor, fp	1.00	
Flow rate, vp	789	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	5	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	789	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	5	
Density, D	11.3	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	LRCB
Agency/Co.:	
Date performed:	3/26/2015
Analysis time period:	AM Peak
Freeway/Dir of Travel:	I-95 Northbound
Junction:	DRoss Off-Ramp
Jurisdiction:	FDOT D4
Analysis Year:	2030

Description: No Build 2030: I-95 NB Diverge at DRoss Off-Ramp (N11 - N12)

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	5	
Free-flow speed on freeway	70.0	mph
Volume on freeway	3675	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	2	
Free-Flow speed on ramp	50.0	mph
Volume on ramp	1273	vph
Length of first accel/decel lane	500	ft
Length of second accel/decel lane	500	ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent ramp		vph
Position of adjacent ramp		
Type of adjacent ramp		
Distance to adjacent ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	3675	1273		vph
Peak-hour factor, PHF	0.95	0.92		
Peak 15-min volume, v15	967	346		v
Trucks and buses	4	3		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	0.00 %	0.00 %		%
Length	0.00 mi	0.00 mi		mi
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

Heavy vehicle adjustment, fHV	0.980	0.985	
Driver population factor, fP	1.00	1.00	
Flow rate, vp	3946	1404	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.260 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 2065 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	3946	9600	No
$v_{FO} = v_F - v_R$	2542	9600	No
v_R	1404	4200	No
v_3 or v_{av34}	940 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	No	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	No	

If yes, v_{12A} = 2065 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	2065	4400	No

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086 v_R - 0.009 L_{12}$ = 8.5 pc/mi/ln

Level of service for ramp-freeway junction areas of influence A

Speed Estimation

Intermediate speed variable,	D_S = 0.359	
Space mean speed in ramp influence area,	S_R = 59.9	mph
Space mean speed in outer lanes,	S_0 = 76.8	mph
Space mean speed for all vehicles,	S = 66.9	mph

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	LRCB
Agency/Co.:	
Date performed:	3/26/2015
Analysis time period:	AM
Freeway/Dir of Travel:	I-95 Southbound
Junction:	DRoss SB On Ramp
Jurisdiction:	FDOT D4
Analysis Year:	2030

Description: No Build 2030 - I-95 SB Merge at DRoss On-Ramp (S1 - S2)

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	5	
Free-flow speed on freeway	70.0	mph
Volume on freeway	4285	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	50.0	mph
Volume on ramp	1710	vph
Length of first accel/decel lane	400	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent Ramp		vph
Position of adjacent Ramp		
Type of adjacent Ramp		
Distance to adjacent Ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	4285	1710		vph
Peak-hour factor, PHF	0.95	0.92		
Peak 15-min volume, v15	1128	465		v
Trucks and buses	4	3		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

Heavy vehicle adjustment, fHV 0.980 0.985
Driver population factor, fP 1.00 1.00
Flow rate, vp 4601 1887 pcph

_____Estimation of V12 Merge Areas_____

L_{EQ} = (Equation 13-6 or 13-7)
P_{FM} = 0.071 Using Equation 4
$v_{12} = v_F (P_{FM})$ = 255 pc/h

_____Capacity Checks_____

	Actual	Maximum	LOS F?
v_{FO}	5476	9600	No
v_3 or v_{av34}	1667 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	No	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	Yes	

If yes, v_{12A} = 1435 (Equation 13-15, 13-16, 18, or 13-19)

_____Flow Entering Merge Influence Area_____

	Actual	Max Desirable	Violation?
v_{12A}	5476	4600	No

_____Level of Service Determination (if not F)_____

Density, $D_R = 5.475 + 0.00734 v_R + 0.0078 v_{12} - 0.00627 L_A$ = 28.0+ pc/mi/ln
Level of service for ramp-freeway junction areas of influence D

_____Speed Estimation_____

Intermediate speed variable, M_S = 0.389
Space mean speed in ramp influence area, S_R = 59.1 mph
Space mean speed in outer lanes, S_0 = 67.9 mph
Space mean speed for all vehicles, S = 62.3 mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	LRCB
Agency or Company:	
Date Performed:	3/26/2015
Analysis Time Period:	AM Peak
Freeway/Direction:	I-95 Southbound
From/To:	DRoss to MT
Jurisdiction:	FDOT D4
Analysis Year:	2030

Description: No Build 2030 - I-95 SB Basict DRoss to Military (S2 - S3)

Flow Inputs and Adjustments

Volume, V	5995	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	1578	v
Trucks and buses	4	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.980	
Driver population factor, fp	1.00	
Flow rate, vp	1287	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	5	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	1287	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	69.9	mi/h
Number of lanes, N	5	
Density, D	18.4	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	LRCB
Agency/Co.:	
Date performed:	3/26/2015
Analysis time period:	AM Peak
Freeway/Dir of Travel:	I-95 Southbound
Junction:	MT Off-Ramp
Jurisdiction:	FDOT D4
Analysis Year:	2030

Description: No Build 2030 - I-95 SB Diverge at MT Off-Ramp (S3 - S4)

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	5	
Free-flow speed on freeway	70.0	mph
Volume on freeway	5995	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	50.0	mph
Volume on ramp	377	vph
Length of first accel/decel lane	500	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent ramp		vph
Position of adjacent ramp		
Type of adjacent ramp		
Distance to adjacent ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	5995	377		vph
Peak-hour factor, PHF	0.95	0.92		
Peak 15-min volume, v15	1578	102		v
Trucks and buses	4	3		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	0.00 %	0.00 %		%
Length	0.00 mi	0.00 mi		mi
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

Heavy vehicle adjustment, fHV	0.980	0.985	
Driver population factor, fP	1.00	1.00	
Flow rate, vp	6437	416	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.436 Using Equation 8

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 2620 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	5472	9600	No
$v_{FO} = v_F - v_R$	5056	9600	No
v_R	416	2100	No
v_3 or v_{av34}	1426 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	No	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	No	

If yes, v_{12A} = 2620 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	2620	4400	No

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086 v_R - 0.009 L_D$ = 22.3 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable, D_S = 0.270

Space mean speed in ramp influence area, S_R = 62.4 mph

Space mean speed in outer lanes, S_0 = 75.1 mph

Space mean speed for all vehicles, S = 68.5 mph

APPENDIX N - NO BUILD HCS REPORTS

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	LRCB
Agency or Company:	
Date Performed:	3/26/2015
Analysis Time Period:	AM Peak
Freeway/Direction:	I-95 Southbound
From/To:	MT to PGA
Jurisdiction:	FDOT D4
Analysis Year:	2030
Description:	No Build 2030 - I-95 SB Basic Military to PGA (S4 - S5)

Flow Inputs and Adjustments

Volume, V	5618	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	1478	v
Trucks and buses	4	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.980	
Driver population factor, fp	1.00	
Flow rate, vp	1206	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	5	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	1206	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	5	
Density, D	17.2	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	LRCB
Agency/Co.:	
Date performed:	3/26/2015
Analysis time period:	AM Peak
Freeway/Dir of Travel:	I-95 Southbound
Junction:	PGA Off Ramp
Jurisdiction:	FDOT D4
Analysis Year:	2030

Description: No Build 2030 - I-95 SB Diverge at PGA Off-Ramp (S5 - S6)

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	5	
Free-flow speed on freeway	70.0	mph
Volume on freeway	5618	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	2	
Free-Flow speed on ramp	60.0	mph
Volume on ramp	746	vph
Length of first accel/decel lane	500	ft
Length of second accel/decel lane	500	ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent ramp		vph
Position of adjacent ramp		
Type of adjacent ramp		
Distance to adjacent ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	5618	746		vph
Peak-hour factor, PHF	0.95	0.92		
Peak 15-min volume, v15	1478	203		v
Trucks and buses	4	3		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	0.00 %	0.00 %		%
Length	0.00 mi	0.00 mi		mi
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

Heavy vehicle adjustment, fHV	0.980	0.985	
Driver population factor, fP	1.00	1.00	
Flow rate, vp	6032	823	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.260 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 1942 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	5128	9600	No
$v_{FO} = v_F - v_R$	4305	9600	No
v_R	823	4400	No
v_3 or v_{av34}	1593 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	No	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	Yes	

If yes, v_{12A} = 2051 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	2051	4400	No

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086\, v_R - 0.009\, L_D$ = 8.4 pc/mi/ln

Level of service for ramp-freeway junction areas of influence A

Speed Estimation

Intermediate speed variable,	D_S = 0.177	
Space mean speed in ramp influence area,	S_R = 65.0	mph
Space mean speed in outer lanes,	S_0 = 74.7	mph
Space mean speed for all vehicles,	S = 70.5	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	LRCB
Agency or Company:	
Date Performed:	3/26/2015
Analysis Time Period:	AM Peak
Freeway/Direction:	I-95 Southbound
From/To:	PGA-Off to WB_PGA On
Jurisdiction:	FDOT D4
Analysis Year:	2030

Description: No Build 2030 - I-95SB Basic PGA-Off to WB PGA-On (S6 - S7)

Flow Inputs and Adjustments

Volume, V	4872	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	1282	v
Trucks and buses	4	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.980	
Driver population factor, fp	1.00	
Flow rate, vp	1046	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	5	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	1046	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	5	
Density, D	14.9	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	LRCB
Agency/Co.:	
Date performed:	3/26/2015
Analysis time period:	AM
Freeway/Dir of Travel:	I-95 Southbound
Junction:	WB PGA SB On Ramp
Jurisdiction:	FDOT D4
Analysis Year:	2030

Description: No Build 2030 - I-95 SB Merge at WB PGA On-Ramp (S7 - S8)

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	5	
Free-flow speed on freeway	70.0	mph
Volume on freeway	4872	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	40.0	mph
Volume on ramp	1351	vph
Length of first accel/decel lane	400	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent Ramp		vph
Position of adjacent Ramp		
Type of adjacent Ramp		
Distance to adjacent Ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	4872	1351		vph
Peak-hour factor, PHF	0.95	0.92		
Peak 15-min volume, v15	1282	367		v
Trucks and buses	4	3		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

```
Heavy vehicle adjustment, fHV          0.980       0.985
Driver population factor, fP           1.00        1.00
Flow rate, vp                          5231        1491                    pcph
```

_____Estimation of V12 Merge Areas_____

```
                  L  =            (Equation 13-6 or 13-7)
                   EQ
                  P  =    0.031   Using Equation  4
                   FM
                  v  = v  (P  ) =  128    pc/h
                   12   F   FM
```

_____Capacity Checks_____

	Actual	Maximum	LOS F?
v_{FO}	5572	9600	No
v_3 or v_{av34}	1976 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	No	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	Yes	

If yes, v_{12A} = 1632 (Equation 13-15, 13-16, 13-18, or 13-19)

_____Flow Entering Merge Influence Area_____

	Actual	Max Desirable	Violation?
v_{12A}	5572	4600	No

_____Level of Service Determination (if not F)_____

```
Density, D = 5.475 + 0.00734 v  + 0.0078 v   - 0.00627 L   =   26.6    pc/mi/ln
          R                   R          12            A
Level of service for ramp-freeway junction areas of influence  C
```

_____Speed Estimation_____

```
Intermediate speed variable,                M  = 0.378
                                             S
Space mean speed in ramp influence area,    S  = 59.4    mph
                                             R
Space mean speed in outer lanes,            S  = 67.4    mph
                                             0
Space mean speed for all vehicles,          S  = 62.7    mph
```

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	LRCB
Agency or Company:	
Date Performed:	3/26/2015
Analysis Time Period:	AM Peak
Freeway/Direction:	I-95 Southbound
From/To:	WB PGA On to EB PGA On
Jurisdiction:	FDOT D4
Analysis Year:	2030
Description:	No Build 2030 I95SB Basic WB PGA On to EB PGA On (S8 - S9)

Flow Inputs and Adjustments

Volume, V	6223	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	1638	v
Trucks and buses	4	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.980	
Driver population factor, fp	1.00	
Flow rate, vp	1336	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	5	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	1336	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	69.8	mi/h
Number of lanes, N	5	
Density, D	19.1	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

APPENDIX N - NO BUILD HCS REPORTS

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	LRCB
Agency/Co.:	
Date performed:	3/26/2015
Analysis time period:	AM
Freeway/Dir of Travel:	I-95 Southbound
Junction:	EB PGA SB On Ramp
Jurisdiction:	FDOT D4
Analysis Year:	2030
Description:	No Build 2030 - I-95 SB Merge at WB PGA On-Ramp (S9 - S10)

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	5	
Free-flow speed on freeway	70.0	mph
Volume on freeway	6223	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	50.0	mph
Volume on ramp	1355	vph
Length of first accel/decel lane	400	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent Ramp		vph
Position of adjacent Ramp		
Type of adjacent Ramp		
Distance to adjacent Ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	6223	1355		vph
Peak-hour factor, PHF	0.95	0.92		
Peak 15-min volume, v15	1638	368		v
Trucks and buses	4	3		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

Heavy vehicle adjustment, fHV 0.980 0.985
Driver population factor, fP 1.00 1.00
Flow rate, vp 6682 1495 pcph

_____Estimation of V12 Merge Areas_____

L_{EQ} = (Equation 13-6 or 13-7)
P_{FM} = 0.031 Using Equation 4
$v_{12} = v_F (P_{FM})$ = 151 pc/h

_____Capacity Checks_____

	Actual	Maximum	LOS F?
v_{FO}	6373	9600	No
v_3 or v_{av34}	2363 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No
Is v_3 or v_{av34} > 1.5 v_{12} /2 Yes
If yes, v_{12A} = 1951 (Equation 13-15, 13-16, 13-18, or 13-19)

_____Flow Entering Merge Influence Area_____

	Actual	Max Desirable	Violation?
v_{12A}	6373	4600	No

_____Level of Service Determination (if not F)_____

Density, $D_R = 5.475 + 0.00734\ v_R + 0.0078\ v_{12} - 0.00627\ L_A$ = 29.2 pc/mi/ln
Level of service for ramp-freeway junction areas of influence D

_____Speed Estimation_____

Intermediate speed variable, M_S = 0.403
Space mean speed in ramp influence area, S_R = 58.7 mph
Space mean speed in outer lanes, S_0 = 66.5 mph
Space mean speed for all vehicles, S = 62.1 mph

APPENDIX N - NO BUILD HCS REPORTS

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	LRCB
Agency or Company:	
Date Performed:	3/26/2015
Analysis Time Period:	AM Peak
Freeway/Direction:	I-95 Southbound
From/To:	EB PGA On to NLake Off
Jurisdiction:	FDOT D4
Analysis Year:	2030
Description:	No Build 2030 I95SB: EB-PGA_On_to_NLake_SB_Off (S10 - S11)

Flow Inputs and Adjustments

Volume, V	7578	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	1994	v
Trucks and buses	4	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.980	
Driver population factor, fp	1.00	
Flow rate, vp	1627	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	5	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	1627	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	67.9	mi/h
Number of lanes, N	5	
Density, D	24.0	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	LRCB
Agency/Co.:	
Date performed:	3/26/2015
Analysis time period:	AM Peak
Freeway/Dir of Travel:	I-95 Southbound
Junction:	Nlake Off Ramp
Jurisdiction:	FDOT D4
Analysis Year:	2030

Description: No Build 2030 - I-95SB Diverge at Nlake Off-Ramp (S11 - S12)

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	5	
Free-flow speed on freeway	70.0	mph
Volume on freeway	7578	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	2	
Free-Flow speed on ramp	50.0	mph
Volume on ramp	1074	vph
Length of first accel/decel lane	500	ft
Length of second accel/decel lane	500	ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent ramp		vph
Position of adjacent ramp		
Type of adjacent ramp		
Distance to adjacent ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	7578	1074		vph
Peak-hour factor, PHF	0.95	0.92		
Peak 15-min volume, v15	1994	292		v
Trucks and buses	4	3		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	0.00 %	0.00 %		%
Length	0.00 mi	0.00 mi		mi
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

Heavy vehicle adjustment, fHV	0.980	0.985	
Driver population factor, fP	1.00	1.00	
Flow rate, vp	8136	1185	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.260 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 2569 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	6509	9600	No
$v_{FO} = v_F - v_R$	5324	9600	No
v_R	1185	4200	No
v_3 or v_{av34}	1970 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	No	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	Yes	

If yes, v_{12A} = 2603 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	2603	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 13.1 pc/mi/ln

Level of service for ramp-freeway junction areas of influence B

Speed Estimation

Intermediate speed variable, D_S = 0.340

Space mean speed in ramp influence area, S_R = 60.5 mph

Space mean speed in outer lanes, S_0 = 73.1 mph

Space mean speed for all vehicles, S = 67.5 mph

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	LRCB
Agency/Co.:	
Date performed:	3/26/2015
Analysis time period:	PM
Freeway/Dir of Travel:	I-95 Northbound
Junction:	NLake NB On Ramp
Jurisdiction:	FDOT D4
Analysis Year:	2030

Description: No Build 2030 - I-95 NB Merge at Nlake On-Ramp (N1 - N2)

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	5	
Free-flow speed on freeway	70.0	mph
Volume on freeway	5168	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	50.0	mph
Volume on ramp	1646	vph
Length of first accel/decel lane	400	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent Ramp		vph
Position of adjacent Ramp		
Type of adjacent Ramp		
Distance to adjacent Ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	5168	1646		vph
Peak-hour factor, PHF	0.95	0.92		
Peak 15-min volume, v15	1360	447		v
Trucks and buses	4	3		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

```
Heavy vehicle adjustment, fHV          0.980       0.985
Driver population factor, fP           1.00        1.00
Flow rate, vp                          5549        1816                    pcph
```

_____Estimation of V12 Merge Areas_____

```
                  L  =            (Equation 13-6 or 13-7)
                   EQ
                  P  =    -0.009  Using Equation  4
                   FM
                  v  = v  (P  ) =  -38    pc/h
                   12   F   FM
```

_____Capacity Checks_____

```
                          Actual        Maximum         LOS F?
     v                    6034          9600            No
      FO
     v  or v              2128 pc/h     (Equation 13-14 or 13-17)
      3     av34
Is   v  or v      > 2700 pc/h?          No
      3     av34
Is   v  or v      > 1.5 v  /2           Yes
      3     av34         12
If yes, v    = 1687                  (Equation 13-15, 13-16, 13-18, or 13-19)
         12A
```

_____Flow Entering Merge Influence Area_____

```
                     Actual        Max Desirable         Violation?
     v               6034          4600                  No
      12A
```

_____Level of Service Determination (if not F)_____

```
Density, D = 5.475 + 0.00734 v  + 0.0078 v   - 0.00627 L   =   29.5    pc/mi/ln
          R                    R           12            A
Level of service for ramp-freeway junction areas of influence  D
```

_____Speed Estimation_____

```
Intermediate speed variable,                M  = 0.411
                                             S
Space mean speed in ramp influence area,    S  = 58.5    mph
                                             R
Space mean speed in outer lanes,            S  = 67.2    mph
                                             0
Space mean speed for all vehicles,          S  = 61.9    mph
```

APPENDIX N - NO BUILD HCS REPORTS

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	LRCB
Agency or Company:	
Date Performed:	3/26/2015
Analysis Time Period:	PM Peak
Freeway/Direction:	I-95 Northbound
From/To:	NLake On-Rmp to PGA Off-Rmp
Jurisdiction:	FDOT D4
Analysis Year:	2030
Description:	No Build 2030 - I-95 NB Basic Nlake-On to PGA-Off (N2 - N3)

Flow Inputs and Adjustments

Volume, V	6814	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	1793	v
Trucks and buses	4	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.980	
Driver population factor, fp	1.00	
Flow rate, vp	1463	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	5	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	1463	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	69.2	mi/h
Number of lanes, N	5	
Density, D	21.1	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

APPENDIX N - NO BUILD HCS REPORTS

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	LRCB
Agency/Co.:	
Date performed:	3/26/2015
Analysis time period:	PM Peak
Freeway/Dir of Travel:	I-95 Northbound
Junction:	EB PGA Off-Ramp
Jurisdiction:	FDOT D4
Analysis Year:	2030

Description: No Build 2030 - I-95 NB Diverge at EB PGA Off-Ramp (N3 - N4)

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	5	
Free-flow speed on freeway	70.0	mph
Volume on freeway	6814	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	2	
Free-Flow speed on ramp	55.0	mph
Volume on ramp	1398	vph
Length of first accel/decel lane	500	ft
Length of second accel/decel lane	500	ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent ramp		vph
Position of adjacent ramp		
Type of adjacent ramp		
Distance to adjacent ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	6814	1398		vph
Peak-hour factor, PHF	0.95	0.92		
Peak 15-min volume, v15	1793	380		v
Trucks and buses	4	3		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	0.00 %	0.00 %		%
Length	0.00 mi	0.00 mi		mi
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

Heavy vehicle adjustment, fHV	0.980	0.985	
Driver population factor, fP	1.00	1.00	
Flow rate, vp	7316	1542	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.260 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 2663 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	5853	9600	No
$v_{FO} = v_F - v_R$	4311	9600	No
v_R	1542	4400	No
v_3 or v_{av34}	1595 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	No	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	No	

If yes, v_{12A} = 2663 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	2663	4400	No

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086 v_R - 0.009 L_{12}$ = 13.7 pc/mi/ln

Level of service for ramp-freeway junction areas of influence B

Speed Estimation

Intermediate speed variable, D_S = 0.307

Space mean speed in ramp influence area, S_R = 61.4 mph

Space mean speed in outer lanes, S_0 = 74.5 mph

Space mean speed for all vehicles, S = 67.9 mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	LRCB
Agency or Company:	
Date Performed:	3/26/2015
Analysis Time Period:	PM Peak
Freeway/Direction:	I-95 Northbound
From/To:	PGA EB Off to PGA WB Off
Jurisdiction:	FDOT D4
Analysis Year:	2030

Description: No Build 2030 - I95NB Basic EB PGA Off to WB PGA (N4 - N5)

Flow Inputs and Adjustments

Volume, V	5416	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	1425	v
Trucks and buses	4	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.980	
Driver population factor, fp	1.00	
Flow rate, vp	1163	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	5	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	1163	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	5	
Density, D	16.6	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	LRCB
Agency/Co.:	
Date performed:	3/26/2015
Analysis time period:	PM Peak
Freeway/Dir of Travel:	I-95 Northbound
Junction:	WB PGA Off-Ramp
Jurisdiction:	FDOT D4
Analysis Year:	2030

Description: No Build 2030 - I-95 NB Diverge at WB PGA Off-Ramp (N5 - N6)

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	5	
Free-flow speed on freeway	70.0	mph
Volume on freeway	5416	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	35.0	mph
Volume on ramp	1018	vph
Length of first accel/decel lane	500	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent ramp		vph
Position of adjacent ramp		
Type of adjacent ramp		
Distance to adjacent ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	5416	1018		vph
Peak-hour factor, PHF	0.95	0.92		
Peak 15-min volume, v15	1425	277		v
Trucks and buses	4	3		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	0.00 %	0.00 %		%
Length	0.00 mi	0.00 mi		mi
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

Heavy vehicle adjustment, fHV	0.980	0.985	
Driver population factor, fP	1.00	1.00	
Flow rate, vp	5815	1123	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.436 Using Equation 8

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 2789 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	4943	9600	No
$v_{FO} = v_F - v_R$	3820	9600	No
v_R	1123	2000	No
v_3 or v_{av34}	1077 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	No	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	No	

If yes, v_{12A} = 2789 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	2789	4400	No

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086 v_R - 0.009 L_D$ = 23.7 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable, D_S = 0.529

Space mean speed in ramp influence area, S_R = 55.2 mph

Space mean speed in outer lanes, S_0 = 76.5 mph

Space mean speed for all vehicles, S = 62.8 mph

APPENDIX N - NO BUILD HCS REPORTS

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	LRCB
Agency or Company:	
Date Performed:	3/26/2015
Analysis Time Period:	AM Peak
Freeway/Direction:	I-95 Northbound
From/To:	WB PGA Off to EB PGA On
Jurisdiction:	FDOT D4
Analysis Year:	2030
Description:	No Build 2030 - I-95 NB WB PGA Off to EB PGA On (N6 - N7)

Flow Inputs and Adjustments

Volume, V	4398	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	1157	v
Trucks and buses	4	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.980	
Driver population factor, fp	1.00	
Flow rate, vp	944	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	5	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	944	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	5	
Density, D	13.5	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	LRCB
Agency/Co.:	
Date performed:	3/26/2015
Analysis time period:	PM
Freeway/Dir of Travel:	I-95 Northbound
Junction:	EB&WB PGA On Ramp
Jurisdiction:	FDOT D4
Analysis Year:	2030

Description: No Build 2030 - I-95 SB Merge at E/W PGA On-Ramp (N7 - N8)

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	5	
Free-flow speed on freeway	70.0	mph
Volume on freeway	4398	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	50.0	mph
Volume on ramp	780	vph
Length of first accel/decel lane	400	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent Ramp		vph
Position of adjacent Ramp		
Type of adjacent Ramp		
Distance to adjacent Ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	4398	780		vph
Peak-hour factor, PHF	0.95	0.92		
Peak 15-min volume, v15	1157	212		v
Trucks and buses	4	3		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

Heavy vehicle adjustment, fHV 0.980 0.985
Driver population factor, fP 1.00 1.00
Flow rate, vp 4722 861 pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)
P_{FM} = 0.110 Using Equation 4
$v_{12} = v_F (P_{FM})$ = 406 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	4545	9600	No
v_3 or v_{av34}	1639 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	No	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	Yes	

If yes, v_{12A} = 1473 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	4545	4600	No

Level of Service Determination (if not F)

Density, $D_R = 5.475 + 0.00734\ v_R + 0.0078\ v_{12} - 0.00627\ L_A$ = 20.8 pc/mi/ln
Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable, M_S = 0.321
Space mean speed in ramp influence area, S_R = 61.0 mph
Space mean speed in outer lanes, S_0 = 67.8 mph
Space mean speed for all vehicles, S = 64.1 mph

APPENDIX N - NO BUILD HCS REPORTS

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	LRCB
Agency or Company:	
Date Performed:	3/26/2015
Analysis Time Period:	AM Peak
Freeway/Direction:	I-95 Northbound
From/To:	DRoss to MT
Jurisdiction:	FDOT D4
Analysis Year:	2030

Description: No Build 2030 - I-95 NB Basic E/W PGA-On to MT-On (N8 - N9)

Flow Inputs and Adjustments

Volume, V	5178	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	1363	v
Trucks and buses	4	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.980	
Driver population factor, fp	1.00	
Flow rate, vp	1112	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	5	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	1112	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	5	
Density, D	15.9	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	LRCB
Agency/Co.:	
Date performed:	3/26/2015
Analysis time period:	PM
Freeway/Dir of Travel:	I-95 Northbound
Junction:	MT NB On Ramp
Jurisdiction:	FDOT D4
Analysis Year:	2030

Description: No Build 2030 - I-95 NB Merge at MT On-Ramp (N9 - N10)

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	5	
Free-flow speed on freeway	70.0	mph
Volume on freeway	5178	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	50.0	mph
Volume on ramp	599	vph
Length of first accel/decel lane	400	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent Ramp		vph
Position of adjacent Ramp		
Type of adjacent Ramp		
Distance to adjacent Ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	5178	599		vph
Peak-hour factor, PHF	0.95	0.92		
Peak 15-min volume, v15	1363	163		v
Trucks and buses	4	3		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

```
Heavy vehicle adjustment, fHV          0.980       0.985
Driver population factor, fP           1.00        1.00
Flow rate, vp                          5560        661                    pcph
```

Estimation of V12 Merge Areas

```
                  L  =            (Equation 13-6 or 13-7)
                   EQ
                  P  =    0.135   Using Equation  4
                   FM
                  v  = v  (P  ) =  571    pc/h
                   12   F   FM
```

Capacity Checks

		Actual	Maximum	LOS F?
v_{FO}		4887	9600	No
v_3 or v_{av34}		1827 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?		No	
Is v_3 or v_{av34}	> 1.5 v_{12} /2		Yes	

If yes, v_{12A} = 1690 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	4887	4600	No

Level of Service Determination (if not F)

Density, $D_R = 5.475 + 0.00734\ v_R + 0.0078\ v_{12} - 0.00627\ L_A$ = 21.0 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

```
Intermediate speed variable,                M  = 0.322
                                             S
Space mean speed in ramp influence area,    S  = 61.0    mph
                                             R
Space mean speed in outer lanes,            S  = 67.2    mph
                                             0
Space mean speed for all vehicles,          S  = 64.1    mph
```

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	LRCB
Agency or Company:	
Date Performed:	3/26/2015
Analysis Time Period:	PM Peak
Freeway/Direction:	I-95 Northbound
From/To:	MT-On to DRoss-Off
Jurisdiction:	FDOT D4
Analysis Year:	2030

Description: No Build 2030: I-95 NB Basic MT-On to DRoss-Off (N10 - N11)

Flow Inputs and Adjustments

Volume, V	5777	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	1520	v
Trucks and buses	4	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.980	
Driver population factor, fp	1.00	
Flow rate, vp	1241	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	5	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	1241	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	5	
Density, D	17.7	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	LRCB
Agency/Co.:	
Date performed:	3/26/2015
Analysis time period:	PM Peak
Freeway/Dir of Travel:	I-95 Northbound
Junction:	DRoss Off-Ramp
Jurisdiction:	FDOT D4
Analysis Year:	2030

Description: No Build 2030: I-95 NB Diverge at DRoss Off-Ramp (N11 - N12)

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	5	
Free-flow speed on freeway	70.0	mph
Volume on freeway	5777	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	2	
Free-Flow speed on ramp	50.0	mph
Volume on ramp	1771	vph
Length of first accel/decel lane	500	ft
Length of second accel/decel lane	500	ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent ramp		vph
Position of adjacent ramp		
Type of adjacent ramp		
Distance to adjacent ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	5777	1771		vph
Peak-hour factor, PHF	0.95	0.92		
Peak 15-min volume, v15	1520	481		v
Trucks and buses	4	3		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	0.00 %	0.00 %		%
Length	0.00 mi	0.00 mi		mi
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

Heavy vehicle adjustment, fHV	0.980	0.985	
Driver population factor, fP	1.00	1.00	
Flow rate, vp	6203	1954	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.260 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 2817 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	5273	9600	No
$v_{FO} = v_F - v_R$	3319	9600	No
v_R	1954	4200	No
v_3 or v_{av34}	1228 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	No	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	No	

If yes, v_{12A} = 2817 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	2817	4400	No

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086 v_R - 0.009 L_D$ = 15.0 pc/mi/ln

Level of service for ramp-freeway junction areas of influence B

Speed Estimation

Intermediate speed variable, D_S = 0.409

Space mean speed in ramp influence area, S_R = 58.6 mph

Space mean speed in outer lanes, S_0 = 75.9 mph

Space mean speed for all vehicles, S = 65.5 mph

APPENDIX N - NO BUILD HCS REPORTS

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	LRCB
Agency/Co.:	
Date performed:	3/26/2015
Analysis time period:	PM
Freeway/Dir of Travel:	I-95 Southbound
Junction:	DRoss SB On Ramp
Jurisdiction:	FDOT D4
Analysis Year:	2030

Description: No Build 2030 - I-95 SB Merge at DRoss On-Ramp (S1 - S2)

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	5	
Free-flow speed on freeway	70.0	mph
Volume on freeway	3155	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	50.0	mph
Volume on ramp	1209	vph
Length of first accel/decel lane	400	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent Ramp		vph
Position of adjacent Ramp		
Type of adjacent Ramp		
Distance to adjacent Ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	3155	1209		vph
Peak-hour factor, PHF	0.95	0.92		
Peak 15-min volume, v15	830	329		v
Trucks and buses	4	3		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

```
Heavy vehicle adjustment, fHV          0.980       0.985
Driver population factor, fP           1.00        1.00
Flow rate, vp                          3387        1334                    pcph
```

_____Estimation of V12 Merge Areas_____

```
                  L  =            (Equation 13-6 or 13-7)
                   EQ
                  P  =    0.140   Using Equation  4
                   FM
                  v  = v  (P  ) =  371    pc/h
                   12   F   FM
```

_____Capacity Checks_____

	Actual	Maximum	LOS F?
v_{FO}	3976	9600	No
v_3 or v_{av34}	1135 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	No	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	Yes	

If yes, v_{12A} = 1056 (Equation 13-15, 13-16, 13-18, or 13-19)

_____Flow Entering Merge Influence Area_____

	Actual	Max Desirable	Violation?
v_{12A}	3976	4600	No

_____Level of Service Determination (if not F)_____

```
Density, D = 5.475 + 0.00734 v  + 0.0078 v   - 0.00627 L   =   21.0    pc/mi/ln
          R                   R          12            A
Level of service for ramp-freeway junction areas of influence  C
```

_____Speed Estimation_____

```
Intermediate speed variable,                M  = 0.324
                                             S
Space mean speed in ramp influence area,    S  = 60.9    mph
                                             R
Space mean speed in outer lanes,            S  = 68.9    mph
                                             0
Space mean speed for all vehicles,          S  = 63.9    mph
```

APPENDIX N - NO BUILD HCS REPORTS

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	LRCB
Agency or Company:	
Date Performed:	3/26/2015
Analysis Time Period:	PM Peak
Freeway/Direction:	I-95 Southbound
From/To:	DRoss to MT
Jurisdiction:	FDOT D4
Analysis Year:	2030

Description: No Build 2030 - I-95 SB Basict DRoss to Military (S2 - S3)

Flow Inputs and Adjustments

Volume, V	4364	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	1148	v
Trucks and buses	4	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.980	
Driver population factor, fp	1.00	
Flow rate, vp	937	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	5	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	937	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	5	
Density, D	13.4	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	LRCB
Agency/Co.:	
Date performed:	3/26/2015
Analysis time period:	PM Peak
Freeway/Dir of Travel:	I-95 Southbound
Junction:	MT Off-Ramp
Jurisdiction:	FDOT D4
Analysis Year:	2030

Description: No Build 2030 - I-95 SB Diverge at MT Off-Ramp (S3 - S4)

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	5	
Free-flow speed on freeway	70.0	mph
Volume on freeway	4364	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	50.0	mph
Volume on ramp	197	vph
Length of first accel/decel lane	500	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent ramp		vph
Position of adjacent ramp		
Type of adjacent ramp		
Distance to adjacent ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	4364	197		vph
Peak-hour factor, PHF	0.95	0.92		
Peak 15-min volume, v15	1148	54		v
Trucks and buses	4	3		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	0.00 %	0.00 %		%
Length	0.00 mi	0.00 mi		mi
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

Heavy vehicle adjustment, fHV	0.980	0.985	
Driver population factor, fP	1.00	1.00	
Flow rate, vp	4686	217	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.436 Using Equation 8

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 1961 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	4218	9600	No
$v_{FO} = v_F - v_R$	4001	9600	No
v_R	217	2100	No
v_3 or v_{av34}	1128 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	No	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	No	

If yes, v_{12A} = 1961 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	1961	4400	No

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086 v_R - 0.009 L_{12}$ = 16.6 pc/mi/ln

Level of service for ramp-freeway junction areas of influence B

Speed Estimation

Intermediate speed variable, D_S = 0.253

Space mean speed in ramp influence area, S_R = 62.9 mph

Space mean speed in outer lanes, S_0 = 76.3 mph

Space mean speed for all vehicles, S = 69.4 mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	LRCB
Agency or Company:	
Date Performed:	3/26/2015
Analysis Time Period:	PM Peak
Freeway/Direction:	I-95 Southbound
From/To:	MT to PGA
Jurisdiction:	FDOT D4
Analysis Year:	2030

Description: No Build 2030 - I-95 SB Basic Military to PGA (S4 - S5)

Flow Inputs and Adjustments

Volume, V	4167	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	1097	v
Trucks and buses	4	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.980	
Driver population factor, fp	1.00	
Flow rate, vp	895	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	5	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	895	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	5	
Density, D	12.8	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	LRCB
Agency/Co.:	
Date performed:	3/26/2015
Analysis time period:	PM Peak
Freeway/Dir of Travel:	I-95 Southbound
Junction:	PGA Off Ramp
Jurisdiction:	FDOT D4
Analysis Year:	2030

Description: No Build 2030 - I-95 SB Diverge at PGA Off-Ramp (S5 - S6)

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	5	
Free-flow speed on freeway	70.0	mph
Volume on freeway	4167	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	2	
Free-Flow speed on ramp	60.0	mph
Volume on ramp	299	vph
Length of first accel/decel lane	500	ft
Length of second accel/decel lane	500	ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent ramp		vph
Position of adjacent ramp		
Type of adjacent ramp		
Distance to adjacent ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	4167	299		vph
Peak-hour factor, PHF	0.95	0.92		
Peak 15-min volume, v15	1097	81		v
Trucks and buses	4	3		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	0.00 %	0.00 %		%
Length	0.00 mi	0.00 mi		mi
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

Heavy vehicle adjustment, fHV 0.980 0.985
Driver population factor, fP 1.00 1.00
Flow rate, vp 4474 330 pcph

_____Estimation of V12 Diverge Areas_____

L_{EQ} = (Equation 13-12 or 13-13)
P_{FD} = 0.260 Using Equation 0
$v_{12} = v_R + (v - v_F) P_{FD}$ = 1291 pc/h

_____Capacity Checks_____

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	4027	9600	No
$v_{FO} = v - v_R$	3697	9600	No
v_R	330	4400	No
v_3 or v_{av34}	1368 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	No	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	Yes	

If yes, v_{12A} = 1610 (Equation 13-15, 13-16, 13-18, or 13-19)

_____Flow Entering Diverge Influence Area_____

	Actual	Max Desirable	Violation?
v_{12A}	1610	4400	No

_____Level of Service Determination (if not F)_____

Density, $D = 4.252 + 0.0086 v_R - 0.009 L_D$ = 4.6 pc/mi/ln
Level of service for ramp-freeway junction areas of influence A

_____Speed Estimation_____

Intermediate speed variable, D_S = 0.133
Space mean speed in ramp influence area, S_R = 66.3 mph
Space mean speed in outer lanes, S_0 = 76.0 mph
Space mean speed for all vehicles, S = 71.8 mph

APPENDIX N - NO BUILD HCS REPORTS

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	LRCB
Agency or Company:	
Date Performed:	3/26/2015
Analysis Time Period:	PM Peak
Freeway/Direction:	I-95 Southbound
From/To:	PGA-Off to WB_PGA On
Jurisdiction:	FDOT D4
Analysis Year:	2030
Description:	No Build 2030 - I-95SB Basic PGA-Off to WB PGA-On (S6 - S7)

Flow Inputs and Adjustments

Volume, V	3868	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	1018	v
Trucks and buses	4	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.980	
Driver population factor, fp	1.00	
Flow rate, vp	831	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	5	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	831	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	5	
Density, D	11.9	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	LRCB
Agency/Co.:	
Date performed:	3/26/2015
Analysis time period:	PM
Freeway/Dir of Travel:	I-95 Southbound
Junction:	WB PGA SB On Ramp
Jurisdiction:	FDOT D4
Analysis Year:	2030

Description: No Build 2030 - I-95 SB Merge at WB PGA On-Ramp (S7 - S8)

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	5	
Free-flow speed on freeway	70.0	mph
Volume on freeway	3868	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	40.0	mph
Volume on ramp	2500	vph
Length of first accel/decel lane	400	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent Ramp		vph
Position of adjacent Ramp		
Type of adjacent Ramp		
Distance to adjacent Ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	3868	2500		vph
Peak-hour factor, PHF	0.95	0.92		
Peak 15-min volume, v15	1018	679		v
Trucks and buses	4	3		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

```
Heavy vehicle adjustment, fHV          0.980       0.985
Driver population factor, fP           1.00        1.00
Flow rate, vp                          4153        2758                    pcph
```

_____Estimation of V12 Merge Areas_____

```
                  L  =            (Equation 13-6 or 13-7)
                   EQ
                  P  =    -0.127  Using Equation  4
                   FM
                  v  = v  (P  ) =  -410   pc/h
                   12   F   FM
```

_____Capacity Checks_____

```
                          Actual        Maximum         LOS F?
     v                    5998          9600            No
      FO
     v  or v              1825 pc/h     (Equation 13-14 or 13-17)
      3     av34
Is   v  or v      > 2700 pc/h?          No
      3     av34
Is   v  or v      > 1.5 v  /2           Yes
      3     av34         12
If yes, v    = 1296                  (Equation 13-15, 13-16, 13-18, or 13-19)
         12A
```

_____Flow Entering Merge Influence Area_____

```
                     Actual        Max Desirable         Violation?
     v               5998          4600                  No
      12A
```

_____Level of Service Determination (if not F)_____

```
Density, D = 5.475 + 0.00734 v  + 0.0078 v   - 0.00627 L   =   33.3    pc/mi/ln
          R                    R           12            A
Level of service for ramp-freeway junction areas of influence  D
```

_____Speed Estimation_____

```
Intermediate speed variable,                M  = 0.514
                                             S
Space mean speed in ramp influence area,    S  = 55.6    mph
                                             R
Space mean speed in outer lanes,            S  = 68.3    mph
                                             0
Space mean speed for all vehicles,          S  = 59.2    mph
```

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	LRCB
Agency or Company:	
Date Performed:	3/26/2015
Analysis Time Period:	PM Peak
Freeway/Direction:	I-95 Southbound
From/To:	WB PGA On to EB PGA On
Jurisdiction:	FDOT D4
Analysis Year:	2030

Description: No Build 2030 I95SB Basic WB PGA On to EB PGA On (S8 - S9)

Flow Inputs and Adjustments

Volume, V	6368	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	1676	v
Trucks and buses	4	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.980	
Driver population factor, fp	1.00	
Flow rate, vp	1367	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	5	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	1367	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	69.7	mi/h
Number of lanes, N	5	
Density, D	19.6	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	LRCB
Agency/Co.:	
Date performed:	3/26/2015
Analysis time period:	PM
Freeway/Dir of Travel:	I-95 Southbound
Junction:	EB PGA SB On Ramp
Jurisdiction:	FDOT D4
Analysis Year:	2030

Description: No Build 2030 - I-95 SB Merge at WB PGA On-Ramp (S9 - S10)

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	5	
Free-flow speed on freeway	70.0	mph
Volume on freeway	6368	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	50.0	mph
Volume on ramp	1761	vph
Length of first accel/decel lane	400	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent Ramp		vph
Position of adjacent Ramp		
Type of adjacent Ramp		
Distance to adjacent Ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	6368	1761		vph
Peak-hour factor, PHF	0.95	0.92		
Peak 15-min volume, v15	1676	479		v
Trucks and buses	4	3		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

```
Heavy vehicle adjustment, fHV          0.980       0.985
Driver population factor, fP           1.00        1.00
Flow rate, vp                          6837        1943                    pcph
```

_____Estimation of V12 Merge Areas_____

```
                  L  =            (Equation 13-6 or 13-7)
                   EQ
                  P  =    -0.025  Using Equation  4
                   FM
                  v  = v  (P  ) =  -124   pc/h
                   12   F   FM
```

_____Capacity Checks_____

```
                          Actual        Maximum         LOS F?
     v                    6935          9600            No
      FO
     v  or v              2558 pc/h     (Equation 13-14 or 13-17)
      3     av34
Is   v  or v      > 2700 pc/h?          No
      3     av34
Is   v  or v      > 1.5 v  /2           Yes
      3     av34         12
If yes, v    = 1996                  (Equation 13-15, 13-16, 13-18, or 13-19)
         12A
```

_____Flow Entering Merge Influence Area_____

```
                     Actual        Max Desirable         Violation?
     v               6935          4600                  No
      12A
```

_____Level of Service Determination (if not F)_____

```
Density, D = 5.475 + 0.00734 v  + 0.0078 v   - 0.00627 L   =   32.8    pc/mi/ln
          R                    R           12            A
Level of service for ramp-freeway junction areas of influence  D
```

_____Speed Estimation_____

```
Intermediate speed variable,                M  = 0.481
                                             S
Space mean speed in ramp influence area,    S  = 56.5    mph
                                             R
Space mean speed in outer lanes,            S  = 66.4    mph
                                             0
Space mean speed for all vehicles,          S  = 60.4    mph
```

APPENDIX N - NO BUILD HCS REPORTS

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	LRCB
Agency or Company:	
Date Performed:	3/26/2015
Analysis Time Period:	PM Peak
Freeway/Direction:	I-95 Southbound
From/To:	EB PGA On to NLake Off
Jurisdiction:	FDOT D4
Analysis Year:	2030
Description:	No Build 2030 I95SB: EB-PGA_On_to_NLake_SB_Off (S10 - S11)

Flow Inputs and Adjustments

Volume, V	8129	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	2139	v
Trucks and buses	4	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.980	
Driver population factor, fp	1.00	
Flow rate, vp	1746	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	5	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	1746	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	66.5	mi/h
Number of lanes, N	5	
Density, D	26.2	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	LRCB
Agency/Co.:	
Date performed:	3/26/2015
Analysis time period:	PM Peak
Freeway/Dir of Travel:	I-95 Southbound
Junction:	Nlake Off Ramp
Jurisdiction:	FDOT D4
Analysis Year:	2030

Description: No Build 2030 - I-95SB Diverge at Nlake Off-Ramp (S11 - S12)

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	5	
Free-flow speed on freeway	70.0	mph
Volume on freeway	8129	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	2	
Free-Flow speed on ramp	50.0	mph
Volume on ramp	1182	vph
Length of first accel/decel lane	500	ft
Length of second accel/decel lane	500	ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent ramp		vph
Position of adjacent ramp		
Type of adjacent ramp		
Distance to adjacent ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	8129	1182		vph
Peak-hour factor, PHF	0.95	0.92		
Peak 15-min volume, v15	2139	321		v
Trucks and buses	4	3		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	0.00 %	0.00 %		%
Length	0.00 mi	0.00 mi		mi
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

Heavy vehicle adjustment, fHV	0.980	0.985	
Driver population factor, fP	1.00	1.00	
Flow rate, vp	8728	1304	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.260 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 2781 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	6983	9600	No
$v_{FO} = v_F - v_R$	5679	9600	No
v_R	1304	4200	No
v_3 or v_{av34}	2101 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	No	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	Yes	

If yes, v_{12A} = 2793 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	2793	4400	No

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086 v_R - 0.009 L_{12}$ = 14.8 pc/mi/ln

Level of service for ramp-freeway junction areas of influence B

Speed Estimation

Intermediate speed variable, D_S = 0.350

Space mean speed in ramp influence area, S_R = 60.2 mph

Space mean speed in outer lanes, S_0 = 72.5 mph

Space mean speed for all vehicles, S = 67.0 mph

APPENDIX N - NO BUILD HCS REPORTS

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	LRCB
Agency/Co.:	
Date performed:	3/26/2015
Analysis time period:	AM
Freeway/Dir of Travel:	I-95 Northbound
Junction:	NLake NB On Ramp
Jurisdiction:	FDOT D4
Analysis Year:	2040

Description: No Build 2040 - I-95 NB Merge at Nlake On-Ramp (N1 - N2)

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	5	
Free-flow speed on freeway	70.0	mph
Volume on freeway	6618	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	50.0	mph
Volume on ramp	1468	vph
Length of first accel/decel lane	400	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent Ramp		vph
Position of adjacent Ramp		
Type of adjacent Ramp		
Distance to adjacent Ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	6618	1468		vph
Peak-hour factor, PHF	0.95	0.92		
Peak 15-min volume, v15	1742	399		v
Trucks and buses	4	3		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

```
Heavy vehicle adjustment, fHV          0.980       0.985
Driver population factor, fP           1.00        1.00
Flow rate, vp                          7106        1620                    pcph
```

_____Estimation of V12 Merge Areas_____

```
                  L  =            (Equation 13-6 or 13-7)
                   EQ
                  P  =    0.015   Using Equation  4
                   FM
                  v  = v  (P  ) =  79     pc/h
                   12   F   FM
```

_____Capacity Checks_____

	Actual	Maximum	LOS F?
v_{FO}	6808	9600	No
v_3 or v_{av34}	2554 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	No	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	Yes	

If yes, v_{12A} = 2075 (Equation 13-15, 13-16, 13-18, or 13-19)

_____Flow Entering Merge Influence Area_____

	Actual	Max Desirable	Violation?
v_{12A}	6808	4600	No

_____Level of Service Determination (if not F)_____

Density, $D_R = 5.475 + 0.00734\ v_R + 0.0078\ v_{12} - 0.00627\ L_A$ = 31.0 pc/mi/ln

Level of service for ramp-freeway junction areas of influence D

_____Speed Estimation_____

```
Intermediate speed variable,                M  = 0.438
                                             S
Space mean speed in ramp influence area,    S  = 57.7    mph
                                             R
Space mean speed in outer lanes,            S  = 66.2    mph
                                             0
Space mean speed for all vehicles,          S  = 61.3    mph
```

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	LRCB
Agency or Company:	
Date Performed:	3/26/2015
Analysis Time Period:	AM Peak
Freeway/Direction:	I-95 Northbound
From/To:	NLake On-Rmp to PGA Off-Rmp
Jurisdiction:	FDOT D4
Analysis Year:	2040
Description:	No Build 2040 - I-95 NB Basic Nlake-On to PGA-Off (N2 - N3)

Flow Inputs and Adjustments

Volume, V	8086	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	2128	v
Trucks and buses	4	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.980	
Driver population factor, fp	1.00	
Flow rate, vp	1736	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	5	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	1736	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	66.7	mi/h
Number of lanes, N	5	
Density, D	26.0+	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

APPENDIX N - NO BUILD HCS REPORTS

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	LRCB
Agency/Co.:	
Date performed:	3/26/2015
Analysis time period:	AM Peak
Freeway/Dir of Travel:	I-95 Northbound
Junction:	EB PGA Off-Ramp
Jurisdiction:	FDOT D4
Analysis Year:	2040

Description: No Build 2040 - I-95 NB Diverge at EB PGA Off-Ramp (N3 - N4)

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	5	
Free-flow speed on freeway	70.0	mph
Volume on freeway	8086	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	2	
Free-Flow speed on ramp	55.0	mph
Volume on ramp	2996	vph
Length of first accel/decel lane	500	ft
Length of second accel/decel lane	500	ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent ramp		vph
Position of adjacent ramp		
Type of adjacent ramp		
Distance to adjacent ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	8086	2996		vph
Peak-hour factor, PHF	0.95	0.92		
Peak 15-min volume, v15	2128	814		v
Trucks and buses	4	3		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	0.00 %	0.00 %		%
Length	0.00 mi	0.00 mi		mi
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

Heavy vehicle adjustment, fHV	0.980	0.985	
Driver population factor, fP	1.00	1.00	
Flow rate, vp	8682	3305	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.260 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 4252 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	6946	9600	No
$v_{FO} = v_F - v_R$	3641	9600	No
v_R	3305	4400	No
v_3 or v_{av34}	1347 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	No	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	No	

If yes, v_{12A} = 4252 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	4252	4400	No

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086 v_R - 0.009 L_{12}$ = 27.3 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable,	D_S = 0.465	
Space mean speed in ramp influence area,	S_R = 57.0	mph
Space mean speed in outer lanes,	S_0 = 75.4	mph
Space mean speed for all vehicles,	S = 62.9	mph

APPENDIX N - NO BUILD HCS REPORTS

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	LRCB
Agency or Company:	
Date Performed:	3/26/2015
Analysis Time Period:	AM Peak
Freeway/Direction:	I-95 Northbound
From/To:	PGA EB Off to PGA WB Off
Jurisdiction:	FDOT D4
Analysis Year:	2040
Description:	No Build 2040 - I95NB Basic EB PGA Off to WB PGA (N4 - N5)

Flow Inputs and Adjustments

Volume, V	5090	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	1339	v
Trucks and buses	4	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.980	
Driver population factor, fp	1.00	
Flow rate, vp	1093	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	5	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	1093	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	5	
Density, D	15.6	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

APPENDIX N - NO BUILD HCS REPORTS

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	LRCB
Agency/Co.:	
Date performed:	3/26/2015
Analysis time period:	AM Peak
Freeway/Dir of Travel:	I-95 Northbound
Junction:	WB PGA Off-Ramp
Jurisdiction:	FDOT D4
Analysis Year:	2040

Description: No Build 2040 - I-95 NB Diverge at WB PGA Off-Ramp (N5 - N6)

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	5	
Free-flow speed on freeway	70.0	mph
Volume on freeway	5090	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	35.0	mph
Volume on ramp	1292	vph
Length of first accel/decel lane	500	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent ramp		vph
Position of adjacent ramp		
Type of adjacent ramp		
Distance to adjacent ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	5090	1292		vph
Peak-hour factor, PHF	0.95	0.92		
Peak 15-min volume, v15	1339	351		v
Trucks and buses	4	3		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	0.00 %	0.00 %		%
Length	0.00 mi	0.00 mi		mi
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

Heavy vehicle adjustment, fHV	0.980	0.985	
Driver population factor, fP	1.00	1.00	
Flow rate, vp	5465	1425	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.436 Using Equation 8

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 2948 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	4919	9600	No
$v_{FO} = v_F - v_R$	3494	9600	No
v_R	1425	2000	No
v_3 or v_{av34}	985 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	No	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	No	

If yes, v_{12A} = 2948 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	2948	4400	No

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086 v_R - 0.009 L_{12}$ = 25.1 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable, D_S = 0.556

Space mean speed in ramp influence area, S_R = 54.4 mph

Space mean speed in outer lanes, S_0 = 76.8 mph

Space mean speed for all vehicles, S = 61.6 mph

APPENDIX N - NO BUILD HCS REPORTS

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	LRCB
Agency or Company:	
Date Performed:	3/26/2015
Analysis Time Period:	AM Peak
Freeway/Direction:	I-95 Northbound
From/To:	WB PGA Off to EB PGA On
Jurisdiction:	FDOT D4
Analysis Year:	2040
Description:	No Build 2040 - I-95 NB WB PGA Off to EB PGA On (N6 - N7)

Flow Inputs and Adjustments

Volume, V	3798	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	999	v
Trucks and buses	4	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.980	
Driver population factor, fp	1.00	
Flow rate, vp	816	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	5	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	816	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	5	
Density, D	11.7	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	LRCB
Agency/Co.:	
Date performed:	3/26/2015
Analysis time period:	AM
Freeway/Dir of Travel:	I-95 Northbound
Junction:	EB&WB PGA On Ramp
Jurisdiction:	FDOT D4
Analysis Year:	2040

Description: No Build 2040 - I-95 SB Merge at E/W PGA On-Ramp (N7 - N8)

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	5	
Free-flow speed on freeway	70.0	mph
Volume on freeway	3798	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	50.0	mph
Volume on ramp	166	vph
Length of first accel/decel lane	400	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent Ramp		vph
Position of adjacent Ramp		
Type of adjacent Ramp		
Distance to adjacent Ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	3798	166		vph
Peak-hour factor, PHF	0.95	0.92		
Peak 15-min volume, v15	999	45		v
Trucks and buses	4	3		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

Heavy vehicle adjustment, fHV 0.980 0.985
Driver population factor, fP 1.00 1.00
Flow rate, vp 4078 183 pcph

_____Estimation of V12 Merge Areas_____

L_{EQ} = (Equation 13-6 or 13-7)
P_{FM} = 0.284 Using Equation 4
$v_{12} = v_F (P_{FM})$ = 904 pc/h

_____Capacity Checks_____

	Actual	Maximum	LOS F?
v_{FO}	3364	9600	No
v_3 or v_{av34}	1138 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No
Is v_3 or v_{av34} > 1.5 v_{12} /2 Yes
If yes, v_{12A} = 1272 (Equation 13-15, 13-16, 13-18, or 13-19)

_____Flow Entering Merge Influence Area_____

	Actual	Max Desirable	Violation?
v_{12A}	3364	4600	No

_____Level of Service Determination (if not F)_____

Density, $D_R = 5.475 + 0.00734 v_R + 0.0078 v_{12} - 0.00627 L_A$ = 14.2 pc/mi/ln
Level of service for ramp-freeway junction areas of influence B

_____Speed Estimation_____

Intermediate speed variable, M_S = 0.298
Space mean speed in ramp influence area, S_R = 61.7 mph
Space mean speed in outer lanes, S_0 = 68.4 mph
Space mean speed for all vehicles, S = 65.3 mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	LRCB
Agency or Company:	
Date Performed:	3/26/2015
Analysis Time Period:	AM Peak
Freeway/Direction:	I-95 Northbound
From/To:	DRoss to MT
Jurisdiction:	FDOT D4
Analysis Year:	2040

Description: No Build 2040 - I-95 NB Basic E/W PGA-On to MT-On (N8 - N9)

Flow Inputs and Adjustments

Volume, V	3964	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	1043	v
Trucks and buses	4	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.980	
Driver population factor, fp	1.00	
Flow rate, vp	851	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	5	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	851	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	5	
Density, D	12.2	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

APPENDIX N - NO BUILD HCS REPORTS

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	LRCB
Agency/Co.:	
Date performed:	3/26/2015
Analysis time period:	AM
Freeway/Dir of Travel:	I-95 Northbound
Junction:	MT NB On Ramp
Jurisdiction:	FDOT D4
Analysis Year:	2040

Description: No Build 2040 - I-95 NB Merge at MT On-Ramp (N9 - N10)

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	5	
Free-flow speed on freeway	70.0	mph
Volume on freeway	3964	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	50.0	mph
Volume on ramp	130	vph
Length of first accel/decel lane	400	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent Ramp		vph
Position of adjacent Ramp		
Type of adjacent Ramp		
Distance to adjacent Ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	3964	130		vph
Peak-hour factor, PHF	0.95	0.92		
Peak 15-min volume, v15	1043	35		v
Trucks and buses	4	3		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

Heavy vehicle adjustment, fHV 0.980 0.985
Driver population factor, fP 1.00 1.00
Flow rate, vp 4256 143 pcph

_____Estimation of V12 Merge Areas_____

L_{EQ} = (Equation 13-6 or 13-7)
P_{FM} = 0.289 Using Equation 4
$v_{12} = v_F (P_{FM})$ = 960 pc/h

_____Capacity Checks_____

	Actual	Maximum	LOS F?
v_{FO}	3463	9600	No
v_3 or v_{av34}	1180 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	No	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	Yes	

If yes, v_{12A} = 1328 (Equation 13-15, 13-16, 13-18, or 13-19)

_____Flow Entering Merge Influence Area_____

	Actual	Max Desirable	Violation?
v_{12A}	3463	4600	No

_____Level of Service Determination (if not F)_____

Density, $D_R = 5.475 + 0.00734 v_R + 0.0078 v_{12} - 0.00627 L_A$ = 14.4 pc/mi/ln
Level of service for ramp-freeway junction areas of influence B

_____Speed Estimation_____

Intermediate speed variable, M_S = 0.298
Space mean speed in ramp influence area, S_R = 61.7 mph
Space mean speed in outer lanes, S_0 = 68.2 mph
Space mean speed for all vehicles, S = 65.3 mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	LRCB
Agency or Company:	
Date Performed:	3/26/2015
Analysis Time Period:	AM Peak
Freeway/Direction:	I-95 Northbound
From/To:	MT-On to DRoss-Off
Jurisdiction:	FDOT D4
Analysis Year:	2040
Description:	No Build 2040: I-95 NB Basic MT-On to DRoss-Off (N10 - N11)

Flow Inputs and Adjustments

Volume, V	4094	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	1077	v
Trucks and buses	4	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.980	
Driver population factor, fp	1.00	
Flow rate, vp	879	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	5	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	879	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	5	
Density, D	12.6	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	LRCB
Agency/Co.:	
Date performed:	3/26/2015
Analysis time period:	AM Peak
Freeway/Dir of Travel:	I-95 Northbound
Junction:	DRoss Off-Ramp
Jurisdiction:	FDOT D4
Analysis Year:	2040

Description: No Build 2040: I-95 NB Diverge at DRoss Off-Ramp (N11 - N12)

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	5	
Free-flow speed on freeway	70.0	mph
Volume on freeway	4094	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	2	
Free-Flow speed on ramp	50.0	mph
Volume on ramp	1418	vph
Length of first accel/decel lane	500	ft
Length of second accel/decel lane	500	ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent ramp		vph
Position of adjacent ramp		
Type of adjacent ramp		
Distance to adjacent ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	4094	1418		vph
Peak-hour factor, PHF	0.95	0.92		
Peak 15-min volume, v15	1077	385		v
Trucks and buses	4	3		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	0.00 %	0.00 %	%	
Length	0.00 mi	0.00 mi	mi	
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

Heavy vehicle adjustment, fHV 0.980 0.985
Driver population factor, fP 1.00 1.00
Flow rate, vp 4396 1564 pcph

_____Estimation of V12 Diverge Areas_____

L_{EQ} = (Equation 13-12 or 13-13)
P_{FD} = 0.260 Using Equation 0
$v_{12} = v_R + (v - v_F) P_{FD}$ = 2186 pc/h

_____Capacity Checks_____

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	3957	9600	No
$v_{FO} = v - v_F - v_R$	2393	9600	No
v_R	1564	4200	No
v_3 or v_{av34}	885 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	No	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	No	

If yes, v_{12A} = 2186 (Equation 13-15, 13-16, 13-18, or 13-19)

_____Flow Entering Diverge Influence Area_____

	Actual	Max Desirable	Violation?
v_{12}	2186	4400	No

_____Level of Service Determination (if not F)_____

Density, $D = 4.252 + 0.0086 v_R - 0.009 L_{12}$ = 9.6 pc/mi/ln
Level of service for ramp-freeway junction areas of influence A

_____Speed Estimation_____

Intermediate speed variable, D_S = 0.374
Space mean speed in ramp influence area, S_R = 59.5 mph
Space mean speed in outer lanes, S_0 = 76.8 mph
Space mean speed for all vehicles, S = 66.2 mph

APPENDIX N - NO BUILD HCS REPORTS

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	LRCB
Agency/Co.:	
Date performed:	3/26/2015
Analysis time period:	AM
Freeway/Dir of Travel:	I-95 Southbound
Junction:	DRoss SB On Ramp
Jurisdiction:	FDOT D4
Analysis Year:	2040

Description: No Build 2040 - I-95 SB Merge at DRoss On-Ramp (S1 - S2)

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	5	
Free-flow speed on freeway	70.0	mph
Volume on freeway	4654	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	50.0	mph
Volume on ramp	1858	vph
Length of first accel/decel lane	400	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent Ramp		vph
Position of adjacent Ramp		
Type of adjacent Ramp		
Distance to adjacent Ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	4654	1858		vph
Peak-hour factor, PHF	0.95	0.92		
Peak 15-min volume, v15	1225	505		v
Trucks and buses	4	3		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

Heavy vehicle adjustment, fHV	0.980	0.985	
Driver population factor, fP	1.00	1.00	
Flow rate, vp	4997	2050	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = -0.038 Using Equation 4

$v_{12} = v_F (P_{FM})$ = -149 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	5948	9600	No
v_3 or v_{av34}	2023 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 Yes

If yes, v_{12A} = 1559 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	5948	4600	No

Level of Service Determination (if not F)

Density, $D_R = 5.475 + 0.00734\ v_R + 0.0078\ v_{12} - 0.00627\ L_A$ = 30.2 pc/mi/ln

Level of service for ramp-freeway junction areas of influence D

Speed Estimation

Intermediate speed variable,	M_S = 0.425	
Space mean speed in ramp influence area,	S_R = 58.1	mph
Space mean speed in outer lanes,	S_0 = 67.6	mph
Space mean speed for all vehicles,	S = 61.5	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	LRCB
Agency or Company:	
Date Performed:	3/26/2015
Analysis Time Period:	AM Peak
Freeway/Direction:	I-95 Southbound
From/To:	DRoss to MT
Jurisdiction:	FDOT D4
Analysis Year:	2040

Description: No Build 2040 - I-95 SB Basict DRoss to Military (S2 - S3)

Flow Inputs and Adjustments

Volume, V	6512	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	1714	v
Trucks and buses	4	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.980	
Driver population factor, fp	1.00	
Flow rate, vp	1398	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	5	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	1398	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	69.5	mi/h
Number of lanes, N	5	
Density, D	20.1	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	LRCB
Agency/Co.:	
Date performed:	3/26/2015
Analysis time period:	AM Peak
Freeway/Dir of Travel:	I-95 Southbound
Junction:	MT Off-Ramp
Jurisdiction:	FDOT D4
Analysis Year:	2040

Description: No Build 2040 - I-95 SB Diverge at MT Off-Ramp (S3 - S4)

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	5	
Free-flow speed on freeway	70.0	mph
Volume on freeway	6512	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	50.0	mph
Volume on ramp	410	vph
Length of first accel/decel lane	500	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent ramp		vph
Position of adjacent ramp		
Type of adjacent ramp		
Distance to adjacent ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	6512	410		vph
Peak-hour factor, PHF	0.95	0.92		
Peak 15-min volume, v15	1714	111		v
Trucks and buses	4	3		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	0.00 %	0.00 %		%
Length	0.00 mi	0.00 mi		mi
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

Heavy vehicle adjustment, fHV	0.980	0.985	
Driver population factor, fP	1.00	1.00	
Flow rate, vp	6992	452	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.436 Using Equation 8

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 2847 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	5944	9600	No
$v_{FO} = v_F - v_R$	5492	9600	No
v_R	452	2100	No
v_3 or v_{av34}	1548 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	No	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	No	

If yes, v_{12A} = 2847 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	2847	4400	No

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086 v_R - 0.009 L_{12}$ = 24.2 pc/mi/ln D

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable, D_S = 0.274

Space mean speed in ramp influence area, S_R = 62.3 mph

Space mean speed in outer lanes, S_0 = 74.7 mph

Space mean speed for all vehicles, S = 68.2 mph

APPENDIX N - NO BUILD HCS REPORTS

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	LRCB
Agency or Company:	
Date Performed:	3/26/2015
Analysis Time Period:	AM Peak
Freeway/Direction:	I-95 Southbound
From/To:	MT to PGA
Jurisdiction:	FDOT D4
Analysis Year:	2040
Description:	No Build 2040 - I-95 SB Basic Military to PGA (S4 - S5)

Flow Inputs and Adjustments

Volume, V	6102	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	1606	v
Trucks and buses	4	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.980	
Driver population factor, fp	1.00	
Flow rate, vp	1310	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	5	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	1310	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	69.9	mi/h
Number of lanes, N	5	
Density, D	18.8	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	LRCB
Agency/Co.:	
Date performed:	3/26/2015
Analysis time period:	AM Peak
Freeway/Dir of Travel:	I-95 Southbound
Junction:	PGA Off Ramp
Jurisdiction:	FDOT D4
Analysis Year:	2040

Description: No Build 2040 - I-95 SB Diverge at PGA Off-Ramp (S5 - S6)

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	5	
Free-flow speed on freeway	70.0	mph
Volume on freeway	6102	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	2	
Free-Flow speed on ramp	60.0	mph
Volume on ramp	810	vph
Length of first accel/decel lane	500	ft
Length of second accel/decel lane	500	ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent ramp		vph
Position of adjacent ramp		
Type of adjacent ramp		
Distance to adjacent ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	6102	810		vph
Peak-hour factor, PHF	0.95	0.92		
Peak 15-min volume, v15	1606	220		v
Trucks and buses	4	3		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	0.00 %	0.00 %		%
Length	0.00 mi	0.00 mi		mi
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

Heavy vehicle adjustment, fHV 0.980 0.985
Driver population factor, fP 1.00 1.00
Flow rate, vp 6552 894 pcph

_____Estimation of V12 Diverge Areas_____

L_{EQ} = (Equation 13-12 or 13-13)
P_{FD} = 0.260 Using Equation 0
$v_{12} = v_R + (v - v_F) P_{FD}$ = 2110 pc/h

_____Capacity Checks_____

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	5570	9600	No
$v_{FO} = v - v_F - v_R$	4676	9600	No
v_R	894	4400	No
v_3 or v_{av34}	1730 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	No	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	Yes	

If yes, v_{12A} = 2228 (Equation 13-15, 13-16, 13-18, or 13-19)

_____Flow Entering Diverge Influence Area_____

	Actual	Max Desirable	Violation?
v_{12A}	2228	4400	No

_____Level of Service Determination (if not F)_____

Density, $D = 4.252 + 0.0086 v_R - 0.009 L_D$ = 9.9 pc/mi/ln
Level of service for ramp-freeway junction areas of influence A

_____Speed Estimation_____

Intermediate speed variable, D_S = 0.183
Space mean speed in ramp influence area, S_R = 64.9 mph
Space mean speed in outer lanes, S_0 = 74.2 mph
Space mean speed for all vehicles, S = 70.1 mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	LRCB
Agency or Company:	
Date Performed:	3/26/2015
Analysis Time Period:	AM Peak
Freeway/Direction:	I-95 Southbound
From/To:	PGA-Off to WB_PGA On
Jurisdiction:	FDOT D4
Analysis Year:	2040

Description: No Build 2040 - I-95SB Basic PGA-Off to WB PGA-On (S6 - S7)

Flow Inputs and Adjustments

Volume, V	5292	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	1393	v
Trucks and buses	4	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.980	
Driver population factor, fp	1.00	
Flow rate, vp	1136	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	5	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	1136	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	5	
Density, D	16.2	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	LRCB
Agency/Co.:	
Date performed:	3/26/2015
Analysis time period:	AM
Freeway/Dir of Travel:	I-95 Southbound
Junction:	WB PGA SB On Ramp
Jurisdiction:	FDOT D4
Analysis Year:	2040

Description: No Build 2040 - I-95 SB Merge at WB PGA On-Ramp (S7 - S8)

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	5	
Free-flow speed on freeway	70.0	mph
Volume on freeway	5292	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	40.0	mph
Volume on ramp	1467	vph
Length of first accel/decel lane	400	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent Ramp		vph
Position of adjacent Ramp		
Type of adjacent Ramp		
Distance to adjacent Ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	5292	1467		vph
Peak-hour factor, PHF	0.95	0.92		
Peak 15-min volume, v15	1393	399		v
Trucks and buses	4	3		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

Heavy vehicle adjustment, fHV	0.980	0.985	
Driver population factor, fP	1.00	1.00	
Flow rate, vp	5682	1618	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 0.016 Using Equation 4

$v_{12} = v_F (P_{FM})$ = 67 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	5937	9600	No
v_3 or v_{av34}	2126 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	No	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	Yes	

If yes, v_{12A} = 1727 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	5937	4600	No

Level of Service Determination (if not F)

Density, $D_R = 5.475 + 0.00734\ v_R + 0.0078\ v_{12} - 0.00627\ L_A$ = 28.3 pc/mi/ln

Level of service for ramp-freeway junction areas of influence D

Speed Estimation

Intermediate speed variable,	M_S = 0.400	
Space mean speed in ramp influence area,	S_R = 58.8	mph
Space mean speed in outer lanes,	S_0 = 67.1	mph
Space mean speed for all vehicles,	S = 62.2	mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	LRCB
Agency or Company:	
Date Performed:	3/26/2015
Analysis Time Period:	AM Peak
Freeway/Direction:	I-95 Southbound
From/To:	WB PGA On to EB PGA On
Jurisdiction:	FDOT D4
Analysis Year:	2040
Description:	No Build 2040 I95SB Basic WB PGA On to EB PGA On (S8 - S9)

Flow Inputs and Adjustments

Volume, V	6759	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	1779	v
Trucks and buses	4	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.980	
Driver population factor, fp	1.00	
Flow rate, vp	1451	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	5	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	1451	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	69.3	mi/h
Number of lanes, N	5	
Density, D	20.9	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	LRCB
Agency/Co.:	
Date performed:	3/26/2015
Analysis time period:	AM
Freeway/Dir of Travel:	I-95 Southbound
Junction:	EB PGA SB On Ramp
Jurisdiction:	FDOT D4
Analysis Year:	2040
Description:	No Build 2040 - I-95 SB Merge at WB PGA On-Ramp (S9 - S10)

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	5	
Free-flow speed on freeway	70.0	mph
Volume on freeway	6759	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	50.0	mph
Volume on ramp	1473	vph
Length of first accel/decel lane	400	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent Ramp		vph
Position of adjacent Ramp		
Type of adjacent Ramp		
Distance to adjacent Ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	6759	1473		vph
Peak-hour factor, PHF	0.95	0.92		
Peak 15-min volume, v15	1779	400		v
Trucks and buses	4	3		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

```
Heavy vehicle adjustment, fHV          0.980       0.985
Driver population factor, fP           1.00        1.00
Flow rate, vp                          7257        1625                    pcph
```

_____Estimation of V12 Merge Areas_____

```
                  L  =            (Equation 13-6 or 13-7)
                   EQ
                  P  =    0.015   Using Equation  4
                   FM
                  v  = v  (P  ) =  78     pc/h
                   12   F   FM
```

_____Capacity Checks_____

	Actual	Maximum	LOS F?
v_{FO}	6923	9600	No
v_3 or v_{av34}	2610 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	No	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	Yes	

If yes, v_{12A} = 2119 (Equation 13-15, 13-16, 13-18, or 13-19)

_____Flow Entering Merge Influence Area_____

	Actual	Max Desirable	Violation?
v_{12A}	6923	4600	No

_____Level of Service Determination (if not F)_____

$$\text{Density, } D = 5.475 + 0.00734\, v_R + 0.0078\, v_R - 0.00627\, L_{12} - L_A = 31.4 \text{ pc/mi/ln}$$

Level of service for ramp-freeway junction areas of influence D

_____Speed Estimation_____

```
Intermediate speed variable,                M  = 0.446
                                             S
Space mean speed in ramp influence area,    S  = 57.5    mph
                                             R
Space mean speed in outer lanes,            S  = 66.1    mph
                                             0
Space mean speed for all vehicles,          S  = 61.2    mph
```

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	LRCB
Agency or Company:	
Date Performed:	3/26/2015
Analysis Time Period:	AM Peak
Freeway/Direction:	I-95 Southbound
From/To:	EB PGA On to NLake Off
Jurisdiction:	FDOT D4
Analysis Year:	2040
Description:	No Build 2040 I95SB: EB-PGA_On_to_NLake_SB_Off (S10 - S11)

Flow Inputs and Adjustments

Volume, V	8232	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	2166	v
Trucks and buses	4	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.980	
Driver population factor, fp	1.00	
Flow rate, vp	1768	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	5	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	1768	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	66.3	mi/h
Number of lanes, N	5	
Density, D	26.7	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	LRCB
Agency/Co.:	
Date performed:	3/26/2015
Analysis time period:	AM Peak
Freeway/Dir of Travel:	I-95 Southbound
Junction:	Nlake Off Ramp
Jurisdiction:	FDOT D4
Analysis Year:	2040

Description: No Build 2040 - I-95SB Diverge at Nlake Off-Ramp (S11 - S12)

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	5	
Free-flow speed on freeway	70.0	mph
Volume on freeway	8232	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	2	
Free-Flow speed on ramp	50.0	mph
Volume on ramp	1167	vph
Length of first accel/decel lane	500	ft
Length of second accel/decel lane	500	ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent ramp		vph
Position of adjacent ramp		
Type of adjacent ramp		
Distance to adjacent ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	8232	1167		vph
Peak-hour factor, PHF	0.95	0.92		
Peak 15-min volume, v15	2166	317		v
Trucks and buses	4	3		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	0.00 %	0.00 %		%
Length	0.00 mi	0.00 mi		mi
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

Heavy vehicle adjustment, fHV 0.980 0.985
Driver population factor, fP 1.00 1.00
Flow rate, vp 8839 1288 pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)
P_{FD} = 0.260 Using Equation 0
$v_{12} = v_R + (v - v_F) P_{FD}$ = 2792 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	7072	9600	No
$v_{FO} = v - v_F - v_R$	5784	9600	No
v_R	1288	4200	No
v_3 or v_{av34}	2140 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	No	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	Yes	

If yes, v_{12A} = 2828 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	2828	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 15.1 pc/mi/ln
Level of service for ramp-freeway junction areas of influence B

Speed Estimation

Intermediate speed variable, D_S = 0.349
Space mean speed in ramp influence area, S_R = 60.2 mph
Space mean speed in outer lanes, S_0 = 72.4 mph
Space mean speed for all vehicles, S = 67.0 mph

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	LRCB
Agency/Co.:	
Date performed:	3/26/2015
Analysis time period:	PM
Freeway/Dir of Travel:	I-95 Northbound
Junction:	NLake NB On Ramp
Jurisdiction:	FDOT D4
Analysis Year:	2040

Description: No Build 2040 - I-95 NB Merge at Nlake On-Ramp (N1 - N2)

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	5	
Free-flow speed on freeway	70.0	mph
Volume on freeway	5642	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	50.0	mph
Volume on ramp	1796	vph
Length of first accel/decel lane	400	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent Ramp		vph
Position of adjacent Ramp		
Type of adjacent Ramp		
Distance to adjacent Ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	5642	1796		vph
Peak-hour factor, PHF	0.95	0.92		
Peak 15-min volume, v15	1485	488		v
Trucks and buses	4	3		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

```
Heavy vehicle adjustment, fHV          0.980       0.985
Driver population factor, fP           1.00        1.00
Flow rate, vp                          6058        1981                    pcph
```

_____Estimation of V12 Merge Areas_____

```
                  L  =            (Equation 13-6 or 13-7)
                   EQ
                  P  =    -0.030  Using Equation  4
                   FM
                  v  = v  (P  ) =  -136   pc/h
                   12   F   FM
```

_____Capacity Checks_____

```
                          Actual        Maximum         LOS F?
     v                    6586          9600            No
      FO
     v  or v              2370 pc/h     (Equation 13-14 or 13-17)
      3     av34
Is   v  or v      > 2700 pc/h?          No
      3     av34
Is   v  or v      > 1.5 v  /2           Yes
      3     av34         12
If yes, v    = 1842                  (Equation 13-15, 13-16, 13-18, or 13-19)
         12A
```

_____Flow Entering Merge Influence Area_____

```
                     Actual        Max Desirable         Violation?
     v               6586          4600                  No
      12A
```

_____Level of Service Determination (if not F)_____

```
Density, D = 5.475 + 0.00734 v  + 0.0078 v   - 0.00627 L   =   31.9    pc/mi/ln
          R                    R           12            A
Level of service for ramp-freeway junction areas of influence  D
```

_____Speed Estimation_____

```
Intermediate speed variable,                M  = 0.459
                                             S
Space mean speed in ramp influence area,    S  = 57.1    mph
                                             R
Space mean speed in outer lanes,            S  = 66.8    mph
                                             0
Space mean speed for all vehicles,          S  = 60.8    mph
```

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	LRCB
Agency or Company:	
Date Performed:	3/26/2015
Analysis Time Period:	PM Peak
Freeway/Direction:	I-95 Northbound
From/To:	NLake On-Rmp to PGA Off-Rmp
Jurisdiction:	FDOT D4
Analysis Year:	2040
Description:	No Build 2040 - I-95 NB Basic Nlake-On to PGA-Off (N2 - N3)

Flow Inputs and Adjustments

Volume, V	7438	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	1957	v
Trucks and buses	4	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.980	
Driver population factor, fp	1.00	
Flow rate, vp	1597	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	5	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	1597	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	68.2	mi/h
Number of lanes, N	5	
Density, D	23.4	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	LRCB
Agency/Co.:	
Date performed:	3/26/2015
Analysis time period:	PM Peak
Freeway/Dir of Travel:	I-95 Northbound
Junction:	EB PGA Off-Ramp
Jurisdiction:	FDOT D4
Analysis Year:	2040

Description: No Build 2040 - I-95 NB Diverge at EB PGA Off-Ramp (N3 - N4)

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	5	
Free-flow speed on freeway	70.0	mph
Volume on freeway	7438	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	2	
Free-Flow speed on ramp	55.0	mph
Volume on ramp	1526	vph
Length of first accel/decel lane	500	ft
Length of second accel/decel lane	500	ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent ramp		vph
Position of adjacent ramp		
Type of adjacent ramp		
Distance to adjacent ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	7438	1526		vph
Peak-hour factor, PHF	0.95	0.92		
Peak 15-min volume, v15	1957	415		v
Trucks and buses	4	3		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	0.00 %	0.00 %		%
Length	0.00 mi	0.00 mi		mi
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

Heavy vehicle adjustment, fHV 0.980 0.985
Driver population factor, fP 1.00 1.00
Flow rate, vp 7986 1684 pcph

_____Estimation of V12 Diverge Areas_____

L_{EQ} = (Equation 13-12 or 13-13)
P_{FD} = 0.260 Using Equation 0
$v_{12} = v_R + (v - v_F) P_{FD}$ = 2907 pc/h

_____Capacity Checks_____

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	6389	9600	No
$v_{FO} = v - v_F - v_R$	4705	9600	No
v_R	1684	4400	No
v_3 or v_{av34}	1741 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	No	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	No	

If yes, v_{12A} = 2907 (Equation 13-15, 13-16, 13-18, or 13-19)

_____Flow Entering Diverge Influence Area_____

	Actual	Max Desirable	Violation?
v_{12}	2907	4400	No

_____Level of Service Determination (if not F)_____

Density, $D = 4.252 + 0.0086 v_R - 0.009 L_{12}$ = 15.8 pc/mi/ln
Level of service for ramp-freeway junction areas of influence B

_____Speed Estimation_____

Intermediate speed variable, D_S = 0.320
Space mean speed in ramp influence area, S_R = 61.1 mph
Space mean speed in outer lanes, S_0 = 73.9 mph
Space mean speed for all vehicles, S = 67.4 mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	LRCB
Agency or Company:	
Date Performed:	3/26/2015
Analysis Time Period:	PM Peak
Freeway/Direction:	I-95 Northbound
From/To:	PGA EB Off to PGA WB Off
Jurisdiction:	FDOT D4
Analysis Year:	2040
Description:	No Build 2040 - I95NB Basic EB PGA Off to WB PGA (N4 - N5)

Flow Inputs and Adjustments

Volume, V	5912	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	1556	v
Trucks and buses	4	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.980	
Driver population factor, fp	1.00	
Flow rate, vp	1270	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	5	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	1270	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	69.9	mi/h
Number of lanes, N	5	
Density, D	18.2	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	LRCB
Agency/Co.:	
Date performed:	3/26/2015
Analysis time period:	PM Peak
Freeway/Dir of Travel:	I-95 Northbound
Junction:	WB PGA Off-Ramp
Jurisdiction:	FDOT D4
Analysis Year:	2040

Description: No Build 2040 - I-95 NB Diverge at WB PGA Off-Ramp (N5 - N6)

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	5	
Free-flow speed on freeway	70.0	mph
Volume on freeway	5912	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	35.0	mph
Volume on ramp	1111	vph
Length of first accel/decel lane	500	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent ramp		vph
Position of adjacent ramp		
Type of adjacent ramp		
Distance to adjacent ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	5912	1111		vph
Peak-hour factor, PHF	0.95	0.92		
Peak 15-min volume, v15	1556	302		v
Trucks and buses	4	3		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	0.00 %	0.00 %		%
Length	0.00 mi	0.00 mi		mi
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

Heavy vehicle adjustment, fHV	0.980	0.985	
Driver population factor, fP	1.00	1.00	
Flow rate, vp	6348	1226	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.436 Using Equation 8

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 3044 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	5396	9600	No
$v_{FO} = v_F - v_R$	4170	9600	No
v_R	1226	2000	No
v_3 or v_{av34}	1176 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	No	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	No	

If yes, v_{12A} = 3044 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3044	4400	No

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086 v_R - 0.009 L_D$ = 25.9 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable, D_S = 0.538

Space mean speed in ramp influence area, S_R = 54.9 mph

Space mean speed in outer lanes, S_0 = 76.1 mph

Space mean speed for all vehicles, S = 62.5 mph

APPENDIX N - NO BUILD HCS REPORTS

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	LRCB
Agency or Company:	
Date Performed:	3/26/2015
Analysis Time Period:	AM Peak
Freeway/Direction:	I-95 Northbound
From/To:	WB PGA Off to EB PGA On
Jurisdiction:	FDOT D4
Analysis Year:	2040
Description:	No Build 2040 - I-95 NB WB PGA Off to EB PGA On (N6 - N7)

Flow Inputs and Adjustments

Volume, V	4801	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	1263	v
Trucks and buses	4	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.980	
Driver population factor, fp	1.00	
Flow rate, vp	1031	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	5	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	1031	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	5	
Density, D	14.7	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	LRCB
Agency/Co.:	
Date performed:	3/26/2015
Analysis time period:	PM
Freeway/Dir of Travel:	I-95 Northbound
Junction:	EB&WB PGA On Ramp
Jurisdiction:	FDOT D4
Analysis Year:	2040

Description: No Build 2040 - I-95 SB Merge at E/W PGA On-Ramp (N7 - N8)

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	5	
Free-flow speed on freeway	70.0	mph
Volume on freeway	4801	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	50.0	mph
Volume on ramp	852	vph
Length of first accel/decel lane	400	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent Ramp		vph
Position of adjacent Ramp		
Type of adjacent Ramp		
Distance to adjacent Ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	4801	852		vph
Peak-hour factor, PHF	0.95	0.92		
Peak 15-min volume, v15	1263	232		v
Trucks and buses	4	3		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

Heavy vehicle adjustment, fHV 0.980 0.985
Driver population factor, fP 1.00 1.00
Flow rate, vp 5155 940 pcph

_____Estimation of V12 Merge Areas_____

L_{EQ} = (Equation 13-6 or 13-7)
P_{FM} = 0.100 Using Equation 4
$v_{12} = v_F (P_{FM})$ = 403 pc/h

_____Capacity Checks_____

	Actual	Maximum	LOS F?
v_{FO}	4961	9600	No
v_3 or v_{av34}	1809 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	No	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	Yes	

If yes, v_{12A} = 1608 (Equation 13-15, 13-16, 18, or 13-19)

_____Flow Entering Merge Influence Area_____

	Actual	Max Desirable	Violation?
v_{12A}	4961	4600	No

_____Level of Service Determination (if not F)_____

Density, $D_R = 5.475 + 0.00734 v_R + 0.0078 v_{12} - 0.00627 L_A$ = 22.4 pc/mi/ln
Level of service for ramp-freeway junction areas of influence C

_____Speed Estimation_____

Intermediate speed variable, M_S = 0.331
Space mean speed in ramp influence area, S_R = 60.7 mph
Space mean speed in outer lanes, S_0 = 67.5 mph
Space mean speed for all vehicles, S = 63.8 mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	LRCB
Agency or Company:	
Date Performed:	3/26/2015
Analysis Time Period:	AM Peak
Freeway/Direction:	I-95 Northbound
From/To:	DRoss to MT
Jurisdiction:	FDOT D4
Analysis Year:	2040

Description: No Build 2040 - I-95 NB Basic E/W PGA-On to MT-On (N8 - N9)

Flow Inputs and Adjustments

Volume, V	5653	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	1488	v
Trucks and buses	4	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.980	
Driver population factor, fp	1.00	
Flow rate, vp	1214	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	5	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	1214	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	5	
Density, D	17.3	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

APPENDIX N - NO BUILD HCS REPORTS

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	LRCB
Agency/Co.:	
Date performed:	3/26/2015
Analysis time period:	PM
Freeway/Dir of Travel:	I-95 Northbound
Junction:	MT NB On Ramp
Jurisdiction:	FDOT D4
Analysis Year:	2040

Description: No Build 2040 - I-95 NB Merge at MT On-Ramp (N9 - N10)

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	5	
Free-flow speed on freeway	70.0	mph
Volume on freeway	5653	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	50.0	mph
Volume on ramp	653	vph
Length of first accel/decel lane	400	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent Ramp		vph
Position of adjacent Ramp		
Type of adjacent Ramp		
Distance to adjacent Ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	5653	653		vph
Peak-hour factor, PHF	0.95	0.92		
Peak 15-min volume, v15	1488	177		v
Trucks and buses	4	3		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

Heavy vehicle adjustment, fHV 0.980 0.985
Driver population factor, fP 1.00 1.00
Flow rate, vp 6070 720 pcph

_____Estimation of V12 Merge Areas_____

L_{EQ} = (Equation 13-6 or 13-7)
P_{FM} = 0.128 Using Equation 4
$v_{12} = v_F (P_{FM})$ = 590 pc/h

_____Capacity Checks_____

	Actual	Maximum	LOS F?
v_{FO}	5334	9600	No
v_3 or v_{av34}	2012 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	No	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	Yes	

If yes, v_{12A} = 1845 (Equation 13-15, 13-16, 18, or 13-19)

_____Flow Entering Merge Influence Area_____

	Actual	Max Desirable	Violation?
v_{12A}	5334	4600	No

_____Level of Service Determination (if not F)_____

Density, $D_R = 5.475 + 0.00734\ v_R + 0.0078\ v_{12} - 0.00627\ L_A$ = 22.6 pc/mi/ln
Level of service for ramp-freeway junction areas of influence C

_____Speed Estimation_____

Intermediate speed variable, M_S = 0.332
Space mean speed in ramp influence area, S_R = 60.7 mph
Space mean speed in outer lanes, S_0 = 66.8 mph
Space mean speed for all vehicles, S = 63.7 mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	LRCB
Agency or Company:	
Date Performed:	3/26/2015
Analysis Time Period:	PM Peak
Freeway/Direction:	I-95 Northbound
From/To:	MT-On to DRoss-Off
Jurisdiction:	FDOT D4
Analysis Year:	2040
Description:	No Build 2040: I-95 NB Basic MT-On to DRoss-Off (N10 - N11)

Flow Inputs and Adjustments

Volume, V	6306	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	1659	v
Trucks and buses	4	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.980	
Driver population factor, fp	1.00	
Flow rate, vp	1354	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	5	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	1354	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	69.7	mi/h
Number of lanes, N	5	
Density, D	19.4	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	LRCB
Agency/Co.:	
Date performed:	3/26/2015
Analysis time period:	PM Peak
Freeway/Dir of Travel:	I-95 Northbound
Junction:	DRoss Off-Ramp
Jurisdiction:	FDOT D4
Analysis Year:	2040

Description: No Build 2040: I-95 NB Diverge at DRoss Off-Ramp (N11 - N12)

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	5	
Free-flow speed on freeway	70.0	mph
Volume on freeway	6306	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	2	
Free-Flow speed on ramp	50.0	mph
Volume on ramp	1933	vph
Length of first accel/decel lane	500	ft
Length of second accel/decel lane	500	ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent ramp		vph
Position of adjacent ramp		
Type of adjacent ramp		
Distance to adjacent ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	6306	1933		vph
Peak-hour factor, PHF	0.95	0.92		
Peak 15-min volume, v15	1659	525		v
Trucks and buses	4	3		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	0.00 %	0.00 %		%
Length	0.00 mi	0.00 mi		mi
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

Heavy vehicle adjustment, fHV	0.980	0.985	
Driver population factor, fP	1.00	1.00	
Flow rate, vp	6771	2133	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.260 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 3075 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	5756	9600	No
$v_{FO} = v_F - v_R$	3623	9600	No
v_R	2133	4200	No
v_3 or v_{av34}	1340 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	No	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	No	

If yes, v_{12A} = 3075 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	3075	4400	No

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086\, v_R - 0.009\, L_{12}$ = 17.2 pc/mi/ln

Level of service for ramp-freeway junction areas of influence B

Speed Estimation

Intermediate speed variable,	D_S = 0.425	
Space mean speed in ramp influence area,	S_R = 58.1	mph
Space mean speed in outer lanes,	S_0 = 75.5	mph
Space mean speed for all vehicles,	S = 65.1	mph

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	LRCB
Agency/Co.:	
Date performed:	3/26/2015
Analysis time period:	PM
Freeway/Dir of Travel:	I-95 Southbound
Junction:	DRoss SB On Ramp
Jurisdiction:	FDOT D4
Analysis Year:	2040

Description: No Build 2040 - I-95 SB Merge at DRoss On-Ramp (S1 - S2)

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	5	
Free-flow speed on freeway	70.0	mph
Volume on freeway	3491	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	50.0	mph
Volume on ramp	1338	vph
Length of first accel/decel lane	400	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent Ramp		vph
Position of adjacent Ramp		
Type of adjacent Ramp		
Distance to adjacent Ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	3491	1338		vph
Peak-hour factor, PHF	0.95	0.92		
Peak 15-min volume, v15	919	364		v
Trucks and buses	4	3		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

Heavy vehicle adjustment, fHV 0.980 0.985
Driver population factor, fP 1.00 1.00
Flow rate, vp 3748 1476 pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 0.122 Using Equation 4

$v_{12} = v_F (P_{FM})$ = 358 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	4400	9600	No
v_3 or v_{av34}	1283 pc/h	(Equation 13-14 or 13-17)	

Is v_3 or v_{av34} > 2700 pc/h? No

Is v_3 or v_{av34} > 1.5 v_{12} /2 Yes

If yes, v_{12A} = 1169 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	4400	4600	No

Level of Service Determination (if not F)

Density, $D_R = 5.475 + 0.00734\ v_R + 0.0078\ v_{12} - 0.00627\ L_A$ = 22.9 pc/mi/ln

Level of service for ramp-freeway junction areas of influence C

Speed Estimation

Intermediate speed variable, M_S = 0.336

Space mean speed in ramp influence area, S_R = 60.6 mph

Space mean speed in outer lanes, S_0 = 68.6 mph

Space mean speed for all vehicles, S = 63.6 mph

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	LRCB
Agency or Company:	
Date Performed:	3/26/2015
Analysis Time Period:	PM Peak
Freeway/Direction:	I-95 Southbound
From/To:	DRoss to MT
Jurisdiction:	FDOT D4
Analysis Year:	2040

Description: No Build 2040 - I-95 SB Basict DRoss to Military (S2 - S3)

Flow Inputs and Adjustments

Volume, V	4829	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	1271	v
Trucks and buses	4	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.980	
Driver population factor, fp	1.00	
Flow rate, vp	1037	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	5	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	1037	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	5	
Density, D	14.8	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	LRCB
Agency/Co.:	
Date performed:	3/26/2015
Analysis time period:	PM Peak
Freeway/Dir of Travel:	I-95 Southbound
Junction:	MT Off-Ramp
Jurisdiction:	FDOT D4
Analysis Year:	2040

Description: No Build 2040 - I-95 SB Diverge at MT Off-Ramp (S3 - S4)

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	5	
Free-flow speed on freeway	70.0	mph
Volume on freeway	4829	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	50.0	mph
Volume on ramp	218	vph
Length of first accel/decel lane	500	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent ramp		vph
Position of adjacent ramp		
Type of adjacent ramp		
Distance to adjacent ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	4829	218		vph
Peak-hour factor, PHF	0.95	0.92		
Peak 15-min volume, v15	1271	59		v
Trucks and buses	4	3		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	0.00 %	0.00 %		%
Length	0.00 mi	0.00 mi		mi
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

Heavy vehicle adjustment, fHV	0.980	0.985	
Driver population factor, fP	1.00	1.00	
Flow rate, vp	5185	241	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.436 Using Equation 8

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 2171 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	4667	9600	No
$v_{FO} = v_F - v_R$	4426	9600	No
v_R	241	2100	No
v_3 or v_{av34}	1248 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	No	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	No	

If yes, v_{12A} = 2171 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12}	2171	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 18.4 pc/mi/ln

Level of service for ramp-freeway junction areas of influence B

Speed Estimation

Intermediate speed variable, D_S = 0.255

Space mean speed in ramp influence area, S_R = 62.9 mph

Space mean speed in outer lanes, S_0 = 75.8 mph

Space mean speed for all vehicles, S = 69.2 mph

APPENDIX N - NO BUILD HCS REPORTS

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	LRCB
Agency or Company:	
Date Performed:	3/26/2015
Analysis Time Period:	PM Peak
Freeway/Direction:	I-95 Southbound
From/To:	MT to PGA
Jurisdiction:	FDOT D4
Analysis Year:	2040
Description:	No Build 2040 - I-95 SB Basic Military to PGA (S4 - S5)

Flow Inputs and Adjustments

Volume, V	4611	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	1213	v
Trucks and buses	4	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.980	
Driver population factor, fp	1.00	
Flow rate, vp	990	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	5	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	990	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	5	
Density, D	14.1	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	LRCB
Agency/Co.:	
Date performed:	3/26/2015
Analysis time period:	PM Peak
Freeway/Dir of Travel:	I-95 Southbound
Junction:	PGA Off Ramp
Jurisdiction:	FDOT D4
Analysis Year:	2040

Description: No Build 2040 - I-95 SB Diverge at PGA Off-Ramp (S5 - S6)

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	5	
Free-flow speed on freeway	70.0	mph
Volume on freeway	4611	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	2	
Free-Flow speed on ramp	60.0	mph
Volume on ramp	331	vph
Length of first accel/decel lane	500	ft
Length of second accel/decel lane	500	ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent ramp		vph
Position of adjacent ramp		
Type of adjacent ramp		
Distance to adjacent ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	4611	331		vph
Peak-hour factor, PHF	0.95	0.92		
Peak 15-min volume, v15	1213	90		v
Trucks and buses	4	3		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	0.00 %	0.00 %		%
Length	0.00 mi	0.00 mi		mi
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

Heavy vehicle adjustment, fHV	0.980	0.985	
Driver population factor, fP	1.00	1.00	
Flow rate, vp	4951	365	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.260 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 1429 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	4456	9600	No
$v_{FO} = v_F - v_R$	4091	9600	No
v_R	365	4400	No
v_3 or v_{av34}	1513 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	No	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	Yes	

If yes, v_{12A} = 1782 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	1782	4400	No

Level of Service Determination (if not F)

Density, $D = 4.252 + 0.0086 v_R - 0.009 L_D$ = 6.1 pc/mi/ln

Level of service for ramp-freeway junction areas of influence A

Speed Estimation

Intermediate speed variable,	D_S = 0.136	
Space mean speed in ramp influence area,	S_R = 66.2	mph
Space mean speed in outer lanes,	S_0 = 75.5	mph
Space mean speed for all vehicles,	S = 71.5	mph

APPENDIX N - NO BUILD HCS REPORTS

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	LRCB
Agency or Company:	
Date Performed:	3/26/2015
Analysis Time Period:	PM Peak
Freeway/Direction:	I-95 Southbound
From/To:	PGA-Off to WB_PGA On
Jurisdiction:	FDOT D4
Analysis Year:	2040
Description:	No Build 2040 - I-95SB Basic PGA-Off to WB PGA-On (S6 - S7)

Flow Inputs and Adjustments

Volume, V	4280	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	1126	v
Trucks and buses	4	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.980	
Driver population factor, fp	1.00	
Flow rate, vp	919	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	5	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	919	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	70.0	mi/h
Number of lanes, N	5	
Density, D	13.1	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

APPENDIX N - NO BUILD HCS REPORTS

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	LRCB
Agency/Co.:	
Date performed:	3/26/2015
Analysis time period:	PM
Freeway/Dir of Travel:	I-95 Southbound
Junction:	WB PGA SB On Ramp
Jurisdiction:	FDOT D4
Analysis Year:	2040

Description: No Build 2040 - I-95 SB Merge at WB PGA On-Ramp (S7 - S8)

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	5	
Free-flow speed on freeway	70.0	mph
Volume on freeway	4280	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	40.0	mph
Volume on ramp	2766	vph
Length of first accel/decel lane	400	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent Ramp		vph
Position of adjacent Ramp		
Type of adjacent Ramp		
Distance to adjacent Ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	4280	2766		vph
Peak-hour factor, PHF	0.95	0.92		
Peak 15-min volume, v15	1126	752		v
Trucks and buses	4	3		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

```
Heavy vehicle adjustment, fHV          0.980       0.985
Driver population factor, fP           1.00        1.00
Flow rate, vp                          4595        3052                    pcph
```

_____Estimation of V12 Merge Areas_____

```
                  L  =            (Equation 13-6 or 13-7)
                   EQ
                  P  =    -0.164  Using Equation  4
                   FM
                  v  = v  (P  ) =  -586   pc/h
                   12   F   FM
```

_____Capacity Checks_____

```
                          Actual        Maximum         LOS F?
     v                    6637          9600            No
      FO
     v  or v              2085 pc/h     (Equation 13-14 or 13-17)
      3     av34
Is   v  or v      > 2700 pc/h?          No
      3     av34
Is   v  or v      > 1.5 v  /2           Yes
      3     av34         12
If yes, v    = 1434                  (Equation 13-15, 13-16, 13-18, or 13-19)
         12A
```

_____Flow Entering Merge Influence Area_____

```
                     Actual        Max Desirable         Violation?
     v               6637          4600                  No
      12A
```

_____Level of Service Determination (if not F)_____

```
Density, D = 5.475 + 0.00734 v  + 0.0078 v   - 0.00627 L   =   36.6    pc/mi/ln
          R                    R           12            A
Level of service for ramp-freeway junction areas of influence  E
```

_____Speed Estimation_____

```
Intermediate speed variable,                M  = 0.635
                                             S
Space mean speed in ramp influence area,    S  = 52.2    mph
                                             R
Space mean speed in outer lanes,            S  = 67.9    mph
                                             0
Space mean speed for all vehicles,          S  = 56.4    mph
```

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	LRCB
Agency or Company:	
Date Performed:	3/26/2015
Analysis Time Period:	PM Peak
Freeway/Direction:	I-95 Southbound
From/To:	WB PGA On to EB PGA On
Jurisdiction:	FDOT D4
Analysis Year:	2040
Description:	No Build 2040 I95SB Basic WB PGA On to EB PGA On (S8 - S9)

Flow Inputs and Adjustments

Volume, V	7046	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	1854	v
Trucks and buses	4	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.980	
Driver population factor, fp	1.00	
Flow rate, vp	1513	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	5	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	1513	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	68.9	mi/h
Number of lanes, N	5	
Density, D	22.0	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

APPENDIX N - NO BUILD HCS REPORTS

Phone: Fax:
E-mail:

Merge Analysis

Analyst:	LRCB
Agency/Co.:	
Date performed:	3/26/2015
Analysis time period:	PM
Freeway/Dir of Travel:	I-95 Southbound
Junction:	EB PGA SB On Ramp
Jurisdiction:	FDOT D4
Analysis Year:	2040
Description:	No Build 2040 - I-95 SB Merge at WB PGA On-Ramp (S9 - S10)

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	5	
Free-flow speed on freeway	70.0	mph
Volume on freeway	7046	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	50.0	mph
Volume on ramp	1949	vph
Length of first accel/decel lane	400	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent Ramp		vph
Position of adjacent Ramp		
Type of adjacent Ramp		
Distance to adjacent Ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	7046	1949		vph
Peak-hour factor, PHF	0.95	0.92		
Peak 15-min volume, v15	1854	530		v
Trucks and buses	4	3		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	%	%	%	
Length	mi	mi	mi	
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

```
Heavy vehicle adjustment, fHV          0.980       0.985
Driver population factor, fP           1.00        1.00
Flow rate, vp                          7565        2150                    pcph
```

Estimation of V12 Merge Areas

```
                  L  =            (Equation 13-6 or 13-7)
                   EQ
                  P  =    -0.051  Using Equation  4
                   FM
                  v  = v  (P  ) =  -275   pc/h
                   12   F   FM
```

Capacity Checks

		Actual	Maximum	LOS F?
v_{FO}		7559	9600	No
v_3 or v_{av34}		2842 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?		Yes	
Is v_3 or v_{av34}	> 1.5 v_{12} /2		Yes	

If yes, v_{12A} = 2163 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	7559	4600	No

Level of Service Determination (if not F)

Density, $D_R = 5.475 + 0.00734\ v_R + 0.0078\ v_{12} - 0.00627\ L_A$ = 35.6 pc/mi/ln

Level of service for ramp-freeway junction areas of influence E

Speed Estimation

```
Intermediate speed variable,                M  = 0.572
                                             S
Space mean speed in ramp influence area,    S  = 54.0    mph
                                             R
Space mean speed in outer lanes,            S  = 66.0    mph
                                             0
Space mean speed for all vehicles,          S  = 58.5    mph
```

APPENDIX N - NO BUILD HCS REPORTS

Phone: Fax:
E-mail:

Operational Analysis

Analyst:	LRCB
Agency or Company:	
Date Performed:	3/26/2015
Analysis Time Period:	PM Peak
Freeway/Direction:	I-95 Southbound
From/To:	EB PGA On to NLake Off
Jurisdiction:	FDOT D4
Analysis Year:	2040
Description:	No Build 2040 I95SB: EB-PGA_On_to_NLake_SB_Off (S10 - S11)

Flow Inputs and Adjustments

Volume, V	8995	veh/h
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v15	2367	v
Trucks and buses	4	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.980	
Driver population factor, fp	1.00	
Flow rate, vp	1932	pc/h/ln

Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	5	
Free-flow speed:	Measured	
FFS or BFFS	70.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	70.0	mi/h

LOS and Performance Measures

Flow rate, vp	1932	pc/h/ln
Free-flow speed, FFS	70.0	mi/h
Average passenger-car speed, S	63.8	mi/h
Number of lanes, N	5	
Density, D	30.3	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

APPENDIX N - NO BUILD HCS REPORTS

Phone: Fax:
E-mail:

Diverge Analysis

Analyst:	LRCB
Agency/Co.:	
Date performed:	3/26/2015
Analysis time period:	PM Peak
Freeway/Dir of Travel:	I-95 Southbound
Junction:	Nlake Off Ramp
Jurisdiction:	FDOT D4
Analysis Year:	2040

Description: No Build 2040 - I-95SB Diverge at Nlake Off-Ramp (S11 - S12)

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	5	
Free-flow speed on freeway	70.0	mph
Volume on freeway	8995	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	2	
Free-Flow speed on ramp	50.0	mph
Volume on ramp	1308	vph
Length of first accel/decel lane	500	ft
Length of second accel/decel lane	500	ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent ramp		vph
Position of adjacent ramp		
Type of adjacent ramp		
Distance to adjacent ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	8995	1308		vph
Peak-hour factor, PHF	0.95	0.92		
Peak 15-min volume, v15	2367	355		v
Trucks and buses	4	3		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	0.00 %	0.00 %		%
Length	0.00 mi	0.00 mi		mi
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

Heavy vehicle adjustment, fHV	0.980	0.985	
Driver population factor, fP	1.00	1.00	
Flow rate, vp	9658	1443	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.260 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 3077 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	7727	9600	No
$v_{FO} = v_F - v_R$	6284	9600	No
v_R	1443	4200	No
v_3 or v_{av34}	2325 pc/h	(Equation 13-14 or 13-17)	
Is v_3 or v_{av34}	> 2700 pc/h?	No	
Is v_3 or v_{av34}	> 1.5 v_{12} /2	Yes	

If yes, v_{12A} = 3090 (Equation 13-15, 13-16, 13-18, or 13-19)

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
v_{12A}	3090	4400	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 17.3 pc/mi/ln

Level of service for ramp-freeway junction areas of influence B

Speed Estimation

Intermediate speed variable, D_S = 0.363

Space mean speed in ramp influence area, S_R = 59.8 mph

Space mean speed in outer lanes, S_0 = 71.6 mph

Space mean speed for all vehicles, S = 66.4 mph

APPENDIX O

CONCEPTUAL DESIGNS

COMPONENTS OF CONTRACT PLANS SET

ROADWAY PLANS

A DETAILED INDEX APPEARS ON THE KEY SHEET OF EACH COMPONENT

INDEX OF ROADWAY PLANS

SHEET NO.	SHEET DESCRIPTION
1A	KEY SHEET
1 - 12	CONCEPT PLANS

APPENDIX O - CONCEPTUAL PLANS

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

CONTRACT PLANS

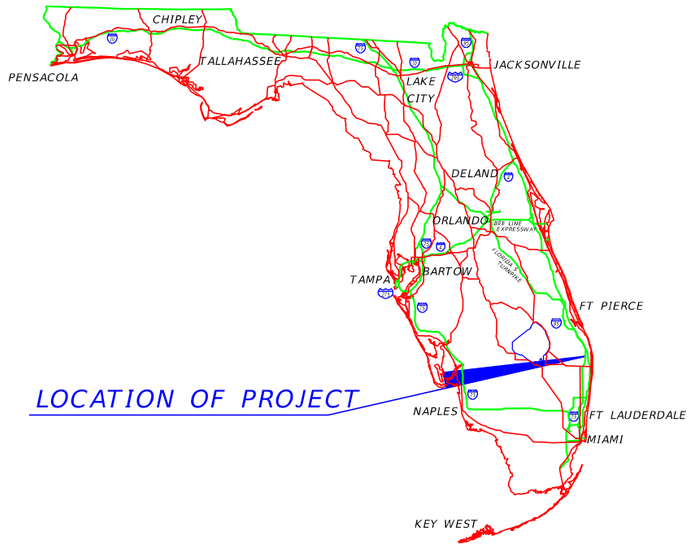
FINANCIAL PROJECT ID 413265-1-22-01
(FEDERAL FUNDS)
PALM BEACH COUNTY (93220)

I-95 (SR 9)

FROM NORTH OF NORTHLAKE BOULEVARD (MP 36.575)

TO SOUTH OF DONALD ROSS ROAD (MP 38.775)

ALT - 2



END PROJECT
STA. 1925+00

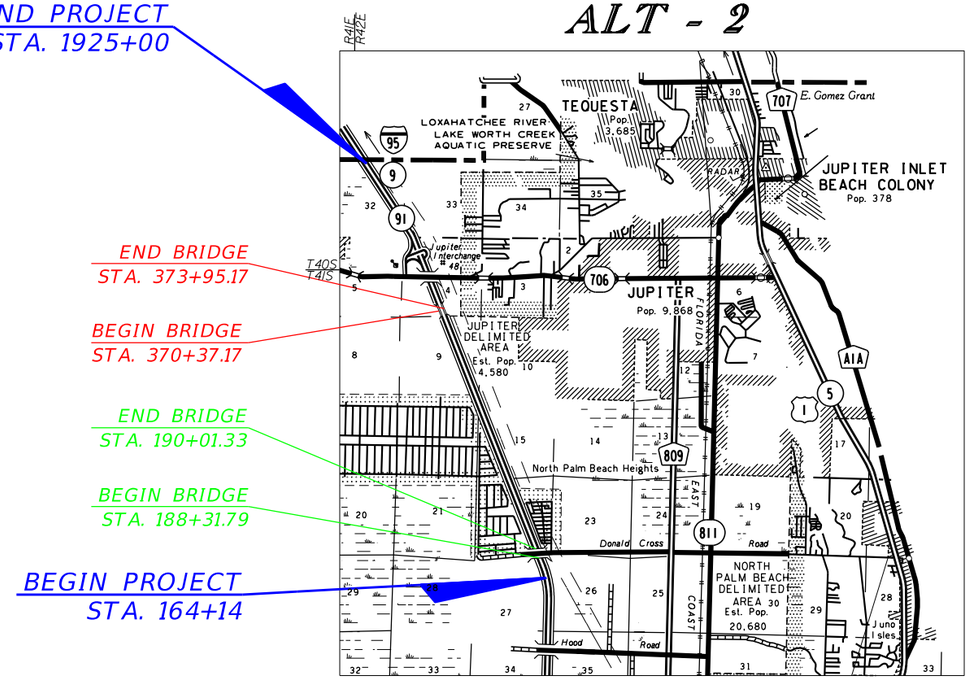
END BRIDGE
STA. 373+95.17

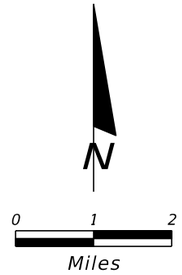
BEGIN BRIDGE
STA. 370+37.17

END BRIDGE
STA. 190+01.33

BEGIN BRIDGE
STA. 188+31.79

BEGIN PROJECT
STA. 164+14





NOTE: THE SCALE OF THESE PLANS MAY HAVE CHANGED DUE TO REPRODUCTION.

PROJECT LENGTH IS BASED ON { OF CONSTRUCTION

LENGTH OF PROJECT	LINEAR FEET	MILES
ROADWAY		
BRIDGES		
NET LENGTH OF PROJECT		
EXCEPTIONS		
GROSS LENGTH OF PROJECT		

KEY SHEET REVISIONS		
DATE	BY	DESCRIPTION

ROADWAY PLANS
ENGINEER OF RECORD: _____

P.E. NO.: _____

FISCAL YEAR	SHEET NO.
16	1A

FDOT PROJECT MANAGER:

9-28-15

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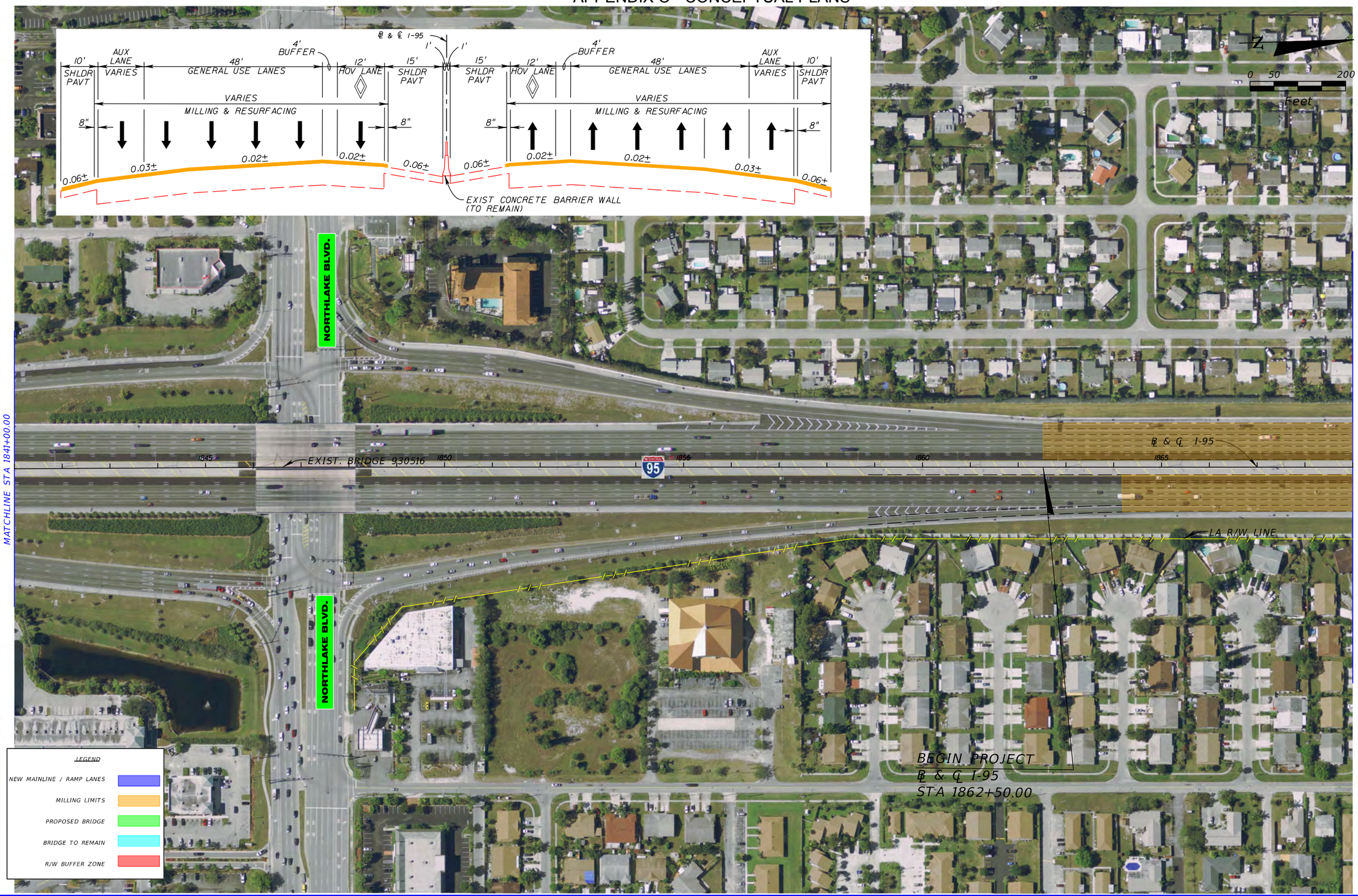


REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
9-28-15					

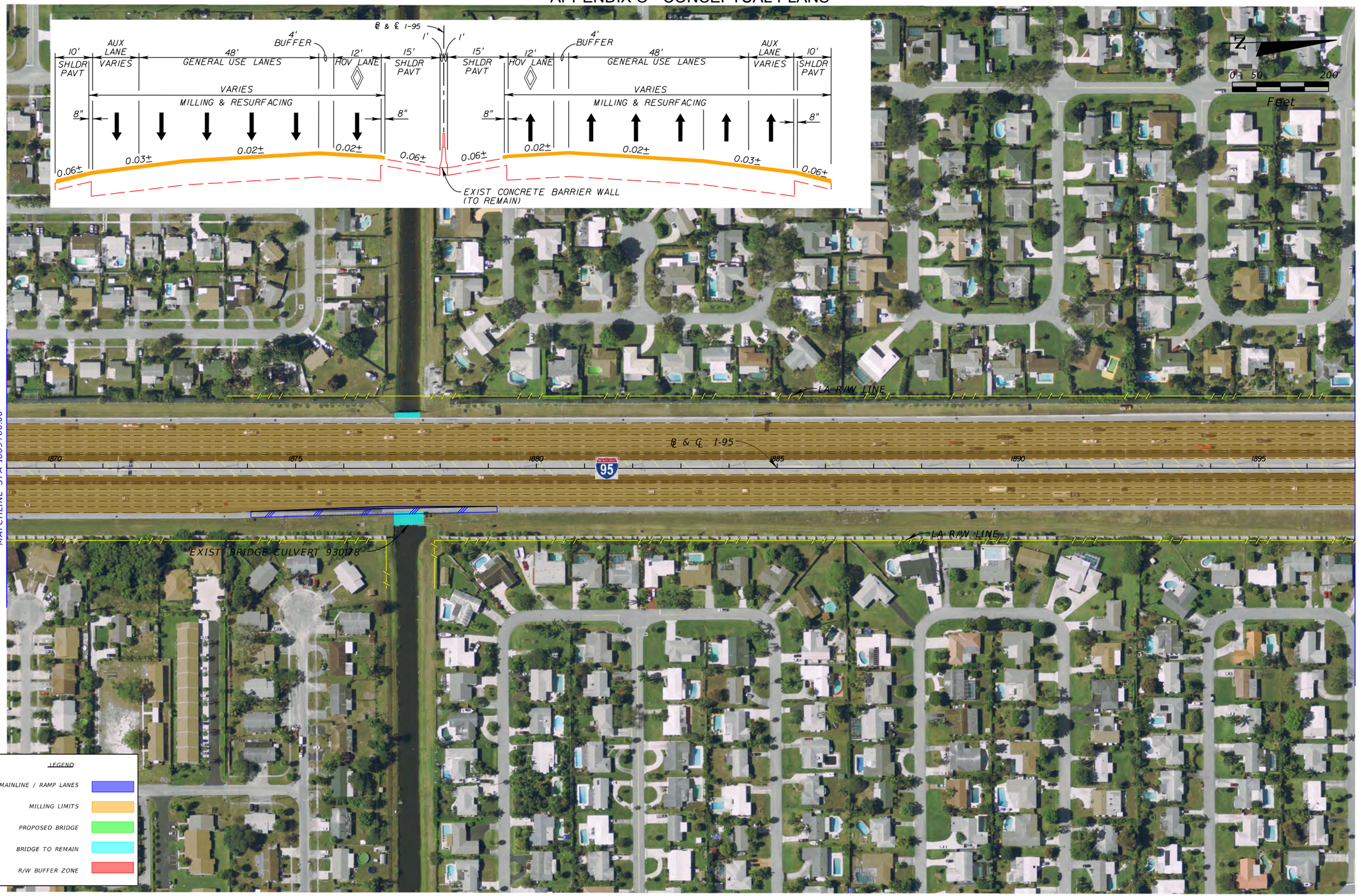
PG | O-2

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
9	PALM BEACH	413265-1-22-01

I-95 FROM N. LAKE TO DONALD ROSS RD. (ALT 2)

SHEET NO. 1



REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
9-28-15					

PG | O-3

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
9	PALM BEACH	413265-1-22-01

I-95 FROM N. LAKE TO DONALD ROSS RD. (ALT 2)

SHEET NO. 2

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
9-28-15					

PG | O-4

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
9	PALM BEACH	413265-1-22-01

I-95 FROM N. LAKE TO DONALD ROSS RD. (ALT 2)

SHEET NO. 3

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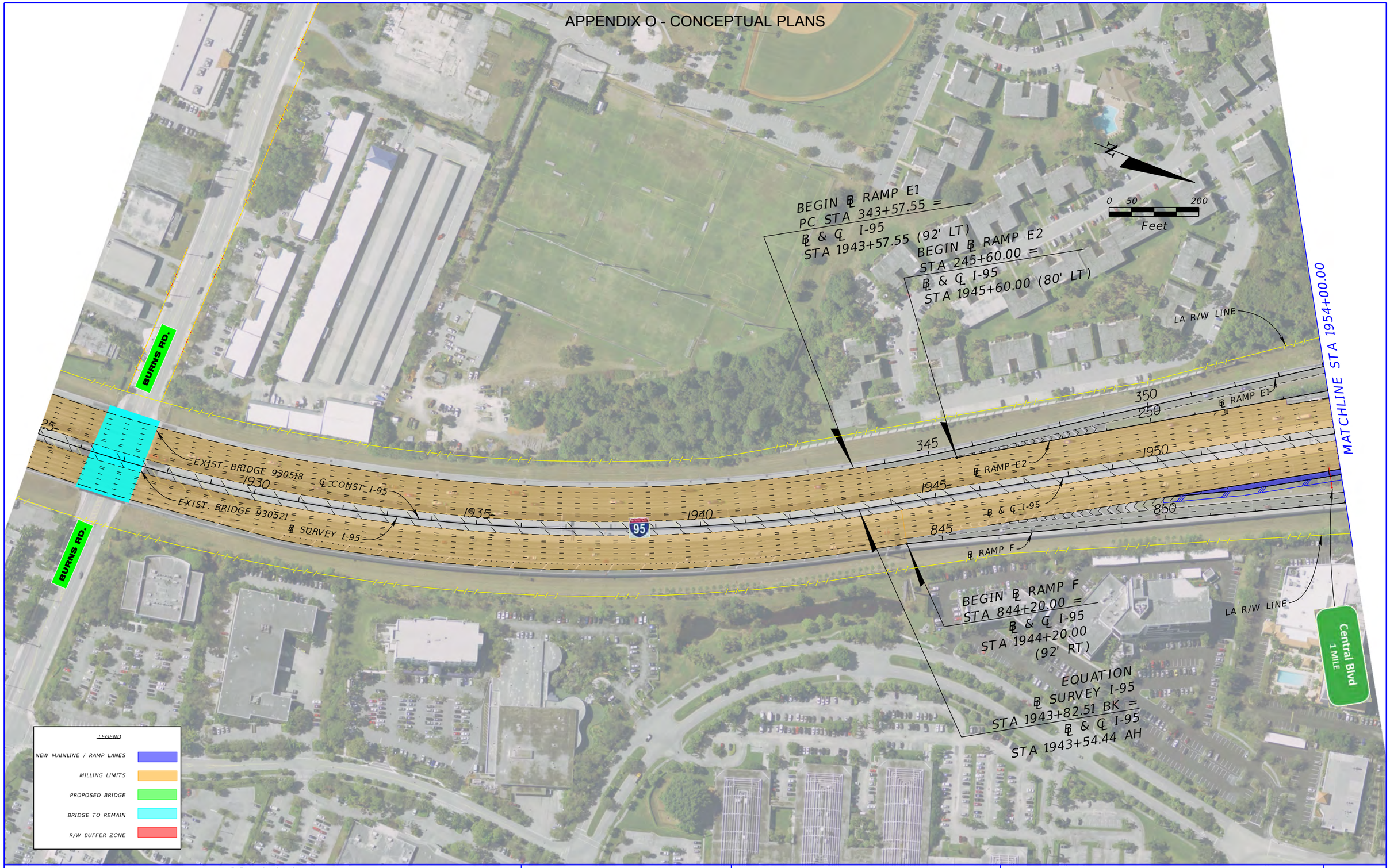

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
9-28-15					

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
9	PALM BEACH	413265-1-22-01

I-95 FROM N. LAKE TO DONALD ROSS RD. (ALT 2)

SHEET NO. 4

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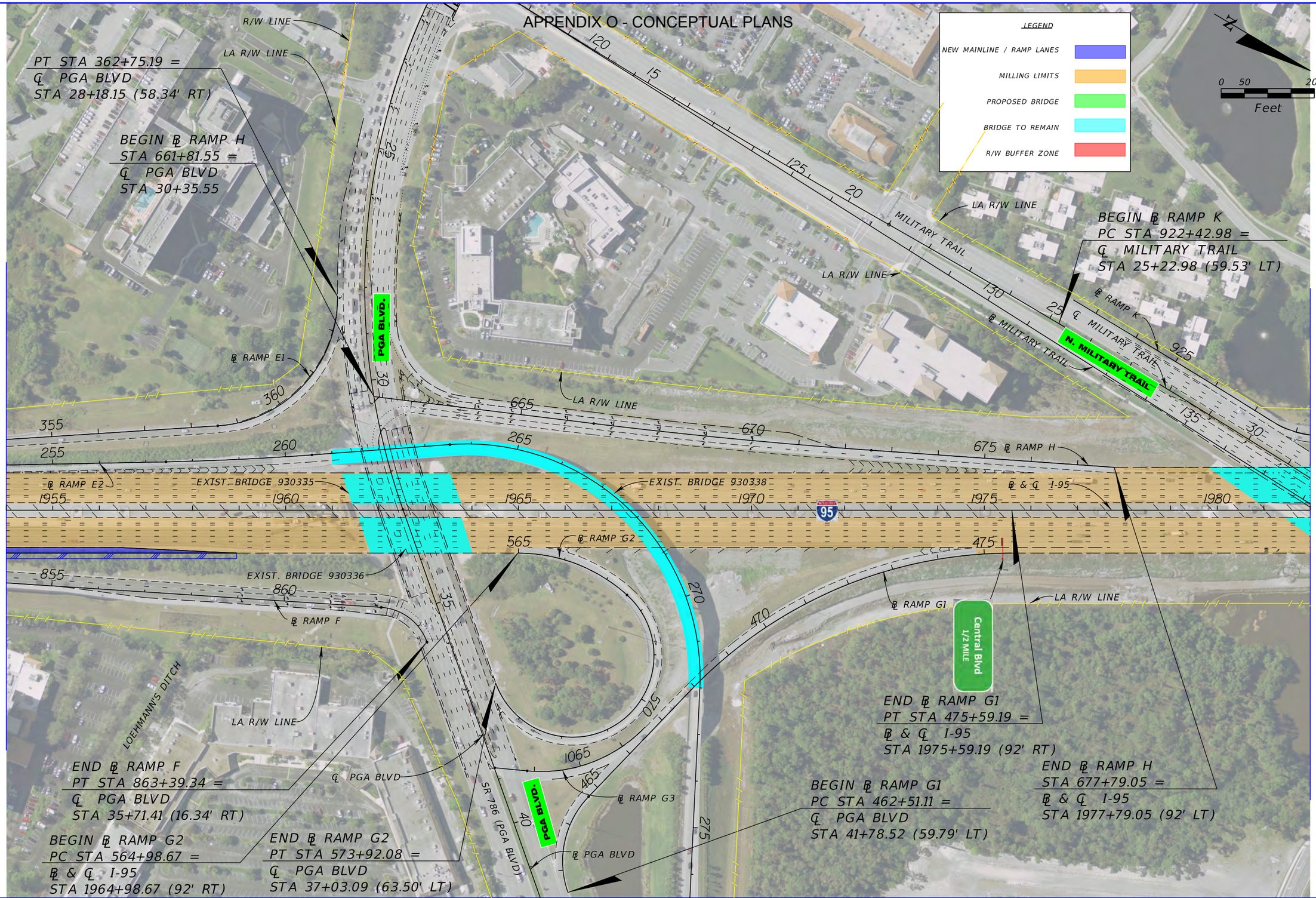


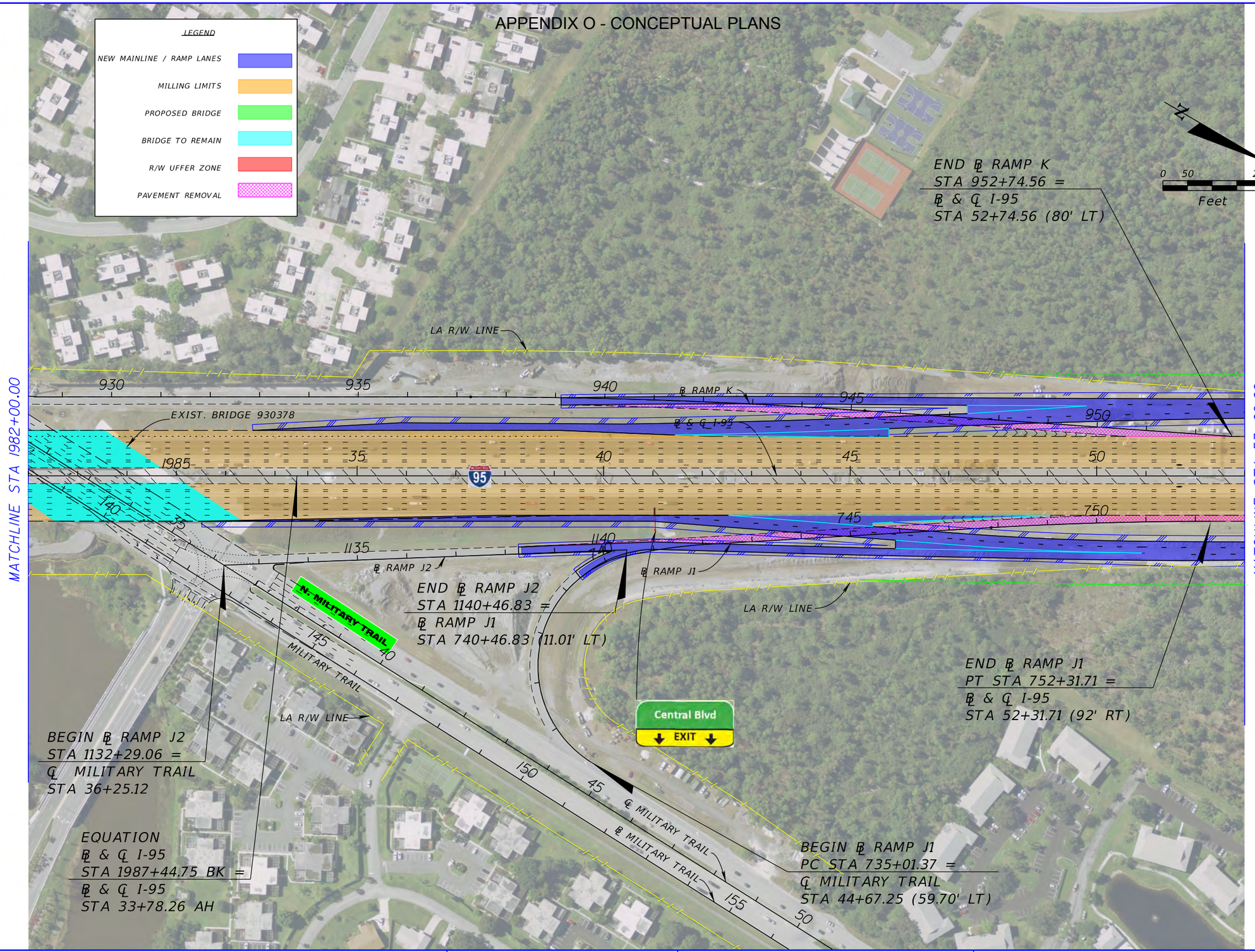
REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
9-28-15					

PG | O-6

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
9	PALM BEACH	413265-1-22-01

I-95 FROM N. LAKE TO DONALD ROSS RD. (ALT 2)

SHEET NO. 5



REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
9-28-15					

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
9	PALM BEACH	413265-1-22-01

I-95 FROM N. LAKE TO DONALD ROSS RD. (ALT 2)

SHEET NO. 6

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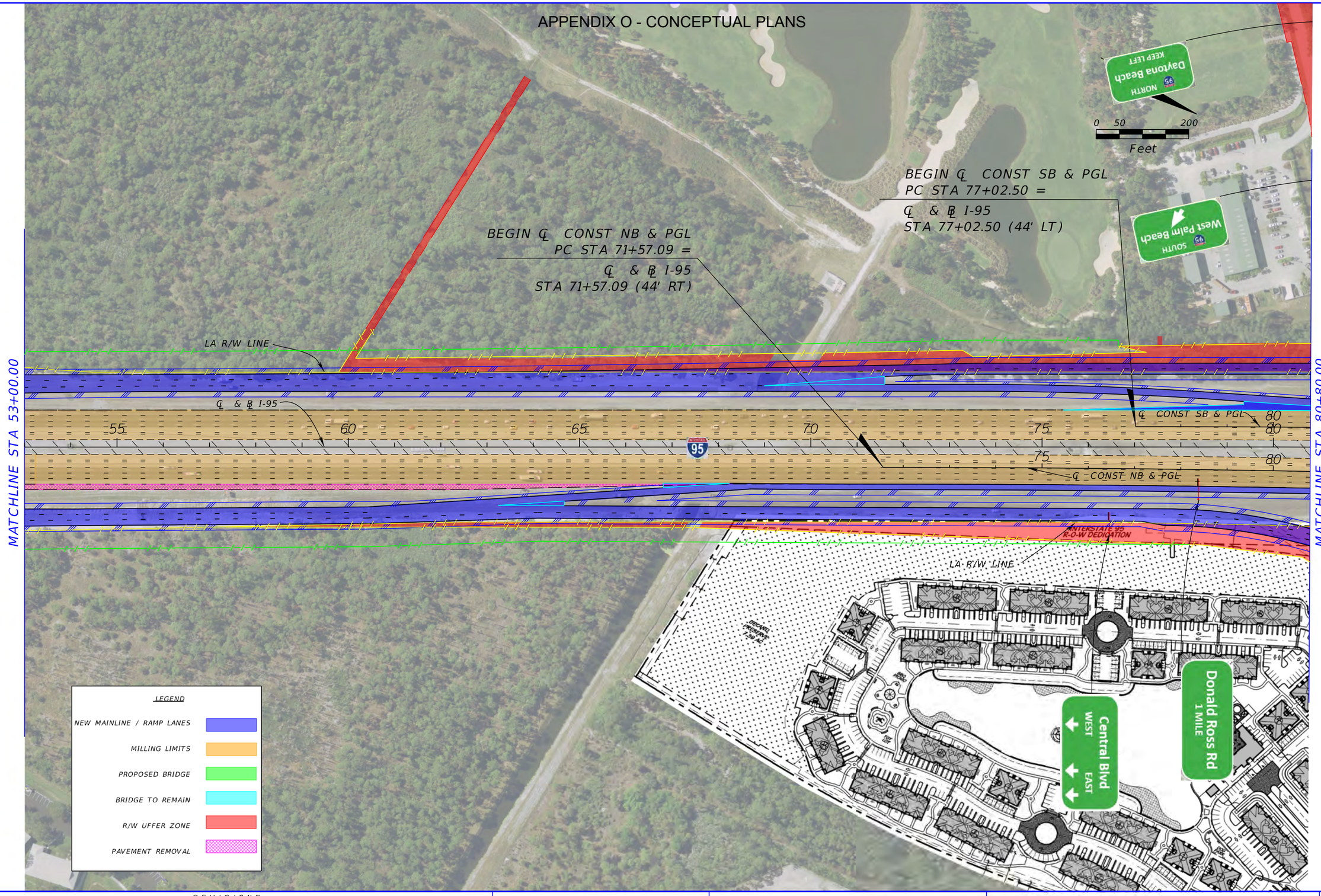

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
9-28-15					

PG | O-8

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
9	PALM BEACH	413265-1-22-01

I-95 FROM N. LAKE TO DONALD ROSS RD. (ALT 2)

SHEET NO. 7

SEE SHEET 12 FOR CENTRAL AVENUE IMPROVEMENTS

MATCHLINE STA 80+80.00

MATCHLINE STA 108+60.00

Central Blvd WEST EAST

Military Trail EXIT

Military Trail 1/2 MILE EXIT

CENTRAL BLVD.

SOUTH West Palm Beach

NORTH Daytona Beach NEXT LEFT

NORTH Daytona Beach

SOUTH West Palm Beach KEEP LEFT

Donald Ross Rd 1/2 MILE

I-95

I-95

CENTRAL BLVD.

CENTRAL BLVD.

LA R/W LINE

LA R/W LINE

LA R/W LINE

EXIST. BRIDGE 930379

℄ CONST SB & PGL

℄ & ℄ I-95

℄ CONST NB & PGL

90

90

90

95

95

100

105

205

210

25.0' PCD BUFFER 0.42 AC.

MXD Residential Pod 11.30 Acres

Upland Preserve 1.35 Acres

Proposed Lake 1.25 Ac.

15.0' PCD BUFFER 0.29 AC.

Upland Preserve 0.67 Acres

Parcel B 19.02 A

PST STA. 210+00.00

DELAND PRESERVE 1.42 AC.

N

0 50 200

Feet

LEGEND

NEW MAINLINE / RAMP LANES

MILLING LIMITS

PROPOSED BRIDGE

BRIDGE TO REMAIN

R/W BUFFER ZONE

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
9-28-15					

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
9	PALM BEACH	413265-1-22-01

I-95 FROM N. LAKE TO DONALD ROSS RD. (ALT 2)

SHEET NO. 8

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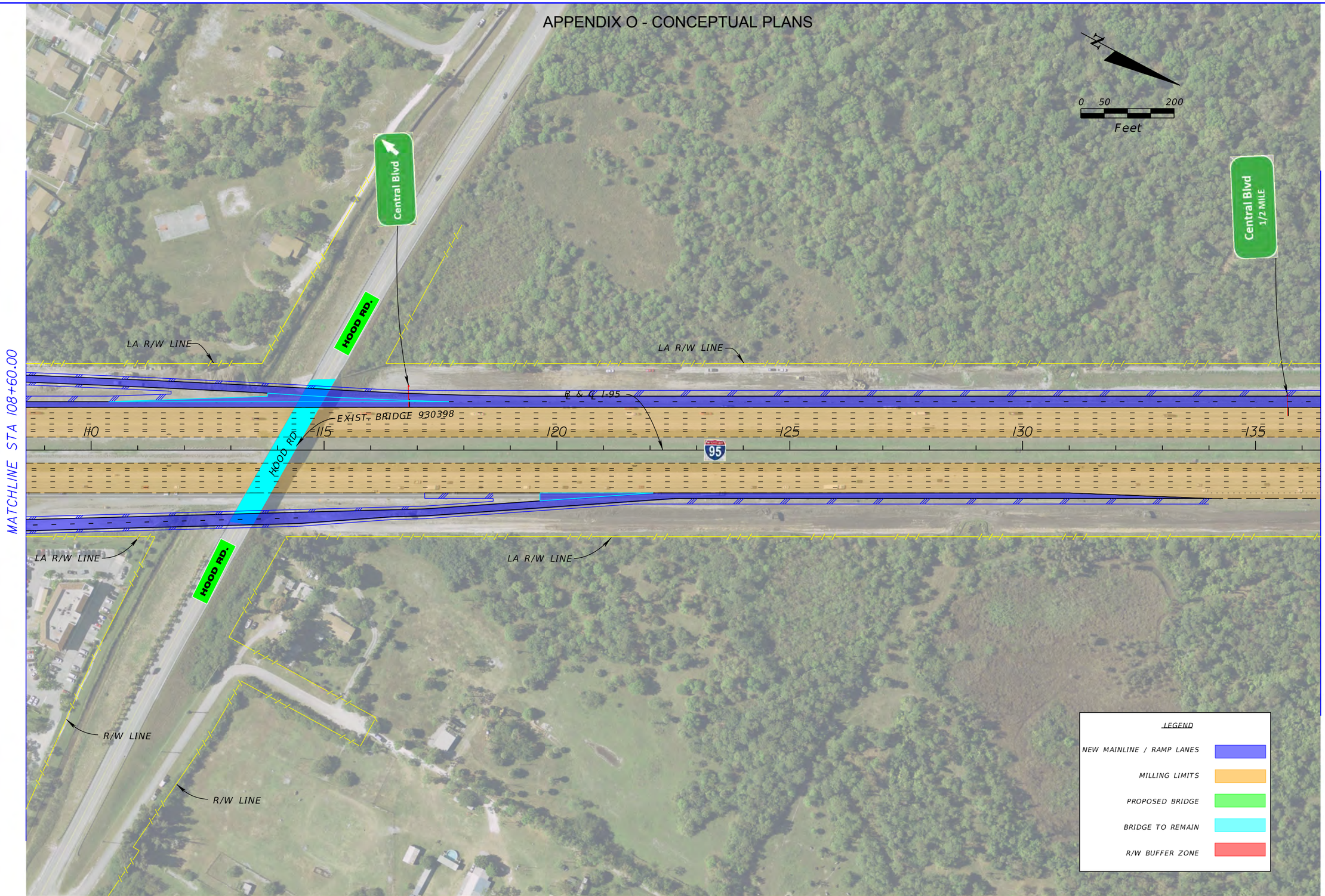


REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
9-28-15					

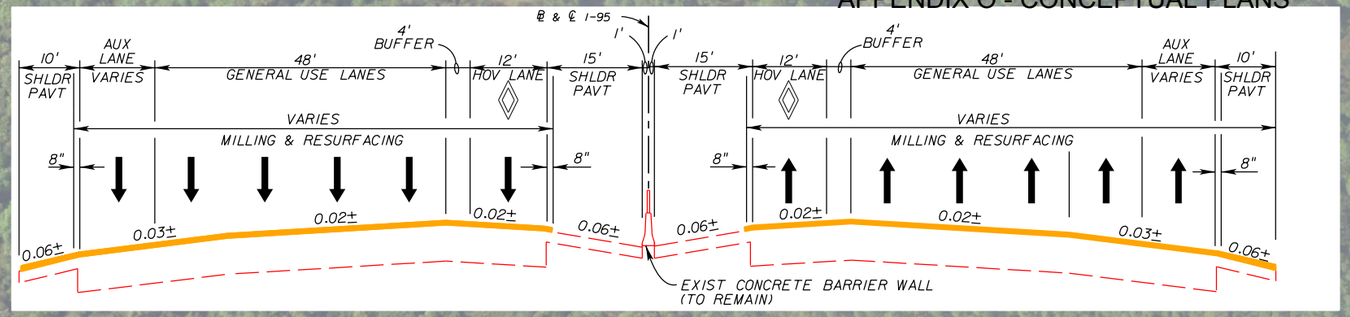
PG | O-10

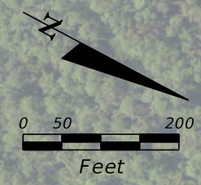
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
9	PALM BEACH	413265-1-22-01

I-95 FROM N. LAKE TO DONALD ROSS RD. (ALT 2)

SHEET NO. 9





MATCHLINE STA 136+40.00

MATCHLINE STA 164+20.00

Central Blvd
1 MILE

LA R/W LINE

℄ & ℄ I-95

500

505

510

140

145

150

155

160

95

LA R/W LINE

Donald Ross Rd

LEGEND

- NEW MAINLINE / RAMP LANES
- MILLING LIMITS
- PROPOSED BRIDGE
- BRIDGE TO REMAIN
- R/W BUFFER ZONE

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
9-28-15					

PG | O-11

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
9	PALM BEACH	413265-1-22-01

I-95 FROM N. LAKE TO DONALD ROSS RD. (ALT 2)

SHEET NO. 10

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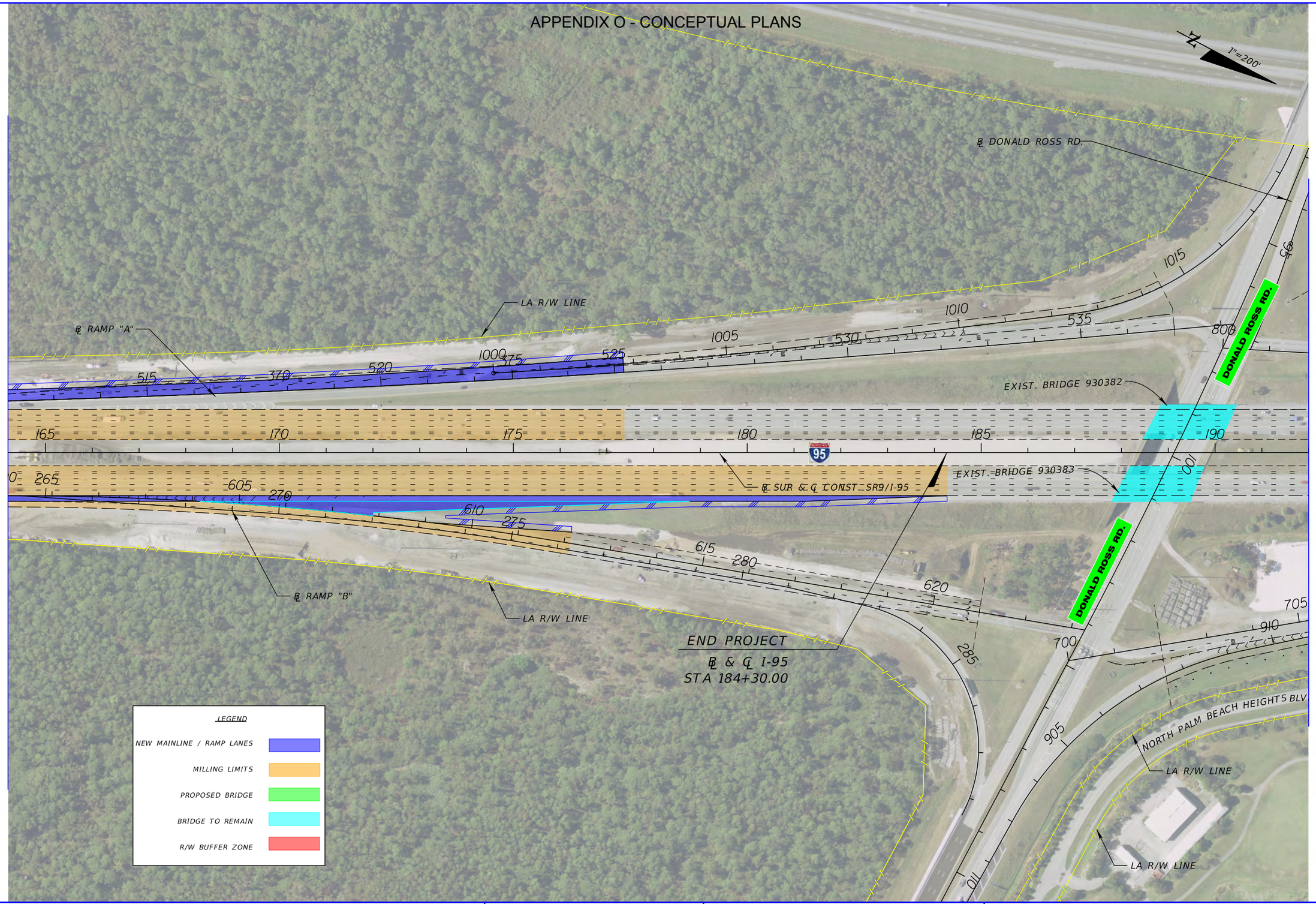

MATCHLINE STA 164+20.00

MATCHLINE STA 192+00.00

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
9-28-15					

PG | O-12

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 9	PALM BEACH	413265-1-22-01

I-95 FROM N. LAKE TO DONALD ROSS RD. (ALT 2)

SHEET NO. 11

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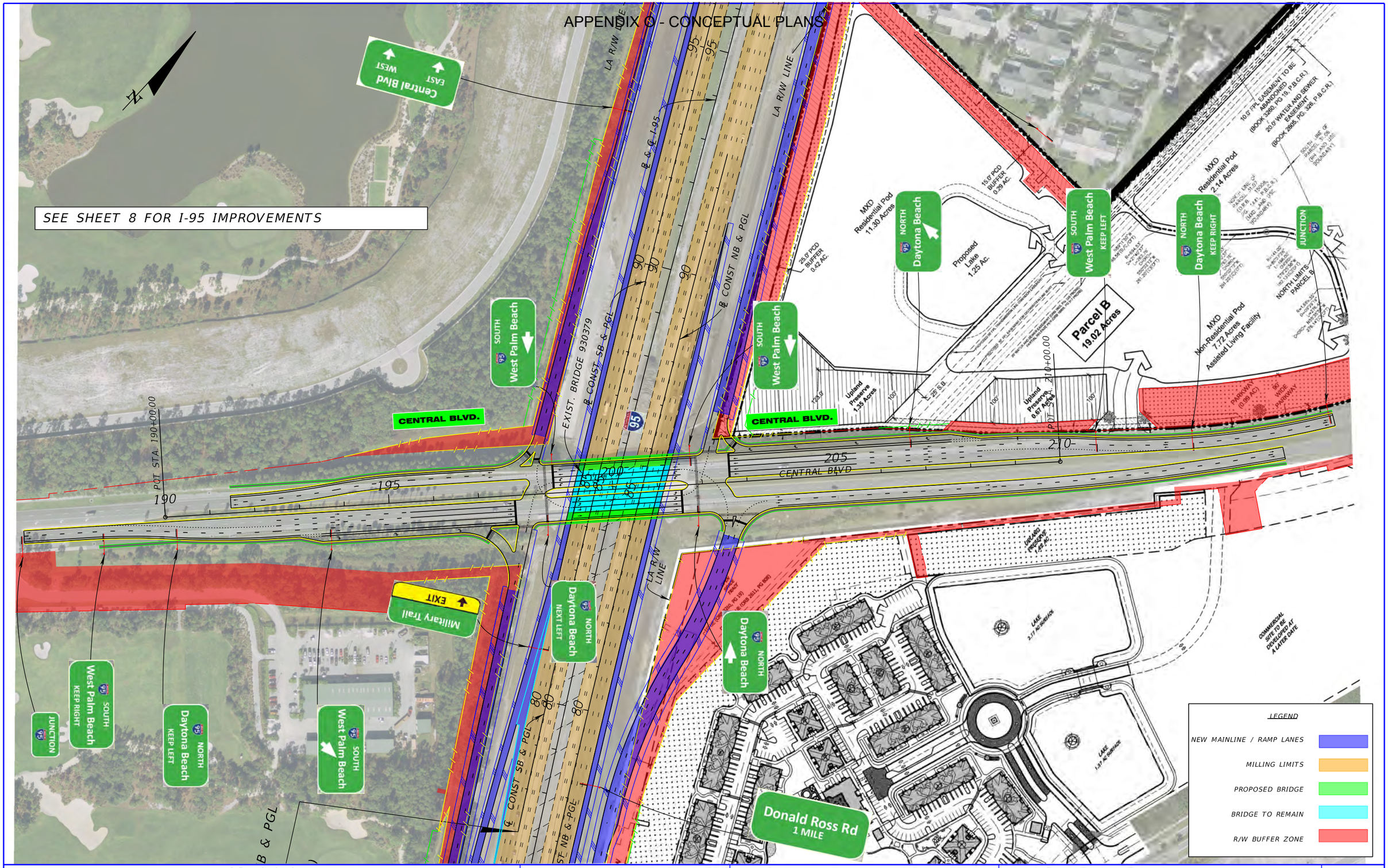


REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
9-28-15					

PG | O-13

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
9	PALM BEACH	413265-1-22-01

I-95 FROM N. LAKE TO DONALD ROSS RD. (ALT 2)

SHEET NO. 12

APPENDIX O - CONCEPTUAL PLANS

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

COMPONENTS OF CONTRACT PLANS SET
ROADWAY PLANS

A DETAILED INDEX APPEARS ON THE
KEY SHEET OF EACH COMPONENT

INDEX OF ROADWAY PLANS

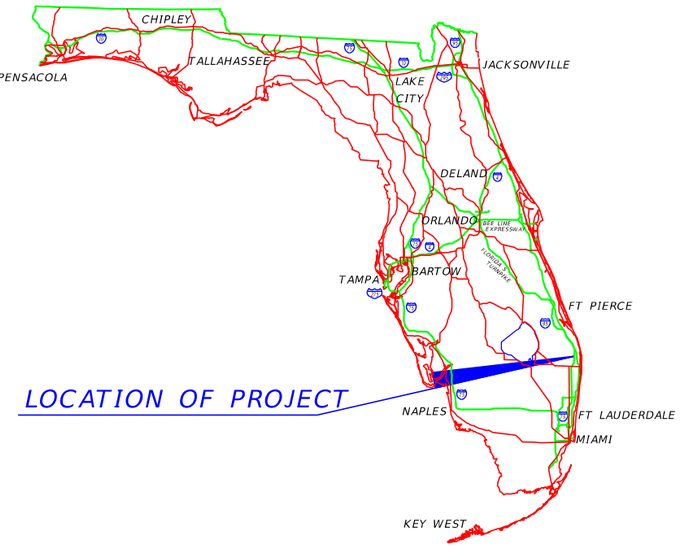
SHEET NO.	SHEET DESCRIPTION
1A	KEY SHEET
1 - 9	CONCEPT PLANS

CONTRACT PLANS

FINANCIAL PROJECT ID 413265-1-22-01
(FEDERAL FUNDS)
PALM BEACH COUNTY (93220)

I-95 (SR 9)
FROM NORTH OF NORTHLAKE BOULEVARD (MP 36.575)
TO SOUTH OF DONALD ROSS ROAD (MP 38.775)

ALT - 3



END PROJECT
STA. 1925+00

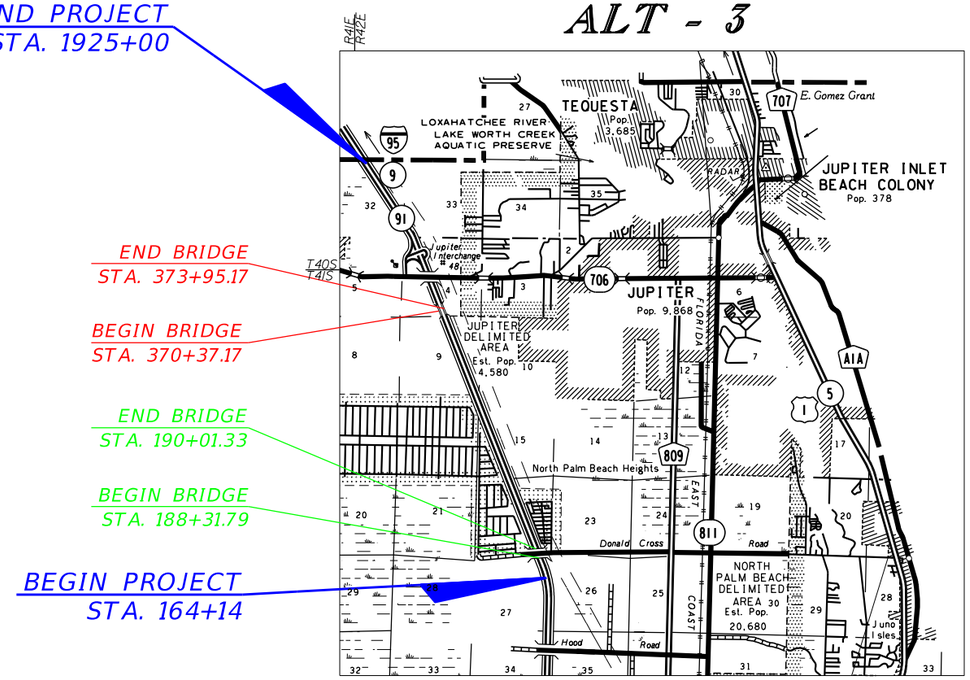
END BRIDGE
STA. 373+95.17

BEGIN BRIDGE
STA. 370+37.17

END BRIDGE
STA. 190+01.33

BEGIN BRIDGE
STA. 188+31.79

BEGIN PROJECT
STA. 164+14



N

0 1 2
Miles

NOTE: THE SCALE OF THESE PLANS MAY
HAVE CHANGED DUE TO REPRODUCTION.

PROJECT LENGTH IS BASED ON { OF CONSTRUCTION

LENGTH OF PROJECT		
	LINEAR FEET	MILES
ROADWAY		
BRIDGES		
NET LENGTH OF PROJECT		
EXCEPTIONS		
GROSS LENGTH OF PROJECT		

KEY SHEET REVISIONS		
DATE	BY	DESCRIPTION

ROADWAY PLANS
ENGINEER OF RECORD: _____

P.E. NO.: _____

FISCAL YEAR	SHEET NO.
16	1A

FDOT PROJECT MANAGER

9-28-15

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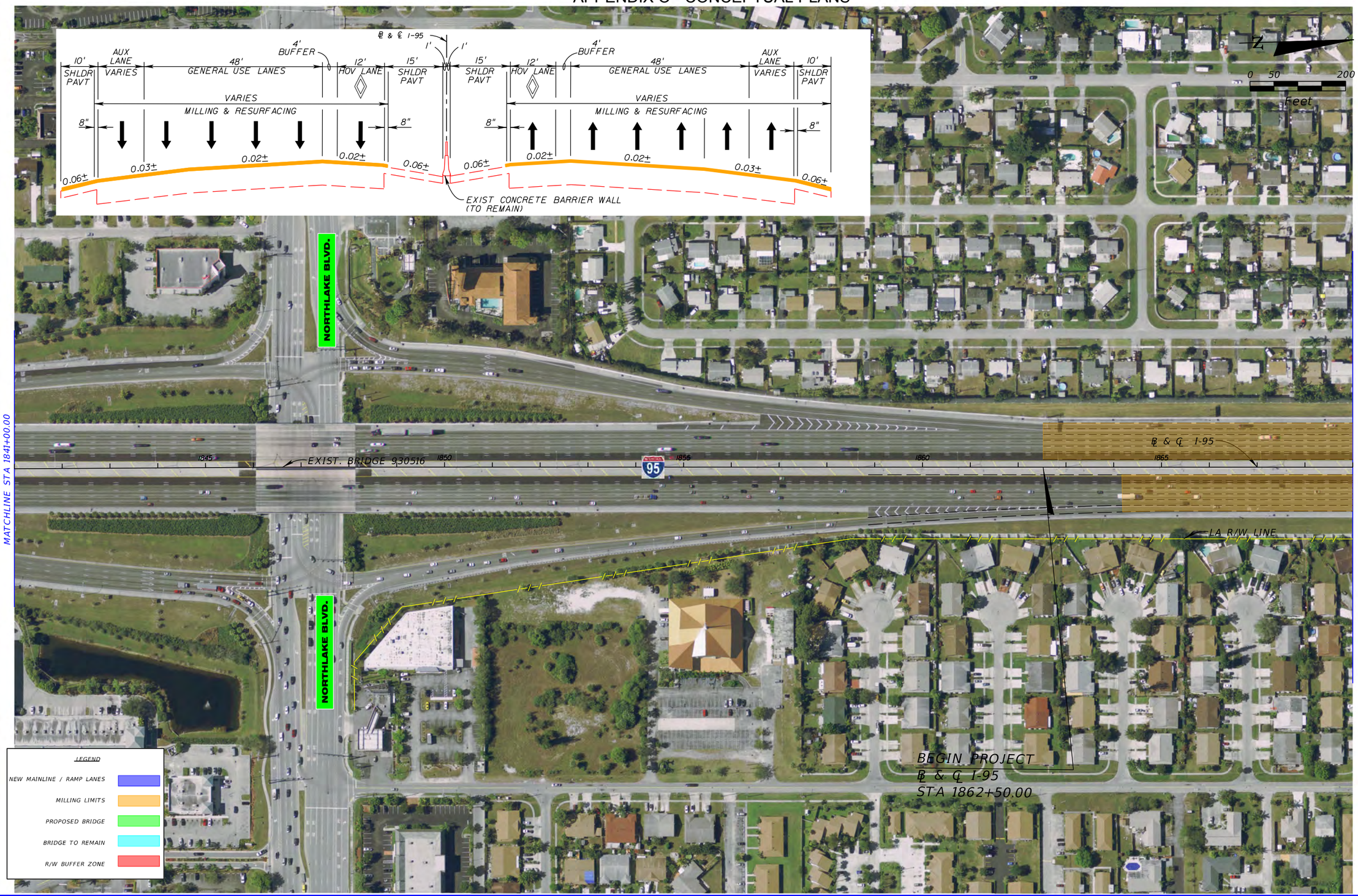


REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
9-28-15					

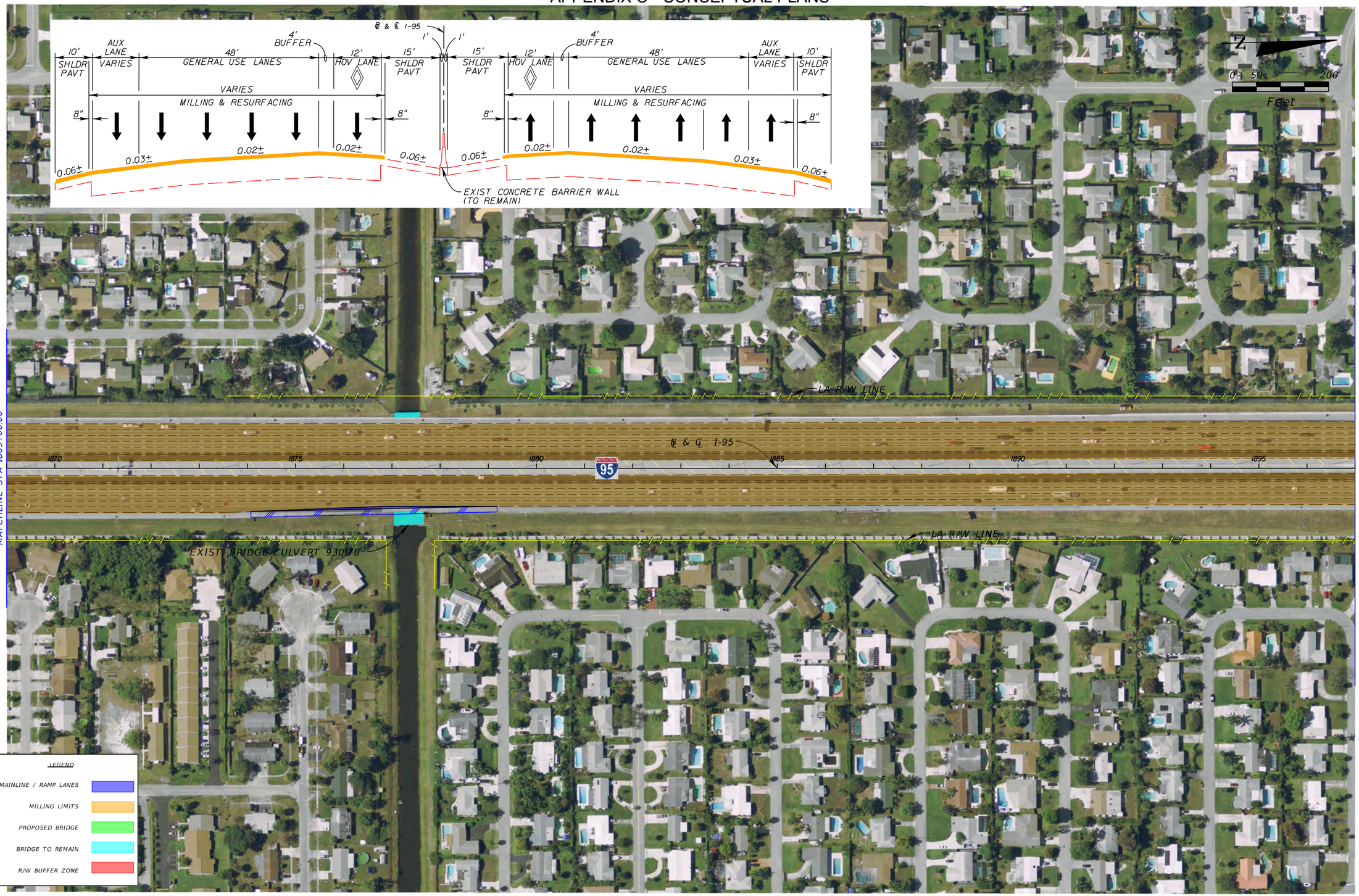
PG | O-15

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
9	PALM BEACH	413265-1-22-01

I-95 FROM N. LAKE TO DONALD ROSS RD. (ALT 3)

SHEET NO. 1



REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
9-28-15					

PG | O-16

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
9	PALM BEACH	413265-1-22-01

I-95 FROM N. LAKE TO DONALD ROSS RD. (ALT 3)

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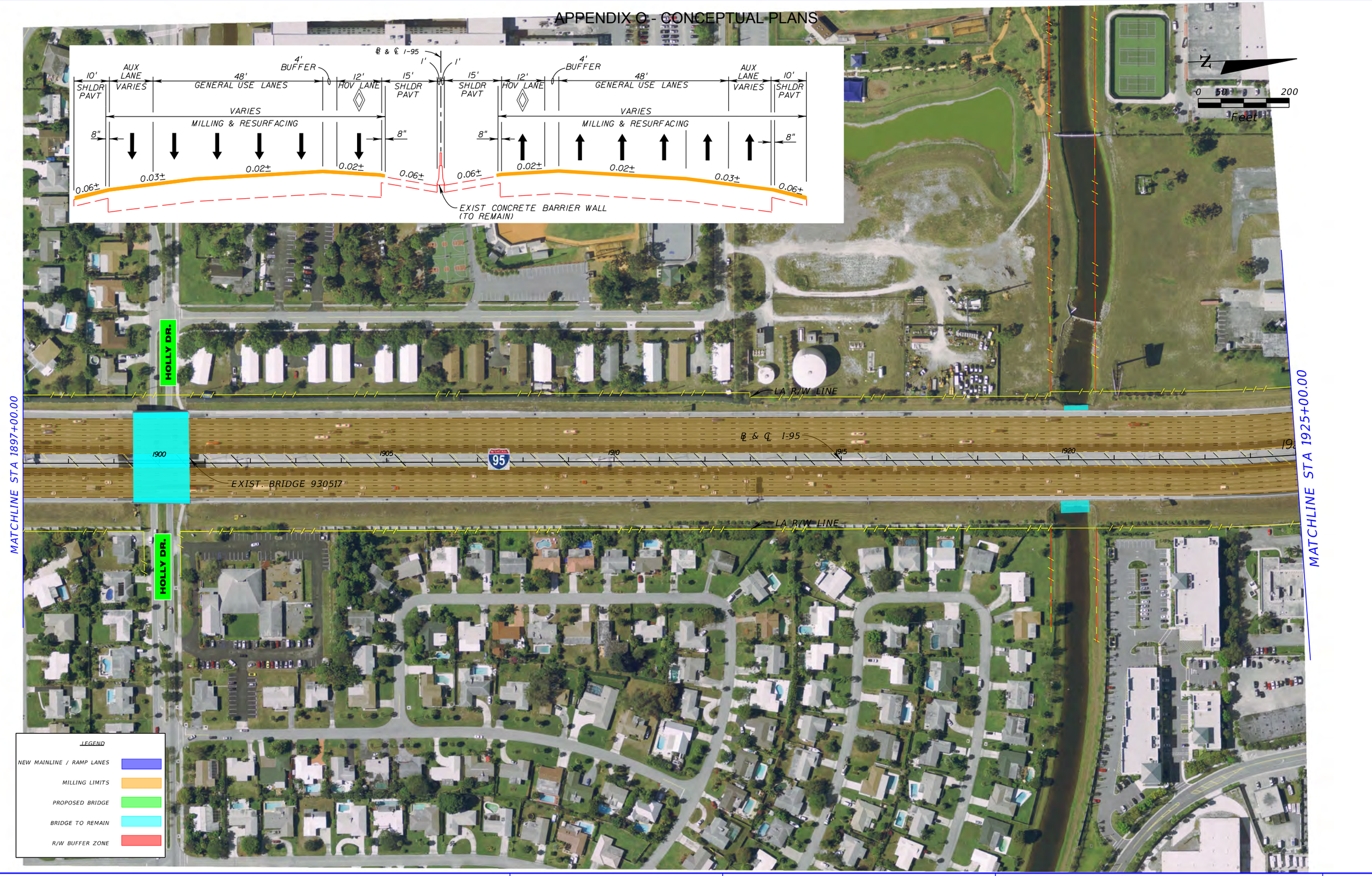


REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
9-28-15					

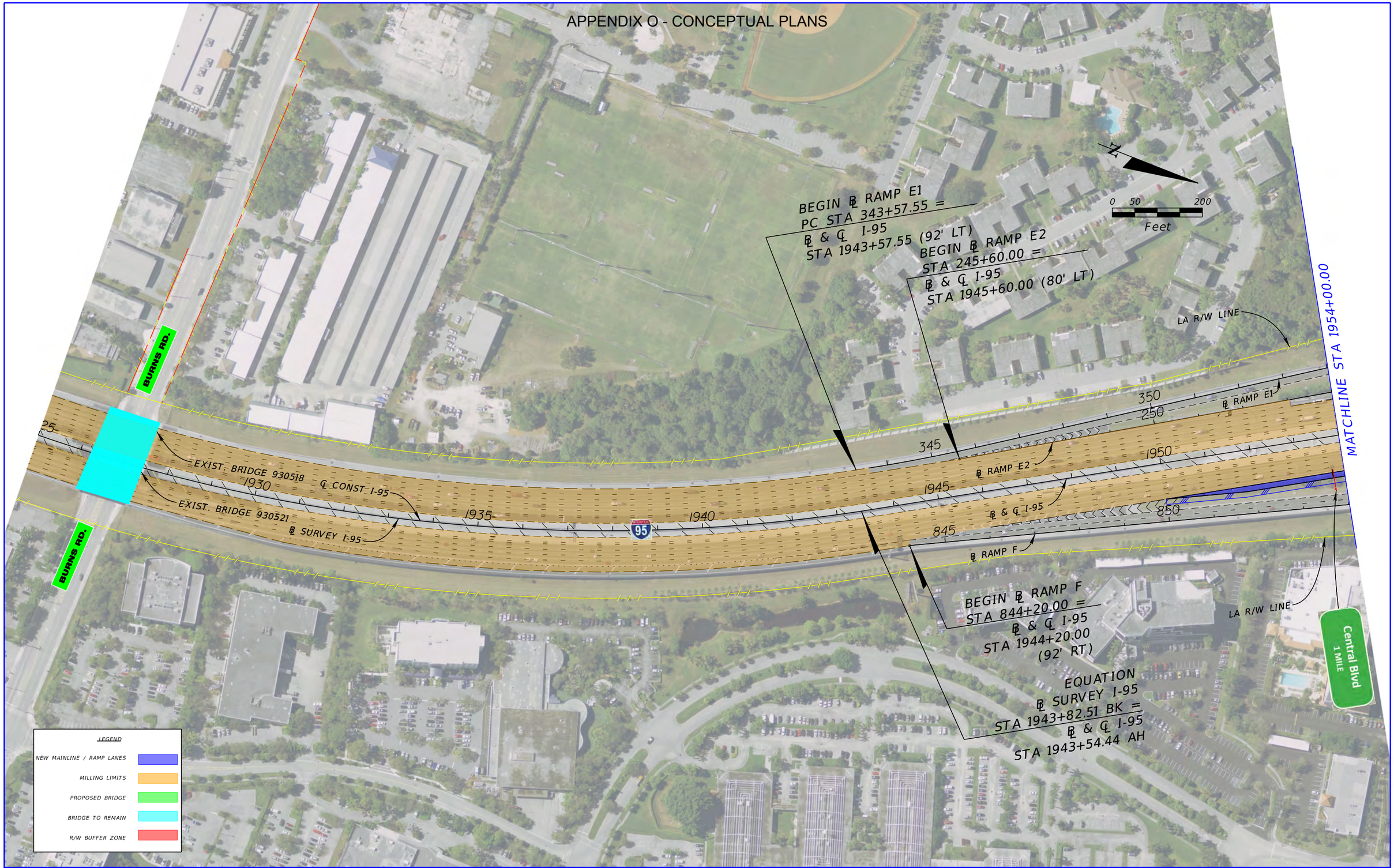
PG | O-17

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
9	PALM BEACH	413265-1-22-01

I-95 FROM N. LAKE TO DONALD ROSS RD. (ALT 3)

SHEET NO. 3



REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
9-28-15					

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
9	PALM BEACH	413265-1-22-01

I-95 FROM N. LAKE TO DONALD ROSS RD. (ALT 3)

SHEET NO. 4

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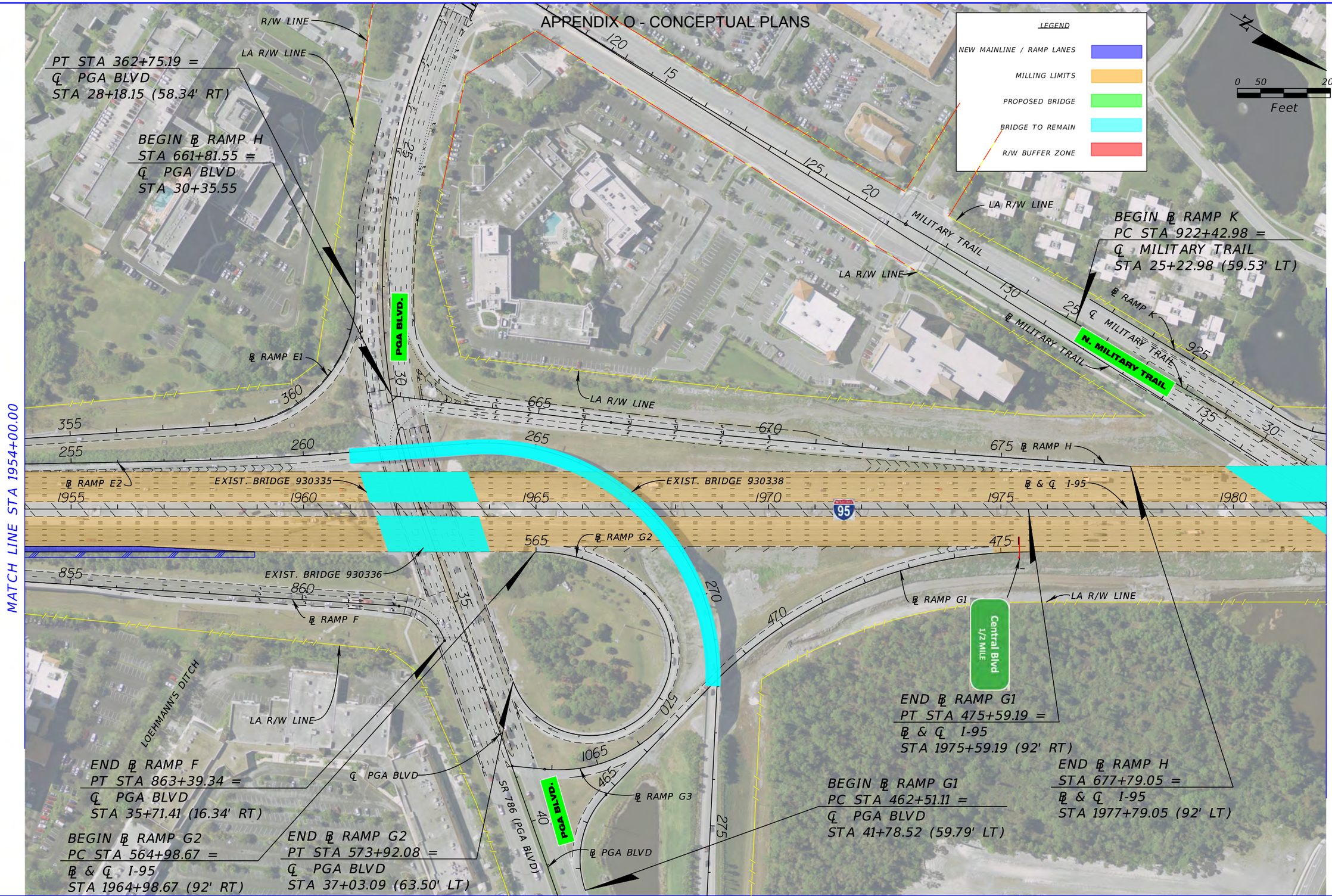

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
9-28-15					

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
9	PALM BEACH	413265-1-22-01

I-95 FROM N. LAKE TO DONALD ROSS RD. (ALT 3)

SHEET NO. 5

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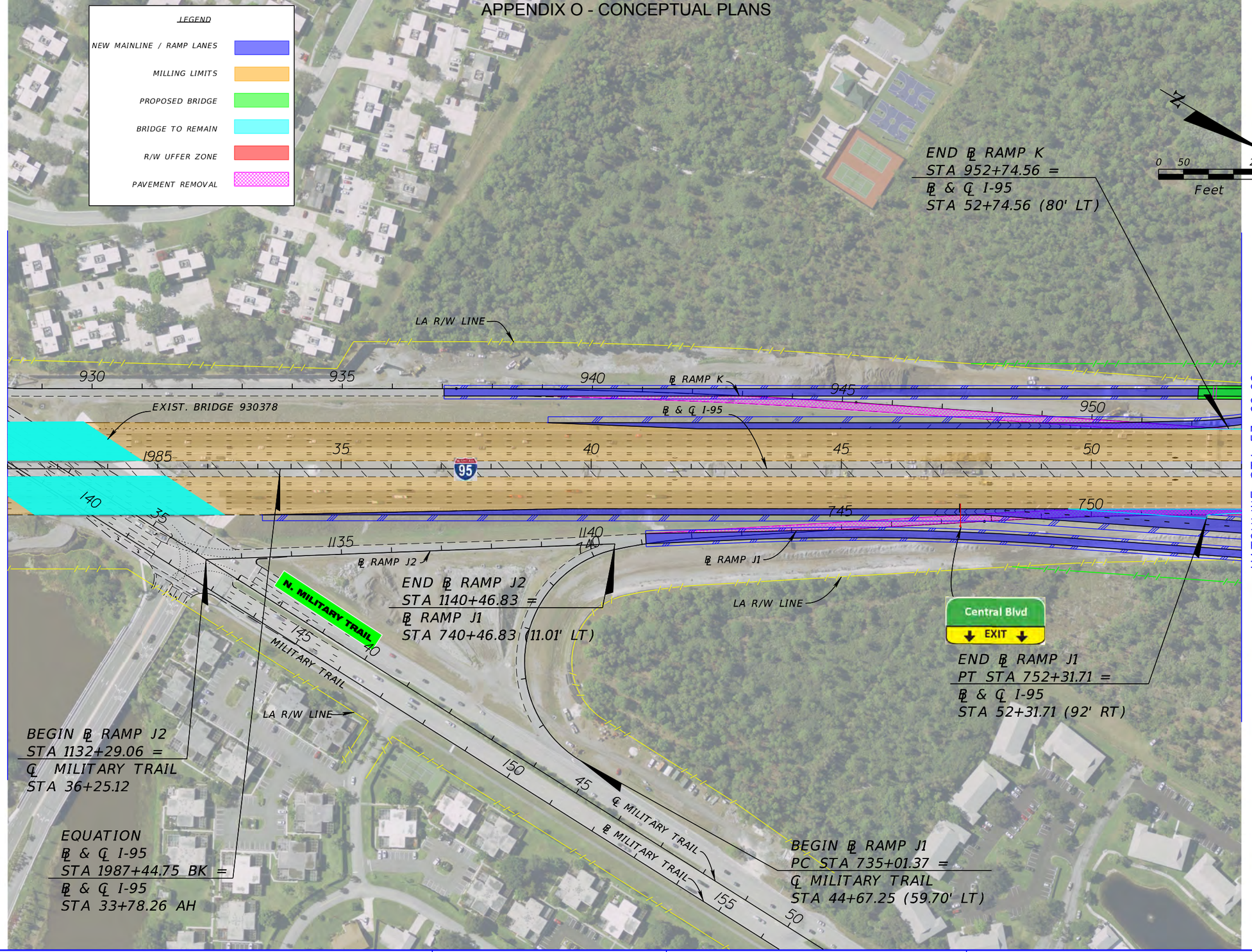

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
9-28-15					

PG | O-20

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
9	PALM BEACH	413265-1-22-01

I-95 FROM N. LAKE TO DONALD ROSS RD. (ALT 3)

SHEET NO. 6

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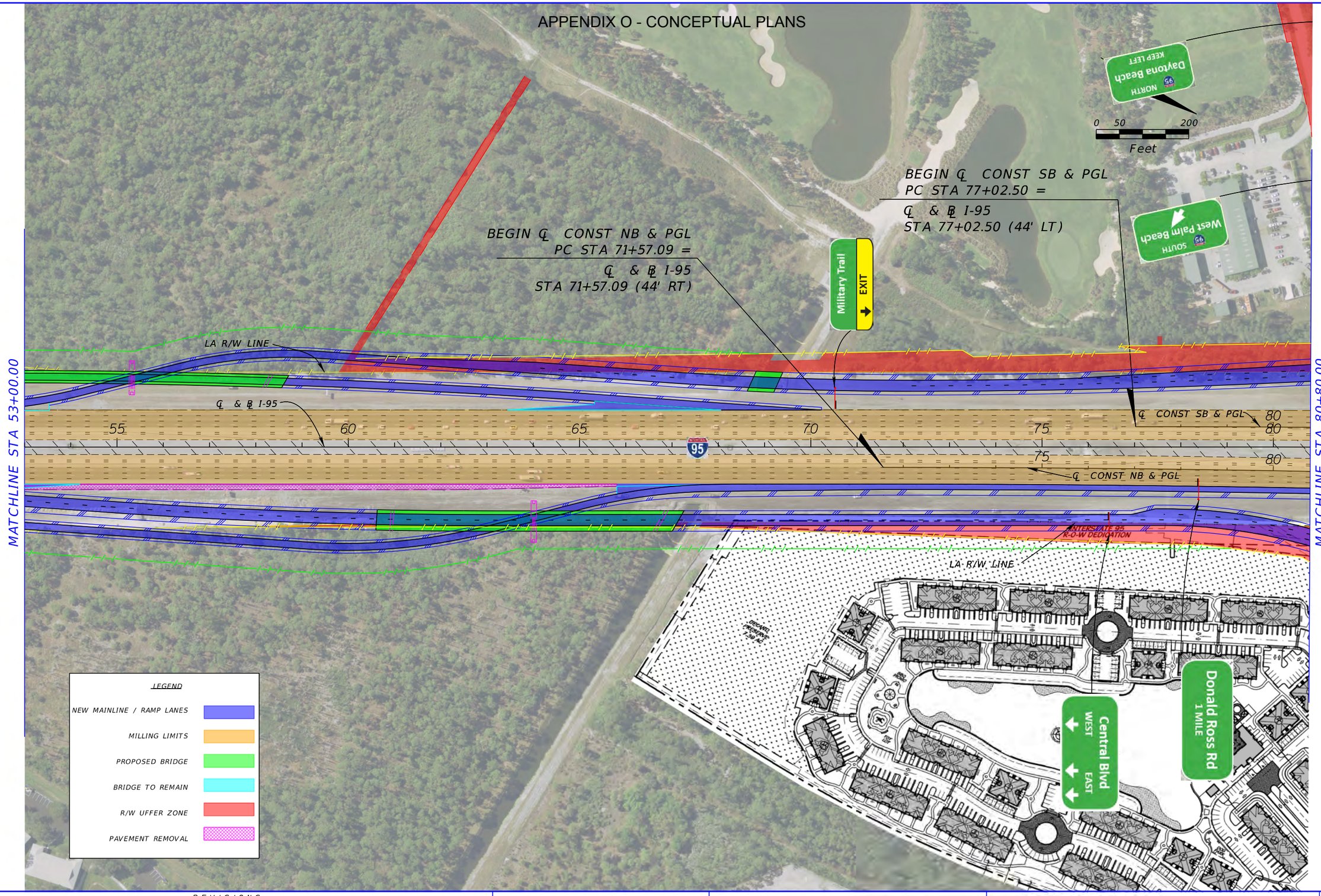

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
9-28-15					

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
9	PALM BEACH	413265-1-22-01

I-95 FROM N. LAKE TO DONALD ROSS RD. (ALT 3)

SHEET NO. 7

rsaenz 9/28/2015 1:45:31 PM K:\0130151 I-95 at PGA PDE Study\roadway\planrd04_bcc - ALT 3.dgn

SEE SHEET 12 FOR CENTRAL AVENUE IMPROVEMENTS

MATCHLINE STA 80+80.00

MATCHLINE STA 108+60.00

CENTRAL BLVD.

Central Blvd WEST EAST

Military Trail 1/2 MILE EXIT

SOUTH West Palm Beach

NORTH Daytona Beach NEXT LEFT

SOUTH West Palm Beach KEEP LEFT

NORTH Daytona Beach

Donald Ross Rd 1/2 MILE

LA R/W LINE

EXIST. BRIDGE 930379

℄ CONST SB & PGL

℄ & ℄ I-95

℄ CONST NB & PGL

CENTRAL BLVD

MXD Residential Pod 11.30 Acres

Proposed Lake 1.25 Ac.

Upland Preserve 1.35 Acres

Upland Preserve 0.67 Acres

25.0' PCD BUFFER 0.42 AC.

15.0' PCD BUFFER 0.29 AC.

Parcel B 19.02 A

DELAND PRESERVE 1.42 AC.

POT STA. 210+00.00

N

0 50 200

Feet

LEGEND

- NEW MAINLINE / RAMP LANES
- MILLING LIMITS
- PROPOSED BRIDGE
- BRIDGE TO REMAIN
- R/W BUFFER ZONE

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
9-28-15					

PG | O-22

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
9	PALM BEACH	413265-1-22-01

I-95 FROM N. LAKE TO DONALD ROSS RD. (ALT 3)

SHEET NO. 8

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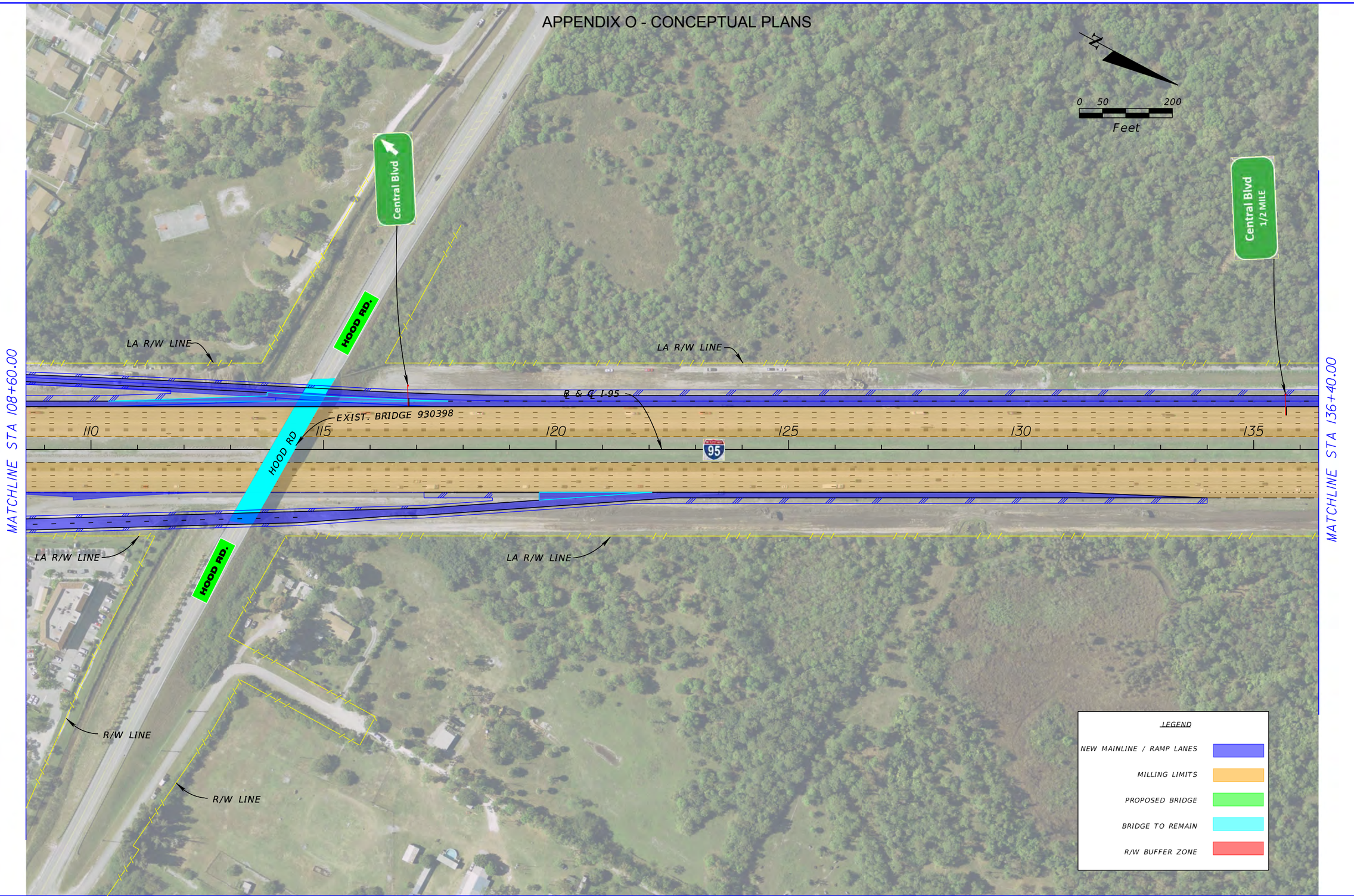

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
9-28-15					

PG | O-23

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
9	PALM BEACH	413265-1-22-01

I-95 FROM N. LAKE TO DONALD ROSS RD. (ALT 3)

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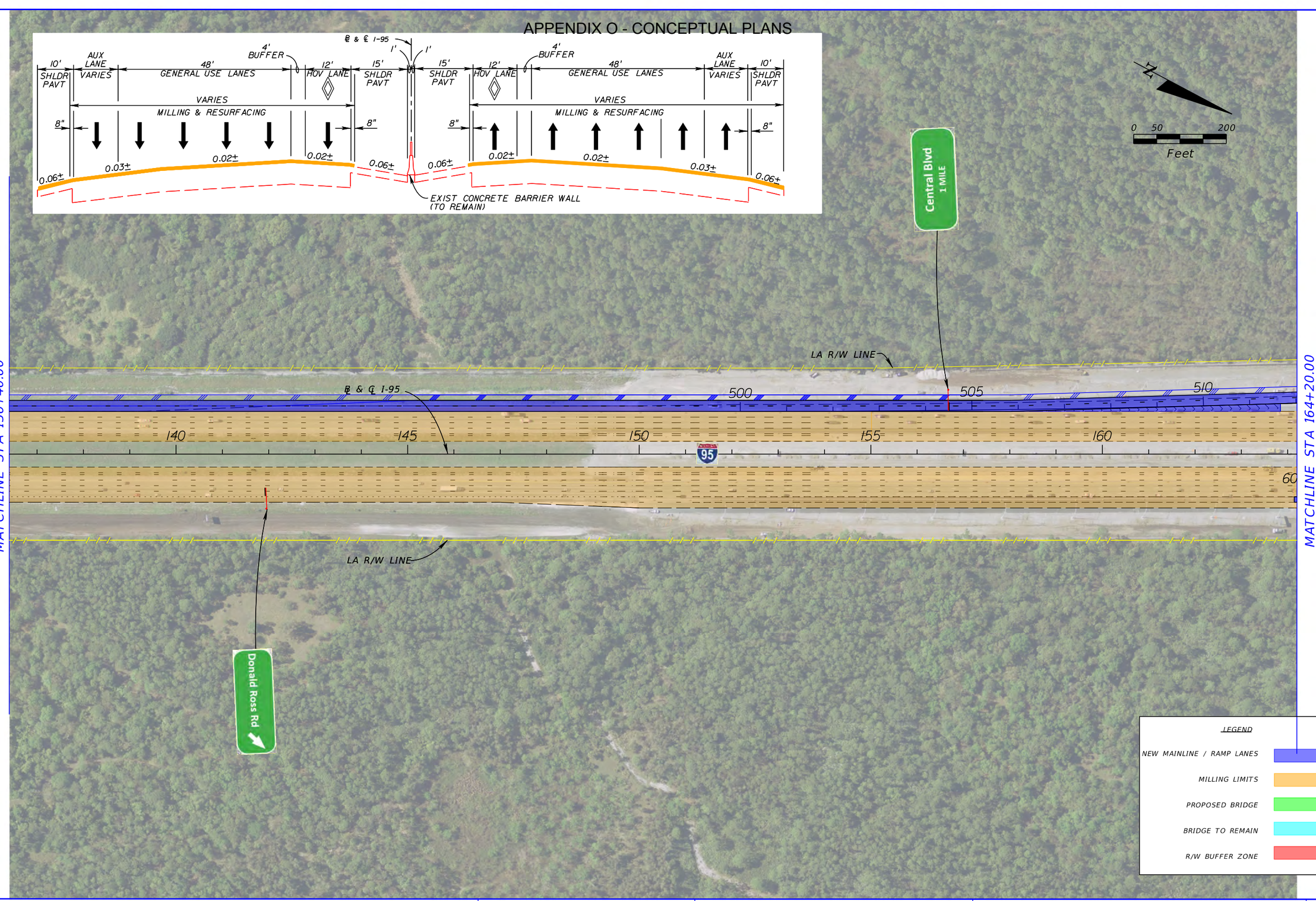

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
9-28-15					

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
9	PALM BEACH	413265-1-22-01

I-95 FROM N. LAKE TO DONALD ROSS RD. (ALT 3)

SHEET NO. 10

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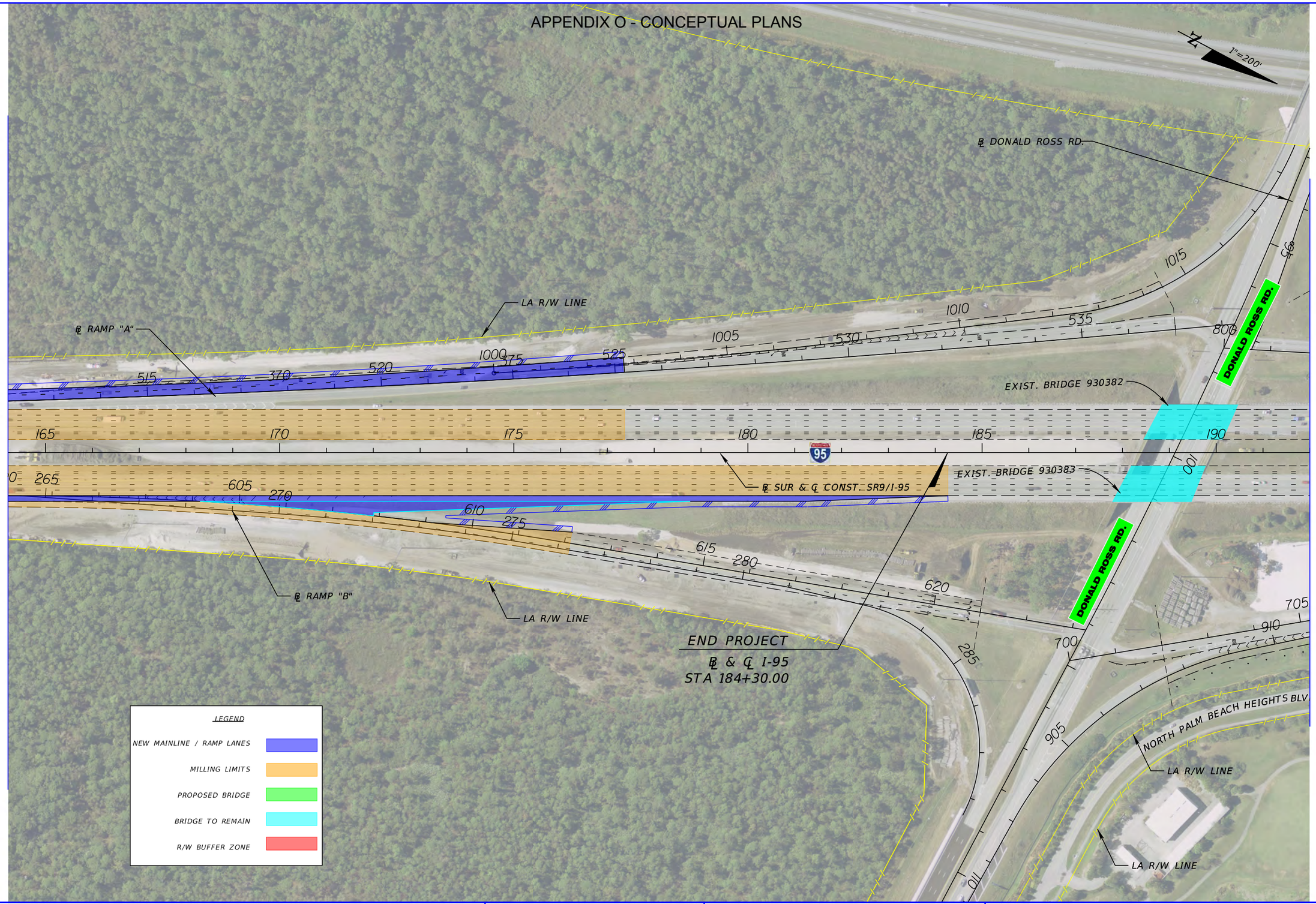


REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
9-28-15					

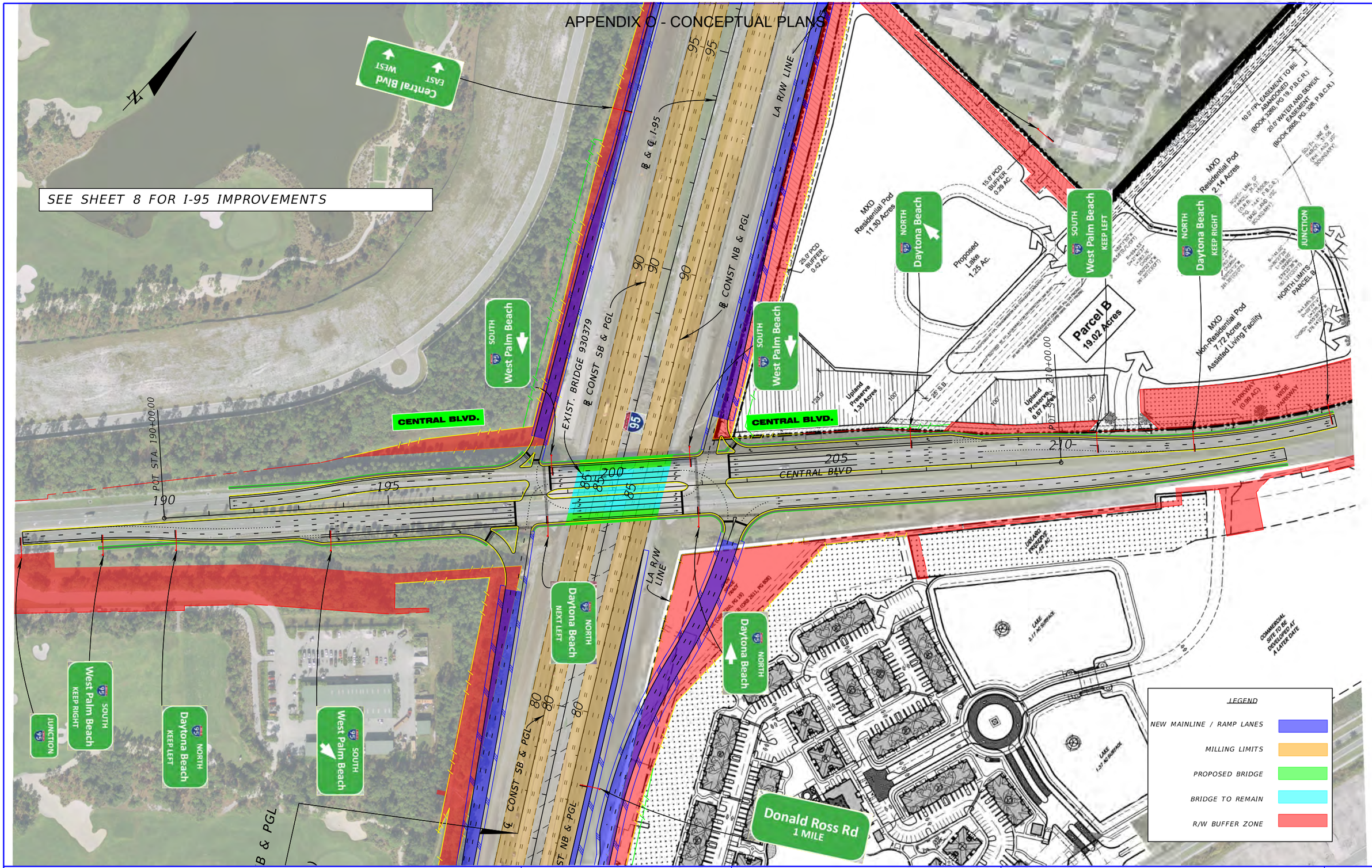
PG | O-25

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 9	PALM BEACH	413265-1-22-01

I-95 FROM N. LAKE TO DONALD ROSS RD. (ALT 3)

SHEET NO. 11



REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
9-28-15					

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
9	PALM BEACH	413265-1-22-01

I-95 FROM N. LAKE TO DONALD ROSS RD. (ALT 3)

SHEET NO. 12

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APPENDIX P

SYNCHRO REPORTS

BUILD 2020 AM

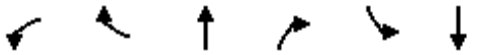
CENTRAL BOULEVARD CORRIDOR

Arterial Level of Service: NB Central Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
PGA Blvd	II	45	11.9	40.1	52.0	0.11	7.5	F
117 Ct	II	45	61.9	10.9	72.8	0.77	38.3	A
SB On Ramp	II	45	52.1	20.0	72.1	0.65	32.4	B
NB Off Ramp	II	45	9.8	27.9	37.7	0.09	8.6	F
Victoria Falls Blvd	II	45	30.0	10.9	40.9	0.30	26.7	C
Hood Rd	II	45	23.7	43.4	67.1	0.23	12.2	F
Donald Ross	II	45	100.8	72.2	173.0	1.26	26.2	C
Total	II		290.2	225.4	515.6	3.41	23.8	C

Arterial Level of Service: SB Central Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Donald Ross	II	45	22.2	50.3	72.5	0.20	10.1	F
Hood Rd	II	45	100.8	30.3	131.1	1.26	34.6	B
	II	45	23.7	8.7	32.4	0.23	25.3	C
NB On Ramp	II	45	30.0	17.9	47.9	0.30	22.8	C
SB Off Ramp	II	45	9.8	2.9	12.7	0.09	25.4	C
117 Ct	II	45	52.1	5.7	57.8	0.65	40.5	A
PGA Blvd	II	45	61.9	59.3	121.2	0.77	23.0	C
Total	II		300.5	175.1	475.6	3.51	26.6	C



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	194	152	954	196	68	712
Number	3	18	2	12	1	6
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	204	160	1004	206	72	749
Adj No. of Lanes	1	1	2	1	1	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	278	248	2066	924	382	2442
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.16	0.16	0.58	0.58	0.04	0.69
Ln Grp Delay, s/veh	29.9	28.6	8.7	7.1	5.7	4.3
Ln Grp LOS	C	C	A	A	A	A
Approach Vol, veh/h	364		1210			821
Approach Delay, s/veh	29.3		8.4			4.4
Approach LOS	C		A			A

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	8			6		
Case No	1.2	7.0	9.0			4.0		
Phs Duration (G+Y+Rc), s	6.9	43.1	15.2			50.0		
Change Period (Y+Rc), s	4.0	5.0	5.0			5.0		
Max Green (Gmax), s	4.0	37.0	60.0			45.0		
Max Allow Headway (MAH), s	3.7	4.8	3.8			4.8		
Max Q Clear (g_c+I1), s	2.9	12.8	9.1			7.4		
Green Ext Time (g_e), s	0.0	13.7	1.1			17.1		
Prob of Phs Call (p_c)	0.73	1.00	1.00			1.00		
Prob of Max Out (p_x)	1.00	0.00	0.00			0.00		
Left-Turn Movement Data								
Assigned Mvmt	1	5	3					
Mvmt Sat Flow, veh/h	1774	0	1774					
Through Movement Data								
Assigned Mvmt		2	8			6		
Mvmt Sat Flow, veh/h		3632	0			3632		
Right-Turn Movement Data								
Assigned Mvmt		12	18			16		
Mvmt Sat Flow, veh/h		1583	1583			0		
Left Lane Group Data								
Assigned Mvmt	1	5	3	0	0	0	0	0
Lane Assignment	(Pr/Pm)							
Lanes in Grp	1	0	1	0	0	0	0	0

Grp Vol (v), veh/h	72	0	204	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1774	0	1774	0	0	0	0	0
Q Serve Time (g_s), s	0.9	0.0	7.1	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.9	0.0	7.1	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	460	0	1774	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	40.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	27.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	38.1	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	382	0	278	0	0	0	0	0
V/C Ratio (X)	0.19	0.00	0.73	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	412	0	1632	0	0	0	0	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	5.4	0.0	26.2	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.0	3.7	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	5.7	0.0	29.9	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.4	0.0	3.5	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	1.00	1.80	0.00	0.00	0.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.8	0.0	6.8	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.06	0.00	0.36	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	0	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	1004	0	0	0	749	0	0
Grp Sat Flow (s), veh/h/ln	0	1770	0	0	0	1770	0	0
Q Serve Time (g_s), s	0.0	10.8	0.0	0.0	0.0	5.4	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	10.8	0.0	0.0	0.0	5.4	0.0	0.0
Lane Grp Cap (c), veh/h	0	2066	0	0	0	2442	0	0
V/C Ratio (X)	0.00	0.49	0.00	0.00	0.00	0.31	0.00	0.00
Avail Cap (c_a), veh/h	0	2066	0	0	0	2442	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	7.9	0.0	0.0	0.0	4.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.8	0.0	0.0	0.0	0.3	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	8.7	0.0	0.0	0.0	4.3	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	5.2	0.0	0.0	0.0	2.6	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.0	0.0	0.1	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.71	1.00	0.00	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	9.2	0.0	0.0	0.0	4.9	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.41	0.00	0.00	0.00	0.24	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	18	0	0	16	0	0
Lane Assignment		R	R					
Lanes in Grp	0	1	1	0	0	0	0	0
Grp Vol (v), veh/h	0	206	160	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1583	1583	0	0	0	0	0
Q Serve Time (g_s), s	0.0	4.1	6.2	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	4.1	6.2	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	924	248	0	0	0	0	0
V/C Ratio (X)	0.00	0.22	0.64	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	924	1456	0	0	0	0	0
Upstream Filter (I)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	6.5	25.8	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.6	2.8	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	7.1	28.6	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	1.8	2.7	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.2	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	1.80	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	3.5	5.2	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.23	0.47	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		10.2						
HCM 2010 LOS		B						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	121	13	10	86	12	69	22	1637	140	108	1482	37
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	127	14	11	91	13	73	23	1723	147	114	1560	39
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	187	103	81	95	46	257	229	2511	212	168	2689	1203
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.11	0.11	0.11	0.05	0.19	0.19	0.76	0.76	0.76	0.76	0.76	0.76
Ln Grp Delay, s/veh	75.7	0.0	61.0	150.5	0.0	52.9	15.1	10.3	10.7	47.0	8.0	4.4
Ln Grp LOS	E		E	F		D	B	B	B	D	A	A
Approach Vol, veh/h		152			177			1893			1713	
Approach Delay, s/veh		73.2			103.1			10.6			10.6	
Approach LOS		E			F			B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6		8
Case No		6.0	2.0	6.0		5.0		4.0
Phs Duration (G+Y+Rc), s		117.9	12.0	20.0		117.9		32.0
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0		4.0
Max Green (Gmax), s		114.0	8.0	16.0		114.0		28.0
Max Allow Headway (MAH), s		5.2	3.7	4.5		5.2		4.5
Max Q Clear (g_c+I1), s		42.2	9.7	16.4		109.3		8.8
Green Ext Time (g_e), s		63.3	0.0	0.0		4.6		0.9
Prob of Phs Call (p_c)		1.00	0.98	1.00		1.00		1.00
Prob of Max Out (p_x)		0.86	1.00	1.00		1.00		0.00

Left-Turn Movement Data								
Assigned Mvmt		5	3	7		1		
Mvmt Sat Flow, veh/h		317	1774	1306		243		

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3305		968		3539		245

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		279		761		1583		1375

Left Lane Group Data								
Assigned Mvmt	0	5	3	7	0	1	0	0
Lane Assignment			(Prot)					
Lanes in Grp	0	1	1	1	0	1	0	0

Grp Vol (v), veh/h	0	23	91	127	0	114	0	0
Grp Sat Flow (s), veh/h/ln	0	317	1774	1306	0	243	0	0
Q Serve Time (g_s), s	0.0	5.0	7.7	14.4	0.0	67.1	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	33.4	7.7	14.4	0.0	107.3	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	317	0	1306	0	243	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	113.9	0.0	16.0	0.0	113.9	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	85.6	0.0	16.0	0.0	73.7	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	5.0	0.0	14.4	0.0	67.1	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	229	95	187	0	168	0	0
V/C Ratio (X)	0.00	0.10	0.96	0.68	0.00	0.68	0.00	0.00
Avail Cap (c_a), veh/h	0	229	95	187	0	168	0	0
Upstream Filter (I)	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	14.9	70.8	66.3	0.0	36.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	79.7	9.4	0.0	10.5	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	15.1	150.5	75.7	0.0	47.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.4	3.8	5.2	0.0	4.5	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	2.1	0.5	0.0	0.5	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	1.68	1.69	0.00	1.73	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.8	9.8	9.6	0.0	8.7	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.07	0.37	1.63	0.00	0.63	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		
Lanes in Grp	0	1	0	0	0	2	0	0
Grp Vol (v), veh/h	0	913	0	0	0	1560	0	0
Grp Sat Flow (s), veh/h/ln	0	1770	0	0	0	1770	0	0
Q Serve Time (g_s), s	0.0	38.4	0.0	0.0	0.0	28.4	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	38.4	0.0	0.0	0.0	28.4	0.0	0.0
Lane Grp Cap (c), veh/h	0	1345	0	0	0	2689	0	0
V/C Ratio (X)	0.00	0.68	0.00	0.00	0.00	0.58	0.00	0.00
Avail Cap (c_a), veh/h	0	1345	0	0	0	2691	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	8.9	0.0	0.0	0.0	7.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.4	0.0	0.0	0.0	0.3	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	10.3	0.0	0.0	0.0	8.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	18.5	0.0	0.0	0.0	13.6	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	0.0	0.0	0.1	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.38	0.00	1.00	0.00	1.44	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	26.2	0.0	0.0	0.0	19.9	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	1.07	0.00	0.00	0.00	0.93	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	957	0	25	0	39	0	86
Grp Sat Flow (s), veh/h/ln	0	1814	0	1729	0	1583	0	1620
Q Serve Time (g_s), s	0.0	40.2	0.0	2.0	0.0	0.9	0.0	6.8
Cycle Q Clear Time (g_c), s	0.0	40.2	0.0	2.0	0.0	0.9	0.0	6.8
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.15	0.00	0.44	0.00	1.00	0.00	0.85
Lane Grp Cap (c), veh/h	0	1378	0	184	0	1203	0	303
V/C Ratio (X)	0.00	0.69	0.00	0.14	0.00	0.03	0.00	0.28
Avail Cap (c_a), veh/h	0	1379	0	184	0	1204	0	303
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	9.2	0.0	60.7	0.0	4.4	0.0	52.4
Incr Delay (d2), s/veh	0.0	1.5	0.0	0.3	0.0	0.0	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	10.7	0.0	61.0	0.0	4.4	0.0	52.9
1st-Term Q (Q1), veh/ln	0.0	19.9	0.0	0.9	0.0	0.4	0.0	3.1
2nd-Term Q (Q2), veh/ln	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.36	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	28.0	0.0	1.7	0.0	0.7	0.0	5.6
%ile Storage Ratio (RQ%)	0.00	1.15	0.00	0.14	0.00	0.05	0.00	0.21
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	17.1
HCM 2010 LOS	B

Build Alternative 2020 AM

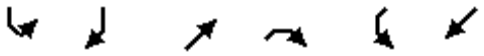
29: Central Blvd & SB On Ramp & SB Off Ramp Corridor: Central Boulevard

Movement	SBL2	SBL	SBR	NWL	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations											
Volume (vph)	69	0	130	0	0	0	1016	53	1062	682	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0				4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00		1.00				0.86	1.00	0.97	0.95	
Frt	1.00		0.85				1.00	0.85	1.00	1.00	
Flt Protected	0.95		1.00				1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770		1583				6408	1583	3433	3539	
Flt Permitted	0.95		1.00				1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770		1583				6408	1583	3433	3539	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	73	0	137	0	0	0	1069	56	1118	718	0
RTOR Reduction (vph)	0	0	53	0	0	0	0	39	0	0	0
Lane Group Flow (vph)	73	0	84	0	0	0	1069	17	1118	718	0
Turn Type	Prot		custom				NA	Prot	Prot	NA	
Protected Phases	1		1				2 4	2 4	3	3 4	
Permitted Phases			3 4								
Actuated Green, G (s)	5.6		39.8				19.2	19.2	24.2	34.2	
Effective Green, g (s)	5.6		39.8				19.2	19.2	24.2	34.2	
Actuated g/C Ratio	0.09		0.61				0.30	0.30	0.37	0.53	
Clearance Time (s)	4.0		4.0						4.0		
Vehicle Extension (s)	3.0		3.0						3.0		
Lane Grp Cap (vph)	152		1066				1892	467	1278	1862	
v/s Ratio Prot	c0.04		0.01				c0.17	0.01	c0.33	0.20	
v/s Ratio Perm			0.05								
v/c Ratio	0.48		0.08				0.57	0.04	0.87	0.39	
Uniform Delay, d1	28.3		5.1				19.4	16.3	19.0	9.2	
Progression Factor	1.00		1.00				1.00	1.00	1.15	0.36	
Incremental Delay, d2	2.4		0.0				0.4	0.0	6.4	0.1	
Delay (s)	30.7		5.2				19.8	16.3	28.3	3.4	
Level of Service	C		A				B	B	C	A	
Approach Delay (s)		14.0		0.0			19.6			18.6	
Approach LOS		B		A			B			B	

Intersection Summary			
HCM 2000 Control Delay	18.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	63.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Build Alternative 2020 AM

29: Central Blvd & SB On Ramp & SB Off Ramp Corridor: Central Boulevard



Lane Group	SBL2	SBR	NET	NER	SWL	SWT
Lane Group Flow (vph)	73	137	1069	56	1118	718
v/c Ratio	0.40	0.10	0.54	0.09	0.85	0.38
Control Delay	34.2	0.1	14.5	0.3	27.2	3.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	34.2	0.1	14.5	0.3	27.2	3.6
Queue Length 50th (ft)	28	0	70	0	139	20
Queue Length 95th (ft)	64	0	90	0	#194	28
Internal Link Dist (ft)			967			394
Turn Bay Length (ft)		300		450	190	
Base Capacity (vph)	190	1439	1973	591	1320	1905
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.38	0.10	0.54	0.09	0.85	0.38

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Build Alternative 2020 AM

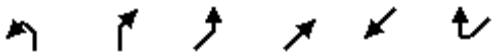
24: Central Blvd & NB Off Ramp/NB On Ramp Corridor: Central Boulevard

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (vph)	21	0	993	0	0	0	280	805	0	0	1723	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0				4.0	4.0			4.0	4.0
Lane Util. Factor	1.00		0.88				0.97	0.95			0.86	1.00
Frt	1.00		0.85				1.00	1.00			1.00	0.85
Flt Protected	0.95		1.00				0.95	1.00			1.00	1.00
Satd. Flow (prot)	1770		2787				3433	3539			6408	1583
Flt Permitted	0.95		1.00				0.95	1.00			1.00	1.00
Satd. Flow (perm)	1770		2787				3433	3539			6408	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	22	0	1045	0	0	0	295	847	0	0	1814	32
RTOR Reduction (vph)	0	0	254	0	0	0	0	0	0	0	0	19
Lane Group Flow (vph)	22	0	791	0	0	0	295	847	0	0	1814	13
Turn Type	Prot		custom				Prot	NA			NA	Prot
Protected Phases	6		6 11				5 7	13			8	8
Permitted Phases												
Actuated Green, G (s)	14.8		22.8				8.0	26.2			26.2	26.2
Effective Green, g (s)	14.8		22.8				8.0	26.2			26.2	26.2
Actuated g/C Ratio	0.23		0.35				0.12	0.40			0.40	0.40
Clearance Time (s)	4.0							4.0			4.0	4.0
Vehicle Extension (s)	3.0							3.0			3.0	3.0
Lane Grp Cap (vph)	403		977				422	1426			2582	638
v/s Ratio Prot	0.01		c0.28				c0.09	0.24			c0.28	0.01
v/s Ratio Perm												
v/c Ratio	0.05		0.81				0.70	0.59			0.70	0.02
Uniform Delay, d1	19.6		19.1				27.3	15.2			16.2	11.7
Progression Factor	1.00		1.00				0.37	2.14			1.00	1.00
Incremental Delay, d2	0.1		5.0				4.3	0.6			1.6	0.1
Delay (s)	19.7		24.1				14.6	33.2			17.8	11.7
Level of Service	B		C				B	C			B	B
Approach Delay (s)		24.1			0.0			28.4			17.7	
Approach LOS		C			A			C			B	

Intersection Summary			
HCM 2000 Control Delay	22.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	63.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Build Alternative 2020 AM

24: Central Blvd & NB Off Ramp/NB On Ramp Corridor: Central Boulevard



Lane Group	NBL	NBR	NEL	NET	SWT	SWR
Lane Group Flow (vph)	22	1045	295	847	1814	32
v/c Ratio	0.06	0.87	0.70	0.58	0.68	0.04
Control Delay	20.9	22.3	15.1	33.3	17.1	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	20.9	22.3	15.1	33.3	17.1	0.1
Queue Length 50th (ft)	7	138	26	201	163	0
Queue Length 95th (ft)	23	#269	#59	257	202	0
Internal Link Dist (ft)				394	826	
Turn Bay Length (ft)		550	160			450
Base Capacity (vph)	381	1202	422	1470	2661	745
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.06	0.87	0.70	0.58	0.68	0.04

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

DONALD ROSS CORRIDOR

Arterial Level of Service: EB Donald Ross

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
West Ramp	II	45	46.0	22.9	68.9	0.52	27.3	C
East Ramp	II	45	15.7	31.8	47.5	0.14	10.9	F
Parkside Dr	II	45	42.7	27.8	70.5	0.53	27.3	C
Central Blvd	II	45	52.1	72.5	124.6	0.65	18.8	D
Military Trail	II	45	32.9	53.9	86.8	0.34	14.2	E
Total	II		189.4	208.9	398.3	2.19	19.8	D

Arterial Level of Service: WB Donald Ross

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Military Trail	II	45	21.4	42.9	64.3	0.20	11.0	F
Central Blvd	II	45	32.9	33.6	66.5	0.34	18.6	D
Parkside Dr	II	45	52.1	22.8	74.9	0.65	31.3	B
East Ramp	II	45	42.7	10.3	53.0	0.53	36.3	A
West Ramp	II	45	15.7	47.9	63.6	0.14	8.1	F
Total	II		164.8	157.5	322.3	1.87	20.9	D

HCM 2010 methodology does not support clustered intersections.

HCM 2010 methodology does not support clustered intersections.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	462	1012	504	332	344	70	334	107	422	96	149	489
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	486	1065	531	349	362	74	352	113	444	101	157	515
Adj No. of Lanes	2	3	1	2	3	1	2	1	1	1	1	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	759	1318	495	550	1115	553	447	402	468	330	370	813
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.08	0.26	0.26	0.09	0.22	0.22	0.13	0.22	0.22	0.05	0.20	0.20
Ln Grp Delay, s/veh	25.2	31.5	87.5	23.7	24.9	16.8	37.8	25.0	55.0	22.9	27.1	24.6
Ln Grp LOS	C	C	F	C	C	B	D	C	D	C	C	C
Approach Vol, veh/h		2082			785			909			773	
Approach Delay, s/veh		44.3			23.6			44.6			24.9	
Approach LOS		D			C			D			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	3.0	2.0	3.0	1.1	3.0	1.1	3.0
Phs Duration (G+Y+Rc), s	14.0	25.0	13.8	22.5	11.0	28.0	12.5	23.7
Change Period (Y+Rc), s	8.0	* 8.5	4.0	* 7.5	4.0	8.5	8.5	7.5
Max Green (Gmax), s	6.0	* 18	12.0	* 16	7.0	19.5	4.0	16.0
Max Allow Headway (MAH), s	3.7	4.6	3.7	4.1	3.7	4.6	3.7	4.1
Max Q Clear (g_c+I1), s	8.0	6.5	9.5	14.1	7.8	21.5	5.4	18.2
Green Ext Time (g_e), s	0.0	7.7	0.3	0.9	0.0	0.0	0.0	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	0.88	1.00
Prob of Max Out (p_x)	1.00	0.74	1.00	1.00	1.00	0.00	1.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3442		3442		3442		1774	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		5085		1863		5085		1863

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		2787		1583		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Pr/Pm)		(Prot)		(Pr/Pm)		(Pr/Pm)	
Lanes in Grp	2	0	2	0	2	0	1	0

Grp Vol (v), veh/h	486	0	352	0	349	0	101	0
Grp Sat Flow (s), veh/h/ln	1721	0	1721	0	1721	0	1774	0
Q Serve Time (g_s), s	6.0	0.0	7.5	0.0	5.8	0.0	3.4	0.0
Cycle Q Clear Time (g_c), s	6.0	0.0	7.5	0.0	5.8	0.0	3.4	0.0
Perm LT Sat Flow (s_l), veh/h/ln	920	0	0	0	308	0	849	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	16.5	0.0	0.0	0.0	16.5	0.0	15.0	0.0
Perm LT Serve Time (g_u), s	12.0	0.0	0.0	0.0	4.7	0.0	12.4	0.0
Perm LT Q Serve Time (g_ps), s	7.4	0.0	0.0	0.0	4.7	0.0	0.3	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	759	0	447	0	550	0	330	0
V/C Ratio (X)	0.64	0.00	0.79	0.00	0.63	0.00	0.31	0.00
Avail Cap (c_a), veh/h	759	0	549	0	550	0	330	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	23.4	0.0	31.7	0.0	21.3	0.0	22.4	0.0
Incr Delay (d2), s/veh	1.8	0.0	6.1	0.0	2.4	0.0	0.5	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	25.2	0.0	37.8	0.0	23.7	0.0	22.9	0.0
1st-Term Q (Q1), veh/ln	1.8	0.0	3.5	0.0	2.8	0.0	1.6	0.0
2nd-Term Q (Q2), veh/ln	0.2	0.0	0.4	0.0	0.2	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	1.80	0.00	1.80	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	3.7	0.0	7.0	0.0	5.3	0.0	3.0	0.0
%ile Storage Ratio (RQ%)	0.17	0.00	0.51	0.00	0.44	0.00	0.51	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	1	0	3	0	1
Grp Vol (v), veh/h	0	362	0	157	0	1065	0	113
Grp Sat Flow (s), veh/h/ln	0	1695	0	1863	0	1695	0	1863
Q Serve Time (g_s), s	0.0	4.5	0.0	5.5	0.0	14.8	0.0	3.8
Cycle Q Clear Time (g_c), s	0.0	4.5	0.0	5.5	0.0	14.8	0.0	3.8
Lane Grp Cap (c), veh/h	0	1115	0	370	0	1318	0	402
V/C Ratio (X)	0.00	0.32	0.00	0.42	0.00	0.81	0.00	0.28
Avail Cap (c_a), veh/h	0	1183	0	396	0	1318	0	402
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	24.7	0.0	26.4	0.0	26.1	0.0	24.6
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.8	0.0	5.4	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	24.9	0.0	27.1	0.0	31.5	0.0	25.0
1st-Term Q (Q1), veh/ln	0.0	2.1	0.0	2.8	0.0	6.9	0.0	1.9
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.7	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.60	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	3.8	0.0	5.2	0.0	12.1	0.0	3.6
%ile Storage Ratio (RQ%)	0.00	0.03	0.00	0.23	0.00	0.11	0.00	0.08
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	2	0	1	0	1
Grp Vol (v), veh/h	0	74	0	515	0	531	0	444
Grp Sat Flow (s), veh/h/ln	0	1583	0	1393	0	1583	0	1583
Q Serve Time (g_s), s	0.0	2.4	0.0	12.1	0.0	19.5	0.0	16.2
Cycle Q Clear Time (g_c), s	0.0	2.4	0.0	12.1	0.0	19.5	0.0	16.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	1583.3	0.0	1393.3	0.0	1583.3	0.0	1583.3
Prot RT Eff Green (g_R), s	0.0	9.8	0.0	7.0	0.0	4.0	0.0	6.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	553	0	813	0	495	0	468
V/C Ratio (X)	0.00	0.13	0.00	0.63	0.00	1.07	0.00	0.95
Avail Cap (c_a), veh/h	0	574	0	852	0	495	0	468
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	16.7	0.0	23.1	0.0	25.9	0.0	25.9
Incr Delay (d2), s/veh	0.0	0.1	0.0	1.4	0.0	61.7	0.0	29.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	16.8	0.0	24.6	0.0	87.5	0.0	55.0
1st-Term Q (Q1), veh/ln	0.0	1.0	0.0	4.6	0.0	10.3	0.0	9.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.2	0.0	8.5	0.0	3.8
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.75	0.00	1.80	0.00	1.46
%ile Back of Q (95%), veh/ln	0.0	1.9	0.0	8.3	0.0	33.7	0.0	18.6
%ile Storage Ratio (RQ%)	0.00	0.10	0.00	0.71	0.00	1.71	0.00	1.05
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	9.1	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	37.5
HCM 2010 LOS	D

Notes

User approved ignoring U-Turning movement.

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	128	1204	368	245	526	176	183	737	88	219	578	80
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	135	1267	387	258	554	185	193	776	93	231	608	84
Adj No. of Lanes	2	3	1	2	3	1	2	2	1	2	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	203	1265	521	260	1349	420	277	784	351	316	844	378
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.06	0.25	0.25	0.08	0.27	0.27	0.08	0.22	0.22	0.09	0.24	0.24
Ln Grp Delay, s/veh	46.3	60.5	33.2	95.7	28.9	31.6	44.6	65.2	30.2	44.2	35.4	28.6
Ln Grp LOS	D	F	C	F	C	C	D	E	C	D	D	C
Approach Vol, veh/h		1789			997			1062			923	
Approach Delay, s/veh		53.5			46.7			58.4			37.0	
Approach LOS		D			D			E			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	14.5	32.5	17.5	28.0	16.0	31.0	15.9	29.6
Change Period (Y+Rc), s	9.0	8.0	9.0	7.5	9.0	8.0	8.5	7.5
Max Green (Gmax), s	8.0	22.0	16.0	20.5	7.0	23.0	16.1	20.9
Max Allow Headway (MAH), s	3.7	4.7	3.7	4.8	3.7	4.7	3.7	4.8
Max Q Clear (g_c+I1), s	5.6	11.0	8.0	22.2	8.9	25.0	7.1	16.6
Green Ext Time (g_e), s	0.1	8.7	0.4	0.0	0.0	0.0	0.4	3.1
Prob of Phs Call (p_c)	0.97	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	0.03	1.00	1.00	1.00	0.01	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3442		3442		3442		3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		5085		3539		5085		3539

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		1583		1583		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	
Lanes in Grp	2	0	2	0	2	0	2	0

Grp Vol (v), veh/h	135	0	231	0	258	0	193	0
Grp Sat Flow (s), veh/h/ln	1721	0	1721	0	1721	0	1721	0
Q Serve Time (g_s), s	3.6	0.0	6.0	0.0	6.9	0.0	5.1	0.0
Cycle Q Clear Time (g_c), s	3.6	0.0	6.0	0.0	6.9	0.0	5.1	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	203	0	316	0	260	0	277	0
V/C Ratio (X)	0.66	0.00	0.73	0.00	0.99	0.00	0.70	0.00
Avail Cap (c_a), veh/h	298	0	595	0	260	0	599	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	42.6	0.0	40.9	0.0	42.7	0.0	41.4	0.0
Incr Delay (d2), s/veh	3.7	0.0	3.3	0.0	53.0	0.0	3.2	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	46.3	0.0	44.2	0.0	95.7	0.0	44.6	0.0
1st-Term Q (Q1), veh/ln	1.7	0.0	2.9	0.0	3.3	0.0	2.4	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.1	0.0	1.9	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	1.80	0.00	1.72	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	3.2	0.0	5.4	0.0	8.9	0.0	4.6	0.0
%ile Storage Ratio (RQ%)	0.15	0.00	0.27	0.00	0.44	0.00	0.22	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	2	0	3	0	2
Grp Vol (v), veh/h	0	554	0	776	0	1267	0	608
Grp Sat Flow (s), veh/h/ln	0	1695	0	1770	0	1695	0	1770
Q Serve Time (g_s), s	0.0	8.3	0.0	20.2	0.0	23.0	0.0	14.6
Cycle Q Clear Time (g_c), s	0.0	8.3	0.0	20.2	0.0	23.0	0.0	14.6
Lane Grp Cap (c), veh/h	0	1349	0	784	0	1265	0	844
V/C Ratio (X)	0.00	0.41	0.00	0.99	0.00	1.00	0.00	0.72
Avail Cap (c_a), veh/h	0	1349	0	784	0	1265	0	844
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	28.0	0.0	35.9	0.0	34.7	0.0	32.4
Incr Delay (d2), s/veh	0.0	0.9	0.0	29.3	0.0	25.8	0.0	3.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	28.9	0.0	65.2	0.0	60.5	0.0	35.4
1st-Term Q (Q1), veh/ln	0.0	3.9	0.0	9.8	0.0	10.7	0.0	7.1
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	3.2	0.0	3.0	0.0	0.4

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.45	0.00	1.80	0.00	1.60
%ile Back of Q (95%), veh/ln	0.0	7.2	0.0	18.9	0.0	24.6	0.0	11.9
%ile Storage Ratio (RQ%)	0.00	0.11	0.00	0.83	0.00	0.19	0.00	0.44
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	185	0	93	0	387	0	84
Grp Sat Flow (s), veh/h/ln	0	1583	0	1583	0	1583	0	1583
Q Serve Time (g_s), s	0.0	9.0	0.0	4.5	0.0	20.1	0.0	3.9
Cycle Q Clear Time (g_c), s	0.0	9.0	0.0	4.5	0.0	20.1	0.0	3.9
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	1583.3	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	7.4	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	420	0	351	0	521	0	378
V/C Ratio (X)	0.00	0.44	0.00	0.26	0.00	0.74	0.00	0.22
Avail Cap (c_a), veh/h	0	420	0	351	0	521	0	378
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	28.3	0.0	29.8	0.0	27.6	0.0	28.3
Incr Delay (d2), s/veh	0.0	3.3	0.0	0.4	0.0	5.7	0.0	0.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	31.6	0.0	30.2	0.0	33.2	0.0	28.6
1st-Term Q (Q1), veh/ln	0.0	3.9	0.0	2.0	0.0	8.7	0.0	1.7
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.0	0.0	0.8	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.79	0.00	1.80	0.00	1.53	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	7.7	0.0	3.6	0.0	14.6	0.0	3.1
%ile Storage Ratio (RQ%)	0.00	0.63	0.00	0.35	0.00	1.25	0.00	0.16
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	50.0
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	382	1205	40	129	673	103	41	925	18	129	1089	349
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	402	1268	42	136	708	108	43	974	19	136	1146	367
Adj No. of Lanes	3	3	1	2	3	1	2	3	1	2	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	507	1322	412	155	1036	323	138	1042	325	568	1678	683
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.10	0.26	0.26	0.05	0.20	0.20	0.04	0.20	0.20	0.17	0.33	0.33
Ln Grp Delay, s/veh	50.6	53.2	28.6	86.9	40.5	36.8	47.9	53.8	32.1	37.3	31.2	24.1
Ln Grp LOS	D	D	C	F	D	D	D	D	C	D	C	C
Approach Vol, veh/h		1712			952			1036			1649	
Approach Delay, s/veh		52.0			46.7			53.2			30.1	
Approach LOS		D			D			D			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	18.6	28.4	25.0	28.0	13.0	34.0	12.5	40.5
Change Period (Y+Rc), s	8.5	8.0	8.5	7.5	8.5	8.0	8.5	7.5
Max Green (Gmax), s	11.5	19.0	16.5	20.5	4.5	26.0	16.5	20.5
Max Allow Headway (MAH), s	3.7	4.8	3.7	4.8	3.7	4.8	3.7	4.8
Max Q Clear (g_c+I1), s	9.9	14.9	5.4	20.8	5.9	26.6	3.2	21.5
Green Ext Time (g_e), s	0.3	3.5	0.3	0.0	0.0	0.0	0.1	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	0.98	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	5003		3442		3442		3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		5085		5085		5085		5085

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		1583		1583		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	
Lanes in Grp	3	0	2	0	2	0	2	0

Grp Vol (v), veh/h	402	0	136	0	136	0	43	0
Grp Sat Flow (s), veh/h/ln	1668	0	1721	0	1721	0	1721	0
Q Serve Time (g_s), s	7.9	0.0	3.4	0.0	3.9	0.0	1.2	0.0
Cycle Q Clear Time (g_c), s	7.9	0.0	3.4	0.0	3.9	0.0	1.2	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	507	0	568	0	155	0	138	0
V/C Ratio (X)	0.79	0.00	0.24	0.00	0.88	0.00	0.31	0.00
Avail Cap (c_a), veh/h	575	0	568	0	155	0	568	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	43.9	0.0	36.3	0.0	47.5	0.0	46.7	0.0
Incr Delay (d2), s/veh	6.7	0.0	1.0	0.0	39.4	0.0	1.3	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	50.6	0.0	37.3	0.0	86.9	0.0	47.9	0.0
1st-Term Q (Q1), veh/ln	3.6	0.0	1.6	0.0	1.9	0.0	0.6	0.0
2nd-Term Q (Q2), veh/ln	0.3	0.0	0.1	0.0	0.8	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	1.80	0.00	1.80	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	7.1	0.0	3.1	0.0	4.9	0.0	1.1	0.0
%ile Storage Ratio (RQ%)	0.30	0.00	0.16	0.00	0.22	0.00	0.05	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	3	0	3	0	3
Grp Vol (v), veh/h	0	708	0	974	0	1268	0	1146
Grp Sat Flow (s), veh/h/ln	0	1695	0	1695	0	1695	0	1695
Q Serve Time (g_s), s	0.0	12.9	0.0	18.8	0.0	24.6	0.0	19.5
Cycle Q Clear Time (g_c), s	0.0	12.9	0.0	18.8	0.0	24.6	0.0	19.5
Lane Grp Cap (c), veh/h	0	1036	0	1042	0	1322	0	1678
V/C Ratio (X)	0.00	0.68	0.00	0.93	0.00	0.96	0.00	0.68
Avail Cap (c_a), veh/h	0	1036	0	1042	0	1322	0	1678
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	36.8	0.0	39.1	0.0	36.5	0.0	29.0
Incr Delay (d2), s/veh	0.0	3.7	0.0	14.7	0.0	16.7	0.0	2.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	40.5	0.0	53.8	0.0	53.2	0.0	31.2
1st-Term Q (Q1), veh/ln	0.0	6.0	0.0	8.8	0.0	11.5	0.0	9.1
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	1.4	0.0	2.0	0.0	0.4

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.65	0.00	1.51	0.00	1.45	0.00	1.53
%ile Back of Q (95%), veh/ln	0.0	10.5	0.0	15.5	0.0	19.6	0.0	14.5
%ile Storage Ratio (RQ%)	0.00	0.28	0.00	0.59	0.00	0.30	0.00	0.47
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	108	0	19	0	42	0	367
Grp Sat Flow (s), veh/h/ln	0	1583	0	1583	0	1583	0	1583
Q Serve Time (g_s), s	0.0	5.8	0.0	1.0	0.0	2.0	0.0	17.2
Cycle Q Clear Time (g_c), s	0.0	5.8	0.0	1.0	0.0	2.0	0.0	17.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1583.3
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.1
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	323	0	325	0	412	0	683
V/C Ratio (X)	0.00	0.33	0.00	0.06	0.00	0.10	0.00	0.54
Avail Cap (c_a), veh/h	0	323	0	325	0	412	0	683
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	34.0	0.0	32.0	0.0	28.1	0.0	21.1
Incr Delay (d2), s/veh	0.0	2.8	0.0	0.1	0.0	0.5	0.0	3.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	36.8	0.0	32.1	0.0	28.6	0.0	24.1
1st-Term Q (Q1), veh/ln	0.0	2.5	0.0	0.4	0.0	0.9	0.0	7.4
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.0	0.0	0.1	0.0	0.6
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.80	0.00	1.58
%ile Back of Q (95%), veh/ln	0.0	5.0	0.0	0.8	0.0	1.7	0.0	12.6
%ile Storage Ratio (RQ%)	0.00	0.41	0.00	0.04	0.00	0.06	0.00	0.92
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	44.5
HCM 2010 LOS	D

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	0	775	4	12	288	15	1	0	16	60	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	325	-	-	289	-	-	-	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	816	4	13	303	16	1	0	17	63	0	5

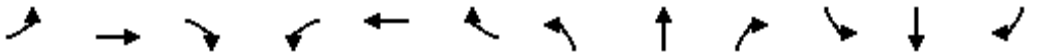
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	319	0	0	820	0	0	995	1162	410	744	1156	159
Stage 1	-	-	-	-	-	-	818	818	-	336	336	-
Stage 2	-	-	-	-	-	-	177	344	-	408	820	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1238	-	-	805	-	-	199	194	591	303	195	858
Stage 1	-	-	-	-	-	-	336	388	-	652	640	-
Stage 2	-	-	-	-	-	-	808	635	-	591	387	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1238	-	-	805	-	-	195	191	591	291	192	858
Mov Cap-2 Maneuver	-	-	-	-	-	-	195	191	-	291	192	-
Stage 1	-	-	-	-	-	-	336	388	-	652	630	-
Stage 2	-	-	-	-	-	-	790	625	-	574	387	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.4	12.1	19.9
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	528	1238	-	-	805	-	-	291	858
HCM Lane V/C Ratio	0.034	-	-	-	0.016	-	-	0.217	0.006
HCM Control Delay (s)	12.1	0	-	-	9.5	-	-	20.8	9.2
HCM Lane LOS	B	A	-	-	A	-	-	C	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.8	0

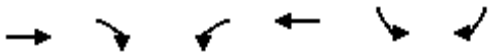
Build Alternative 2020 AM

2: West Ramp & Donald Ross Corridor: Donald Ross Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	617	232	1085	304	0	0	0	0	656	0	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0	4.0	7.0	6.0					6.0		4.0
Lane Util. Factor		0.86	1.00	0.86	0.86					0.94		1.00
Frt		1.00	0.85	1.00	1.00					1.00		0.85
Flt Protected		1.00	1.00	0.95	0.97					0.95		1.00
Satd. Flow (prot)		6408	1583	3044	3120					4990		1583
Flt Permitted		1.00	1.00	0.95	0.55					0.95		1.00
Satd. Flow (perm)		6408	1583	3044	1762					4990		1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	649	244	1142	320	0	0	0	0	691	0	48
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	649	244	765	697	0	0	0	0	691	0	48
Turn Type		NA	Free	Prot	NA					Prot		Free
Protected Phases		6		5	2					3		
Permitted Phases			Free									Free
Actuated Green, G (s)		23.7	80.0	21.8	52.5					15.5		80.0
Effective Green, g (s)		23.7	80.0	21.8	52.5					15.5		80.0
Actuated g/C Ratio		0.30	1.00	0.27	0.66					0.19		1.00
Clearance Time (s)		6.0		7.0	6.0					6.0		
Vehicle Extension (s)		3.0		3.0	3.0					3.0		
Lane Grp Cap (vph)		1898	1583	829	1526					966		1583
v/s Ratio Prot		0.10		c0.25	0.12					c0.14		
v/s Ratio Perm			0.15		c0.18							0.03
v/c Ratio		0.34	0.15	0.92	0.46					0.72		0.03
Uniform Delay, d1		22.0	0.0	28.3	6.7					30.2		0.0
Progression Factor		1.00	1.00	1.51	1.54					1.00		1.00
Incremental Delay, d2		0.5	0.2	15.0	0.2					2.5		0.0
Delay (s)		22.5	0.2	57.7	10.6					32.7		0.0
Level of Service		C	A	E	B					C		A
Approach Delay (s)		16.4			35.2			0.0			30.6	
Approach LOS		B			D			A			C	

Intersection Summary			
HCM 2000 Control Delay	28.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	19.0
Intersection Capacity Utilization	53.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



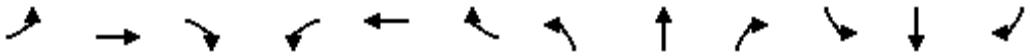
Lane Group	EBT	EBR	WBL	WBT	SBL	SBR
Lane Group Flow (vph)	649	244	765	697	691	48
v/c Ratio	0.34	0.15	0.92	0.78	0.72	0.03
Control Delay	22.9	0.2	60.0	47.9	34.6	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	22.9	0.2	60.0	47.9	34.6	0.0
Queue Length 50th (ft)	74	0	247	219	114	0
Queue Length 95th (ft)	99	0	#364	#291	150	0
Internal Link Dist (ft)	2056			679		
Turn Bay Length (ft)		433				
Base Capacity (vph)	1898	1583	829	889	1060	1583
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.34	0.15	0.92	0.78	0.65	0.03

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Build Alternative 2020 AM

9: East Ramp & Donald Ross Corridor: Donald Ross Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	33	1240	0	0	1298	351	91	0	835	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0			6.0	4.0	6.0		6.0			
Lane Util. Factor	0.97	0.91			0.86	1.00	0.97		0.76			
Frt	1.00	1.00			1.00	0.85	1.00		0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (prot)	3433	5085			6408	1583	3433		3610			
Flt Permitted	0.95	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (perm)	3433	5085			6408	1583	3433		3610			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	35	1305	0	0	1366	369	96	0	879	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	709	0	0	0
Lane Group Flow (vph)	35	1305	0	0	1366	369	96	0	170	0	0	0
Turn Type	Prot	NA			NA	Free	Prot		Prot			
Protected Phases	1	6			2		7		7			
Permitted Phases						Free						
Actuated Green, G (s)	2.6	23.7			43.9	80.0	15.5		15.5			
Effective Green, g (s)	2.6	23.7			43.9	80.0	15.5		15.5			
Actuated g/C Ratio	0.03	0.30			0.55	1.00	0.19		0.19			
Clearance Time (s)	6.0	6.0			6.0		6.0		6.0			
Vehicle Extension (s)	3.0	3.0			3.0		3.0		3.0			
Lane Grp Cap (vph)	111	1506			3516	1583	665		699			
v/s Ratio Prot	0.01	c0.26			c0.21		0.03		0.05			
v/s Ratio Perm						c0.23						
v/c Ratio	0.32	0.87			0.39	0.23	0.14		0.24			
Uniform Delay, d1	37.8	26.7			10.4	0.0	26.7		27.3			
Progression Factor	0.56	0.92			1.00	1.00	1.00		1.00			
Incremental Delay, d2	1.4	6.2			0.3	0.3	0.1		0.2			
Delay (s)	22.6	30.8			10.7	0.3	26.9		27.5			
Level of Service	C	C			B	A	C		C			
Approach Delay (s)		30.6			8.5			27.4			0.0	
Approach LOS		C			A			C			A	

Intersection Summary			
HCM 2000 Control Delay	20.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	19.0
Intersection Capacity Utilization	53.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	WBT	WBR	NBL	NBR
Lane Group Flow (vph)	35	1305	1366	369	96	879
v/c Ratio	0.17	0.87	0.37	0.23	0.14	0.62
Control Delay	21.9	31.8	10.3	0.3	26.7	4.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	21.9	31.8	10.3	0.3	26.7	4.3
Queue Length 50th (ft)	7	155	115	0	20	0
Queue Length 95th (ft)	m14	#303	141	0	39	38
Internal Link Dist (ft)		679	2740			
Turn Bay Length (ft)				400		
Base Capacity (vph)	207	1506	3710	1583	729	1459
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.87	0.37	0.23	0.13	0.60

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

HOOD ROAD CORRIDOR

Arterial Level of Service: EB Hood Road

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Central Blvd	II	45	133.7	36.1	169.8	1.67	35.4	A
Military Trail	II	45	31.0	33.4	64.4	0.31	17.5	D
Total	II		164.7	69.5	234.2	1.98	30.5	B

Arterial Level of Service: WB Hood Road

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Military Trail	II	45	14.9	26.6	41.5	0.14	11.8	F
Central Blvd	II	45	31.0	23.1	54.1	0.31	20.8	D
Total	II		45.9	49.7	95.6	0.45	16.9	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	106	197	115	605	105	5	138	933	608	220	792	99
Future Volume (veh/h)	106	197	115	605	105	5	138	933	608	220	792	99
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	112	207	121	637	111	5	145	982	640	232	834	104
Adj No. of Lanes	2	2	1	2	2	1	2	2	1	2	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	198	409	283	696	921	412	217	1073	480	261	1118	500
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.06	0.12	0.12	0.20	0.26	0.26	0.06	0.30	0.30	0.08	0.32	0.32
Ln Grp Delay, s/veh	38.9	33.8	29.9	47.8	22.4	10.4	43.8	40.0	170.3	65.2	28.8	20.8
Ln Grp LOS	D	C	C	D	C	B	D	D	F	E	C	C
Approach Vol, veh/h		440			753			1767			1170	
Approach Delay, s/veh		34.0			43.8			87.5			35.3	
Approach LOS		C			D			F			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	2	1	3	4	5	6	7	8
Case No	3.0	2.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	30.0	12.0	22.0	15.1	11.0	31.0	10.5	26.6
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green (Gmax), s	24.0	6.0	16.0	20.0	5.0	25.0	6.0	30.0
Max Allow Headway (MAH), s	4.5	4.6	3.7	4.6	3.7	4.6	3.7	4.6
Max Q Clear (g_c+l1), s	23.2	7.3	16.3	7.4	5.3	18.7	4.5	3.9
Green Ext Time (g_e), s	0.6	0.0	0.0	1.8	0.0	3.3	0.0	2.2
Prob of Phs Call (p_c)	1.00	0.99	1.00	1.00	0.96	1.00	1.00	1.00
Prob of Max Out (p_x)	0.00	1.00	1.00	0.05	1.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt		1	3		5		7	
Mvmt Sat Flow, veh/h		3442	3442		3442		3442	

Through Movement Data								
Assigned Mvmt	2			4		6		8
Mvmt Sat Flow, veh/h	3539			3539		3539		3539

Right-Turn Movement Data								
Assigned Mvmt	12			14		16		18
Mvmt Sat Flow, veh/h	1583			1583		1583		1583

Left Lane Group Data								
Assigned Mvmt	0	1	3	0	5	0	7	0
Lane Assignment		(Prot)	(Prot)		(Prot)		(Prot)	

Lanes in Grp	0	2	2	0	2	0	2	0
Grp Vol (v), veh/h	0	232	637	0	145	0	112	0
Grp Sat Flow (s), veh/h/ln	0	1721	1721	0	1721	0	1721	0
Q Serve Time (g_s), s	0.0	5.3	14.3	0.0	3.3	0.0	2.5	0.0
Cycle Q Clear Time (g_c), s	0.0	5.3	14.3	0.0	3.3	0.0	2.5	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	261	696	0	217	0	198	0
V/C Ratio (X)	0.00	0.89	0.92	0.00	0.67	0.00	0.57	0.00
Avail Cap (c_a), veh/h	0	261	696	0	217	0	261	0
Upstream Filter (I)	0.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	0.0	36.2	30.9	0.0	36.3	0.0	36.3	0.0
Incr Delay (d2), s/veh	0.0	29.0	16.9	0.0	7.5	0.0	2.5	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	65.2	47.8	0.0	43.8	0.0	38.9	0.0
1st-Term Q (Q1), veh/ln	0.0	2.5	6.8	0.0	1.6	0.0	1.2	0.0
2nd-Term Q (Q2), veh/ln	0.0	1.0	1.6	0.0	0.2	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	1.56	0.00	1.80	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	0.0	6.4	13.2	0.0	3.2	0.0	2.3	0.0
%ile Storage Ratio (RQ%)	0.00	0.54	0.61	0.00	0.23	0.00	0.11	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	2	0	0	4	0	6	0	8
Lane Assignment	T			T		T		T
Lanes in Grp	2	0	0	2	0	2	0	2
Grp Vol (v), veh/h	982	0	0	207	0	834	0	111
Grp Sat Flow (s), veh/h/ln	1770	0	0	1770	0	1770	0	1770
Q Serve Time (g_s), s	21.2	0.0	0.0	4.3	0.0	16.7	0.0	1.9
Cycle Q Clear Time (g_c), s	21.2	0.0	0.0	4.3	0.0	16.7	0.0	1.9
Lane Grp Cap (c), veh/h	1073	0	0	409	0	1118	0	921
V/C Ratio (X)	0.92	0.00	0.00	0.51	0.00	0.75	0.00	0.12
Avail Cap (c_a), veh/h	1073	0	0	894	0	1118	0	1341
Upstream Filter (I)	1.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	26.6	0.0	0.0	32.9	0.0	24.2	0.0	22.4
Incr Delay (d2), s/veh	13.4	0.0	0.0	1.0	0.0	4.5	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	40.0	0.0	0.0	33.8	0.0	28.8	0.0	22.4
1st-Term Q (Q1), veh/ln	10.4	0.0	0.0	2.1	0.0	8.1	0.0	0.9

2nd-Term Q (Q2), veh/ln	2.0	0.0	0.0	0.1	0.0	0.7	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.47	0.00	0.00	1.80	0.00	1.55	0.00	1.80
%ile Back of Q (95%), veh/ln	18.1	0.0	0.0	3.9	0.0	13.7	0.0	1.7
%ile Storage Ratio (RQ%)	1.05	0.00	0.00	0.13	0.00	0.36	0.00	0.03
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	12	0	0	14	0	16	0	18
Lane Assignment	R			R		R		R
Lanes in Grp	1	0	0	1	0	1	0	1
Grp Vol (v), veh/h	640	0	0	121	0	104	0	5
Grp Sat Flow (s), veh/h/ln	1583	0	0	1583	0	1583	0	1583
Q Serve Time (g_s), s	11.8	0.0	0.0	5.4	0.0	3.8	0.0	0.1
Cycle Q Clear Time (g_c), s	11.8	0.0	0.0	5.4	0.0	3.8	0.0	0.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	1583.3	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	1.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	480	0	0	283	0	500	0	412
V/C Ratio (X)	1.33	0.00	0.00	0.43	0.00	0.21	0.00	0.01
Avail Cap (c_a), veh/h	480	0	0	500	0	500	0	600
Upstream Filter (I)	1.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	6.7	0.0	0.0	28.9	0.0	19.8	0.0	10.4
Incr Delay (d2), s/veh	163.6	0.0	0.0	1.0	0.0	0.9	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	170.3	0.0	0.0	29.9	0.0	20.8	0.0	10.4
1st-Term Q (Q1), veh/ln	7.2	0.0	0.0	2.4	0.0	1.7	0.0	0.1
2nd-Term Q (Q2), veh/ln	21.8	0.0	0.0	0.1	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	52.2	0.0	0.0	4.4	0.0	3.2	0.0	0.1
%ile Storage Ratio (RQ%)	4.74	0.00	0.00	0.15	0.00	0.24	0.00	0.01
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	40.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	59.0
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	261	491	165	261	222	54	10	516	296	134	562	437
Future Volume (veh/h)	261	491	165	261	222	54	10	516	296	134	562	437
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	275	517	174	275	234	57	11	543	312	141	592	460
Adj No. of Lanes	3	2	1	3	2	1	2	3	1	2	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	378	688	308	351	668	299	38	1182	368	194	1413	560
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.08	0.19	0.19	0.07	0.19	0.19	0.01	0.23	0.23	0.06	0.28	0.28
Ln Grp Delay, s/veh	39.7	31.1	28.2	44.3	25.9	25.1	39.9	25.3	47.6	46.5	22.4	34.2
Ln Grp LOS	D	C	C	D	C	C	D	C	D	D	C	C
Approach Vol, veh/h		966			566			866			1193	
Approach Delay, s/veh		33.0			34.8			33.5			29.8	
Approach LOS		C			C			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	9.3	27.7	14.0	21.7	12.6	24.4	13.6	22.1
Change Period (Y+Rc), s	8.5	7.5	8.5	8.0	8.5	7.5	8.5	8.0
Max Green (Gmax), s	4.0	17.0	5.5	16.0	4.1	16.9	5.1	16.4
Max Allow Headway (MAH), s	3.7	4.5	3.7	4.7	3.7	4.5	3.7	4.7
Max Q Clear (g_c+I1), s	2.2	21.3	5.9	6.2	4.9	15.7	5.9	12.0
Green Ext Time (g_e), s	0.0	0.0	0.0	3.7	0.0	1.0	0.0	2.1
Prob of Phs Call (p_c)	0.20	1.00	1.00	1.00	0.94	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.43	1.00	0.00	1.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3442		5003		3442		5003	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		5085		3539		5085		3539

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		1583		1583		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	3	0	2	0	3	0
Grp Vol (v), veh/h	11	0	275	0	141	0	275	0
Grp Sat Flow (s), veh/h/ln	1721	0	1668	0	1721	0	1668	0
Q Serve Time (g_s), s	0.2	0.0	3.9	0.0	2.9	0.0	3.9	0.0
Cycle Q Clear Time (g_c), s	0.2	0.0	3.9	0.0	2.9	0.0	3.9	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	38	0	378	0	194	0	351	0
V/C Ratio (X)	0.29	0.00	0.73	0.00	0.73	0.00	0.78	0.00
Avail Cap (c_a), veh/h	189	0	378	0	194	0	351	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	35.7	0.0	32.9	0.0	33.8	0.0	33.3	0.0
Incr Delay (d2), s/veh	4.2	0.0	6.9	0.0	12.8	0.0	11.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	39.9	0.0	39.7	0.0	46.5	0.0	44.3	0.0
1st-Term Q (Q1), veh/ln	0.1	0.0	1.8	0.0	1.4	0.0	1.8	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.2	0.0	0.3	0.0	0.4	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	1.80	0.00	1.80	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	0.2	0.0	3.7	0.0	3.1	0.0	3.9	0.0
%ile Storage Ratio (RQ%)	0.01	0.00	0.18	0.00	0.13	0.00	0.19	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	2	0	3	0	2
Grp Vol (v), veh/h	0	592	0	234	0	543	0	517
Grp Sat Flow (s), veh/h/ln	0	1695	0	1770	0	1695	0	1770
Q Serve Time (g_s), s	0.0	6.9	0.0	4.2	0.0	6.7	0.0	10.0
Cycle Q Clear Time (g_c), s	0.0	6.9	0.0	4.2	0.0	6.7	0.0	10.0
Lane Grp Cap (c), veh/h	0	1413	0	668	0	1182	0	688
V/C Ratio (X)	0.00	0.42	0.00	0.35	0.00	0.46	0.00	0.75
Avail Cap (c_a), veh/h	0	1413	0	779	0	1182	0	798
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	21.5	0.0	25.6	0.0	24.0	0.0	27.6
Incr Delay (d2), s/veh	0.0	0.9	0.0	0.3	0.0	1.3	0.0	3.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	22.4	0.0	25.9	0.0	25.3	0.0	31.1
1st-Term Q (Q1), veh/ln	0.0	3.2	0.0	2.0	0.0	3.1	0.0	4.9

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.80	0.00	1.72
%ile Back of Q (95%), veh/ln	0.0	6.0	0.0	3.7	0.0	5.9	0.0	9.0
%ile Storage Ratio (RQ%)	0.00	0.16	0.00	0.15	0.00	0.20	0.00	0.15
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	460	0	57	0	312	0	174
Grp Sat Flow (s), veh/h/ln	0	1583	0	1583	0	1583	0	1583
Q Serve Time (g_s), s	0.0	19.3	0.0	2.2	0.0	13.7	0.0	7.2
Cycle Q Clear Time (g_c), s	0.0	19.3	0.0	2.2	0.0	13.7	0.0	7.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	1583.3	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	5.5	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	560	0	299	0	368	0	308
V/C Ratio (X)	0.00	0.82	0.00	0.19	0.00	0.85	0.00	0.57
Avail Cap (c_a), veh/h	0	560	0	348	0	368	0	357
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	21.4	0.0	24.8	0.0	26.7	0.0	26.5
Incr Delay (d2), s/veh	0.0	12.8	0.0	0.3	0.0	20.9	0.0	1.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	34.2	0.0	25.1	0.0	47.6	0.0	28.2
1st-Term Q (Q1), veh/ln	0.0	8.3	0.0	1.0	0.0	6.0	0.0	3.2
2nd-Term Q (Q2), veh/ln	0.0	2.0	0.0	0.0	0.0	2.1	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.51	0.00	1.80	0.00	1.58	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	15.6	0.0	1.8	0.0	12.8	0.0	6.0
%ile Storage Ratio (RQ%)	0.00	0.66	0.00	0.15	0.00	1.06	0.00	0.45
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	32.3
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Traffic Vol, veh/h	17	435	276	53	29	10
Future Vol, veh/h	17	435	276	53	29	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	150	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	18	458	291	56	31	11

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	291	0	-	0	785	291
Stage 1	-	-	-	-	291	-
Stage 2	-	-	-	-	494	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1271	-	-	-	361	748
Stage 1	-	-	-	-	759	-
Stage 2	-	-	-	-	613	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1271	-	-	-	354	748
Mov Cap-2 Maneuver	-	-	-	-	354	-
Stage 1	-	-	-	-	759	-
Stage 2	-	-	-	-	601	-

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	14.8
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1271	-	-	-	409
HCM Lane V/C Ratio	0.014	-	-	-	0.1
HCM Control Delay (s)	7.9	0	-	-	14.8
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.3

MILITARY TRAIL CORRIDOR

Arterial Level of Service: NB N Military Trail

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
PGA Blvd	II	45	18.9	51.0	69.9	0.17	8.9	F
Kyoto Gardens Dr	II	45	43.4	16.0	59.4	0.49	29.9	B
Hood Road	II	45	104.9	24.5	129.4	1.31	36.5	A
Donald Ross	II	45	102.8	38.2	141.0	1.29	32.8	B
Total	II		270.0	129.7	399.7	3.26	29.4	B

Arterial Level of Service: SB N Military Trail

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Donald Ross	II	45	22.3	33.4	55.7	0.20	13.2	E
Hood Road	II	45	102.8	17.6	120.4	1.29	38.4	A
Kyoto Gardens Dr	II	45	104.9	8.6	113.5	1.31	41.6	A
PGA Blvd	II	45	43.4	33.3	76.7	0.49	23.1	C
Total	II		273.4	92.9	366.3	3.29	32.4	B

Movement	WBL	WBR	WBR2	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SER
Lane Configurations											
Traffic Volume (veh/h)	218	101	65	41	801	210	68	821	1	0	0
Future Volume (veh/h)	218	101	65	41	801	210	68	821	1	0	0
Number	7	14	14	1	6	16	5	2	12		
Initial Q, veh	0	0	0	0	0	0	0	0	0		
Ped-Bike Adj (A_pbT)	1.00	1.00	1.00	1.00		1.00	1.00		1.00		
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900		
Adj Flow Rate, veh/h	229	68	68	43	843	221	72	864	1		
Adj No. of Lanes	2	1	1	1	3	1	1	3	0		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2		
Opposing Right Turn Influence	Yes			Yes			Yes				
Cap, veh/h	403	185	185	374	1834	571	90	2948	3		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Prop Arrive On Green	0.12	0.12	0.12	0.36	0.36	0.36	0.05	0.56	0.56		
Ln Grp Delay, s/veh	22.1	21.5	21.5	11.5	13.0	13.8	38.1	6.1	6.4		
Ln Grp LOS	C	C	C	B	B	B	D	A	A		

Approach Vol, veh/h	297				1107			937			Timer:
Approach Delay, s/veh	21.9				13.1			8.7			Assigned Phs
Approach LOS	C				B			A			Case No
Phs Duration (G+Y+Rc), s			36.0		13.8	10.0	26.0				
Change Period (Y+Rc), s			8.0		8.0	7.5	8.0				
Max Green (Gmax), s			28.0		16.0	5.5	15.0				
Max Allow Headway (MAH), s			4.8		3.8	3.7	4.8				
Max Q Clear (g_c+I1), s			6.3		5.1	4.0	8.3				
Green Ext Time (g_e), s			12.5		0.7	0.0	5.1				
Prob of Phs Call (p_c)			1.00		1.00	0.63	1.00				
Prob of Max Out (p_x)			0.00		0.01	1.00	0.00				

Left-Turn Movement Data											
Assigned Mvmt					7	5	1				
Mvmt Sat Flow, veh/h					3442	1774	637				

Through Movement Data											
Assigned Mvmt			2		4		6				
Mvmt Sat Flow, veh/h			5246		0		5085				

Right-Turn Movement Data											
Assigned Mvmt			12		14		16				
Mvmt Sat Flow, veh/h			6		1583		1583				

Left Lane Group Data											
Assigned Mvmt		0	0	0	7	5	1	0	0		
Lane Assignment						(Prot)					
Lanes in Grp		0	0	0	2	1	1	0	0		
Grp Vol (v), veh/h		0	0	0	229	72	43	0	0		
Grp Sat Flow (s), veh/h/ln		0	0	0	1721	1774	637	0	0		

Q Serve Time (g_s), s	0.0	0.0	0.0	3.1	2.0	2.3	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	3.1	2.0	2.3	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1721	0	637	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	18.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	18.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	2.3	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	1.00	1.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	403	90	374	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.57	0.80	0.11	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	1105	196	374	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	20.8	23.4	10.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.3	14.7	0.6	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	22.1	38.1	11.5	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	1.5	1.0	0.4	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.4	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.80	1.80	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	2.8	2.4	0.8	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.10	0.16	0.07	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	3	0	0
Grp Vol (v), veh/h	0	558	0	0	0	843	0	0
Grp Sat Flow (s), veh/h/ln	0	1695	0	0	0	1695	0	0
Q Serve Time (g_s), s	0.0	4.3	0.0	0.0	0.0	6.3	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	4.3	0.0	0.0	0.0	6.3	0.0	0.0
Lane Grp Cap (c), veh/h	0	1905	0	0	0	1834	0	0
V/C Ratio (X)	0.00	0.29	0.00	0.00	0.00	0.46	0.00	0.00
Avail Cap (c_a), veh/h	0	1905	0	0	0	1834	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	5.7	0.0	0.0	0.0	12.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.4	0.0	0.0	0.0	0.8	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	6.1	0.0	0.0	0.0	13.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	2.0	0.0	0.0	0.0	3.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.00	0.00	1.80	0.00	0.00

%ile Back of Q (95%), veh/ln	0.0	3.8	0.0	0.0	0.0	5.6	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.01	0.00	0.00	0.00	0.36	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment		T+R		R		R		
Lanes in Grp	0	1	0	1	0	1	0	0
Grp Vol (v), veh/h	0	307	0	68	0	221	0	0
Grp Sat Flow (s), veh/h/ln	0	1862	0	1583	0	1583	0	0
Q Serve Time (g_s), s	0.0	4.3	0.0	2.0	0.0	5.2	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	4.3	0.0	2.0	0.0	5.2	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	1046	0	185	0	571	0	0
V/C Ratio (X)	0.00	0.29	0.00	0.37	0.00	0.39	0.00	0.00
Avail Cap (c_a), veh/h	0	1046	0	508	0	571	0	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	5.7	0.0	20.3	0.0	11.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.7	0.0	1.2	0.0	2.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	6.4	0.0	21.5	0.0	13.8	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	2.2	0.0	1.8	0.0	2.2	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.1	0.0	0.3	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	4.4	0.0	3.3	0.0	4.5	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.02	0.00	0.11	0.00	0.38	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	12.5
HCM 2010 LOS	B

NORTHLAKE BOULEVARD CORRIDOR

Arterial Level of Service: EB Northlake Blvd

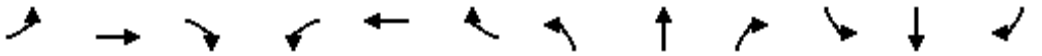
Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Keating Dr	II	45	17.3	24.8	42.1	0.16	13.6	E
West Ramps	II	45	12.7	33.4	46.1	0.12	9.1	F
East Ramps	II	45	11.1	8.2	19.3	0.10	19.0	D
Roan Ln	II	45	8.8	0.2	9.0	0.08	32.4	B
Sandtree Dr	II	45	13.5	24.0	37.5	0.12	11.9	F
Total	II		63.4	90.6	154.0	0.58	13.6	E

Arterial Level of Service: WB Northlake Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Sunrise Dr	II	45	15.3	22.5	37.8	0.14	13.4	E
Roan Ln	II	45	13.5	5.1	18.6	0.12	24.0	C
East Ramps	II	45	8.8	26.7	35.5	0.08	8.2	F
West Ramps	II	45	11.1	6.9	18.0	0.10	20.4	D
Keating Dr	II	45	12.7	7.7	20.4	0.12	20.5	D
Total	II		61.4	68.9	130.3	0.56	15.6	E

Build Alternative 2020 AM

3: Keating Dr & Northlake Blvd Corridor: Northlake Boulevard



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1980	108	220	1249	63	71	0	117	135	3	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0	4.0	5.0	5.0	6.0	6.0	6.0		6.0	
Lane Util. Factor		0.91	1.00	1.00	0.91	1.00	0.95	0.95	1.00		0.95	
Frt		1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85		1.00	
Flt Protected		1.00	1.00	0.95	1.00	1.00	0.95	0.95	1.00		0.95	
Satd. Flow (prot)		5085	1583	1770	5085	1583	1681	1681	1583		3374	
Flt Permitted		1.00	1.00	0.09	1.00	1.00	0.95	0.44	1.00		0.73	
Satd. Flow (perm)		5085	1583	160	5085	1583	1681	774	1583		2577	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	2084	114	232	1315	66	75	0	123	142	3	0
RTOR Reduction (vph)	0	0	60	0	0	23	0	0	95	0	0	0
Lane Group Flow (vph)	0	2084	54	232	1315	43	37	38	28	0	145	0
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	Prot	NA	Perm	pm+pt	NA	
Protected Phases		6		5	2		7	4		3	8	
Permitted Phases	6		6	2		2			4	8		
Actuated Green, G (s)		42.6	42.6	58.2	58.2	58.2	3.0	20.8	20.8		11.8	
Effective Green, g (s)		42.6	42.6	58.2	58.2	58.2	3.0	20.8	20.8		11.8	
Actuated g/C Ratio		0.47	0.47	0.65	0.65	0.65	0.03	0.23	0.23		0.13	
Clearance Time (s)		5.0	5.0	4.0	5.0	5.0	6.0	6.0	6.0		6.0	
Vehicle Extension (s)		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)		2406	749	310	3288	1023	56	209	365		337	
v/s Ratio Prot		c0.41		c0.10	0.26		c0.02	0.01				
v/s Ratio Perm			0.03	0.39		0.03		0.04	0.02		c0.06	
v/c Ratio		0.87	0.07	0.75	0.40	0.04	0.66	0.18	0.08		0.43	
Uniform Delay, d1		21.2	12.9	22.3	7.6	5.8	43.0	27.8	27.1		36.0	
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	
Incremental Delay, d2		4.5	0.2	9.5	0.4	0.1	25.5	0.4	0.1		0.9	
Delay (s)		25.7	13.1	31.8	7.9	5.9	68.5	28.2	27.2		36.9	
Level of Service		C	B	C	A	A	E	C	C		D	
Approach Delay (s)		25.0			11.3			35.1			36.9	
Approach LOS		C			B			D			D	

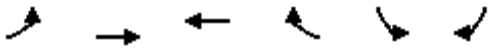
Intersection Summary			
HCM 2000 Control Delay	20.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	21.0
Intersection Capacity Utilization	77.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1488	626	877	888	0	0	0	0	597	0	491
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0	4.0	7.0	6.5					6.0		6.0
Lane Util. Factor		0.81	1.00	0.97	0.91					0.97		0.88
Frt		1.00	0.85	1.00	1.00					1.00		0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (prot)		7544	1583	3433	5085					3433		2787
Flt Permitted		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (perm)		7544	1583	3433	5085					3433		2787
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	1566	659	923	935	0	0	0	0	628	0	517
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	387
Lane Group Flow (vph)	0	1566	659	923	935	0	0	0	0	628	0	130
Turn Type		NA	Free	Prot	NA					Prot		Perm
Protected Phases		6		5	2					3		
Permitted Phases			Free									6
Actuated Green, G (s)		20.1	80.0	24.2	50.8					16.7		20.1
Effective Green, g (s)		20.1	80.0	24.2	50.8					16.7		20.1
Actuated g/C Ratio		0.25	1.00	0.30	0.63					0.21		0.25
Clearance Time (s)		6.0		7.0	6.5					6.0		6.0
Vehicle Extension (s)		3.0		3.0	3.0					3.0		3.0
Lane Grp Cap (vph)		1895	1583	1038	3228					716		700
v/s Ratio Prot		c0.21		c0.27	0.18					c0.18		
v/s Ratio Perm			0.42									0.05
v/c Ratio		0.83	0.42	0.89	0.29					0.88		0.19
Uniform Delay, d1		28.3	0.0	26.6	6.5					30.7		23.5
Progression Factor		1.00	1.00	1.00	1.00					1.00		1.00
Incremental Delay, d2		4.3	0.8	9.5	0.2					11.7		0.6
Delay (s)		32.6	0.8	36.1	6.8					42.4		24.1
Level of Service		C	A	D	A					D		C
Approach Delay (s)		23.2			21.3			0.0			34.1	
Approach LOS		C			C			A			C	

Intersection Summary			
HCM 2000 Control Delay	24.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	19.0
Intersection Capacity Utilization	75.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

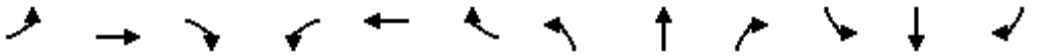
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	754	1331	0	0	1204	505	561	0	981	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	6.0			6.5	4.0	6.0		6.5			
Lane Util. Factor	0.97	0.91			0.81	1.00	0.97		0.88			
Frt	1.00	1.00			1.00	0.85	1.00		0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (prot)	3433	5085			7544	1583	3433		2787			
Flt Permitted	0.95	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (perm)	3433	5085			7544	1583	3433		2787			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	794	1401	0	0	1267	532	591	0	1033	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	727	0	0	0
Lane Group Flow (vph)	794	1401	0	0	1267	532	591	0	306	0	0	0
Turn Type	Prot	NA			NA	Free	Prot		Perm			
Protected Phases	1	6			2		7					
Permitted Phases						Free			2			
Actuated Green, G (s)	18.0	42.5			17.0	70.0	15.5		17.0			
Effective Green, g (s)	18.0	42.5			17.0	70.0	15.5		17.0			
Actuated g/C Ratio	0.26	0.61			0.24	1.00	0.22		0.24			
Clearance Time (s)	7.0	6.0			6.5		6.0		6.5			
Vehicle Extension (s)	3.0	3.0			3.0		3.0		3.0			
Lane Grp Cap (vph)	882	3087			1832	1583	760		676			
v/s Ratio Prot	c0.23	0.28			c0.17		c0.17					
v/s Ratio Perm						0.34			0.11			
v/c Ratio	0.90	0.45			0.69	0.34	0.78		0.45			
Uniform Delay, d1	25.1	7.5			24.1	0.0	25.6		22.5			
Progression Factor	1.00	1.00			1.00	1.00	1.00		1.00			
Incremental Delay, d2	12.2	0.5			2.2	0.6	5.0		2.2			
Delay (s)	37.3	7.9			26.3	0.6	30.7		24.7			
Level of Service	D	A			C	A	C		C			
Approach Delay (s)		18.6			18.7			26.9			0.0	
Approach LOS		B			B			C			A	

Intersection Summary			
HCM 2000 Control Delay	21.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	75.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



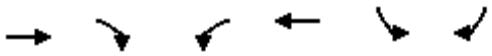
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	86	1995	1403	72	0	176
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	8.0	6.5	6.5	4.0		4.0
Lane Util. Factor	1.00	0.91	0.76	1.00		1.00
Frt	1.00	1.00	1.00	0.85		0.86
Flt Protected	0.95	1.00	1.00	1.00		1.00
Satd. Flow (prot)	1770	5085	8494	1583		1611
Flt Permitted	0.95	1.00	1.00	1.00		1.00
Satd. Flow (perm)	1770	5085	8494	1583		1611
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	91	2100	1477	76	0	185
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	91	2100	1477	76	0	185
Turn Type	Prot	NA	NA	Free		Free
Protected Phases	1	6	2			
Permitted Phases				Free		Free
Actuated Green, G (s)	4.2	40.0	21.3	40.0		40.0
Effective Green, g (s)	4.2	40.0	21.3	40.0		40.0
Actuated g/C Ratio	0.11	1.00	0.53	1.00		1.00
Clearance Time (s)	8.0	6.5	6.5			
Vehicle Extension (s)	3.0	3.0	3.0			
Lane Grp Cap (vph)	185	5085	4523	1583		1611
v/s Ratio Prot	0.05	c0.41	0.17			
v/s Ratio Perm				0.05		0.11
v/c Ratio	0.49	0.41	0.33	0.05		0.11
Uniform Delay, d1	16.9	0.0	5.3	0.0		0.0
Progression Factor	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	2.1	0.2	0.2	0.1		0.1
Delay (s)	18.9	0.2	5.5	0.1		0.1
Level of Service	B	A	A	A		A
Approach Delay (s)		1.0	5.2		0.1	
Approach LOS		A	A		A	

Intersection Summary			
HCM 2000 Control Delay	2.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	14.5
Intersection Capacity Utilization	44.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	85	1683	218	92	1121	55	245	1	80	77	1	109
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.5	7.5	7.0	7.5		6.0	6.5	6.5	6.0	6.5	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91		0.97	0.95	0.95	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.85	0.85	1.00	0.85	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1583	3433	5050		3433	1510	1504	1770	1586	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1583	3433	5050		3433	1510	1504	1770	1586	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	89	1772	229	97	1180	58	258	1	84	81	1	115
RTOR Reduction (vph)	0	0	130	0	5	0	0	34	35	0	106	0
Lane Group Flow (vph)	89	1772	99	97	1233	0	258	8	8	81	10	0
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6						4			
Actuated Green, G (s)	6.8	38.9	38.9	3.2	35.3		13.9	16.1	16.1	4.8	7.0	
Effective Green, g (s)	6.8	38.9	38.9	3.2	35.3		13.9	16.1	16.1	4.8	7.0	
Actuated g/C Ratio	0.08	0.43	0.43	0.04	0.39		0.15	0.18	0.18	0.05	0.08	
Clearance Time (s)	7.0	7.5	7.5	7.0	7.5		6.0	6.5	6.5	6.0	6.5	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	133	2197	684	122	1980		530	270	269	94	123	
v/s Ratio Prot	0.05	c0.35		0.03	c0.24		c0.08	c0.01		c0.05	0.01	
v/s Ratio Perm			0.06						0.01			
v/c Ratio	0.67	0.81	0.14	0.80	0.62		0.49	0.03	0.03	0.86	0.08	
Uniform Delay, d1	40.5	22.3	15.5	43.1	22.0		34.8	30.5	30.5	42.3	38.5	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	12.1	3.3	0.4	29.0	1.5		0.7	0.0	0.0	50.9	0.3	
Delay (s)	52.6	25.6	15.9	72.1	23.5		35.5	30.6	30.5	93.2	38.8	
Level of Service	D	C	B	E	C		D	C	C	F	D	
Approach Delay (s)		25.7			27.0			34.3			61.2	
Approach LOS		C			C			C			E	

Intersection Summary			
HCM 2000 Control Delay	28.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	27.0
Intersection Capacity Utilization	67.0%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Lane Group	EBT	EBR	WBL	WBT	SBL	SBR
Lane Group Flow (vph)	1566	659	923	935	628	517
v/c Ratio	0.83	0.42	0.89	0.29	0.88	0.48
Control Delay	33.4	0.8	38.5	6.9	45.9	4.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	33.4	0.8	38.5	6.9	45.9	4.2
Queue Length 50th (ft)	186	0	221	68	157	0
Queue Length 95th (ft)	#225	0	#324	88	#245	40
Internal Link Dist (ft)	533			458		
Turn Bay Length (ft)						
Base Capacity (vph)	1891	1583	1072	3228	729	1086
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.83	0.42	0.86	0.29	0.86	0.48

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Build Alternative 2020 AM

9: East Ramps & Northlake Blvd Corridor: Northlake Boulevard

Lane Group	EBL	EBT	WBT	WBR	NBL	NBR
Lane Group Flow (vph)	794	1401	1267	532	591	1033
v/c Ratio	0.90	0.45	0.69	0.34	0.78	0.74
Control Delay	40.7	8.2	26.7	0.6	33.4	6.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.7	8.2	26.7	0.6	33.4	6.5
Queue Length 50th (ft)	170	110	125	0	121	14
Queue Length 95th (ft)	#270	141	156	0	174	67
Internal Link Dist (ft)		458	348			
Turn Bay Length (ft)				400		
Base Capacity (vph)	882	3087	1832	1583	809	1403
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.90	0.45	0.69	0.34	0.73	0.74

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

PGA BOULEVARD CORRIDOR

Arterial Level of Service: EB PGA Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
FL Turnpike	II	45	16.8	77.9	94.7	0.15	5.8	F
Central Blvd	II	45	36.7	22.6	59.3	0.39	23.7	C
N Military Trail	II	45	81.7	56.4	138.1	1.02	26.6	C
West Ramps	II	45	20.5	9.4	29.9	0.19	22.6	C
East Ramps	II	45	6.3	71.9	78.2	0.06	2.7	F
Lake Victoria Garden	II	45	56.6	7.2	63.8	0.71	39.9	A
Total	II		218.6	245.4	464.0	2.52	19.5	D

Arterial Level of Service: WB PGA Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Lake Victoria Garden	II	45	13.7	21.9	35.6	0.13	12.8	F
East Ramps	II	45	56.6	0.0	56.6	0.71	44.9	A
West Ramps	II	45	6.3	10.7	17.0	0.06	12.3	F
N Military Trail	II	45	20.5	32.9	53.4	0.19	12.7	F
Central Blvd	II	45	25.0	47.6	72.6	0.24	11.9	F
FL Turnpike	II	45	36.7	51.6	88.3	0.39	15.9	E
Total	II		158.8	164.7	323.5	1.71	19.0	D

Build Alternative 2020 AM

3: FL Turnpike & PGA Blvd Corridor: PGA Boulevard

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	46	948	35	249	970	354	44	75	498	1228	159	116
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.5		7.5	8.0	7.5	7.5	7.5	7.5	7.5	7.5	4.0
Lane Util. Factor	0.97	0.91		0.97	0.91	0.88	1.00	0.95	0.95	0.91	0.91	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	0.89	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.97	1.00
Satd. Flow (prot)	3433	5058		3433	5085	2787	1770	1572	1504	3221	1641	1583
Flt Permitted	0.18	1.00		0.95	1.00	1.00	0.17	1.00	1.00	0.95	0.97	1.00
Satd. Flow (perm)	663	5058		3433	5085	2787	317	1572	1504	3221	1641	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	48	998	37	262	1021	373	46	79	524	1293	167	122
RTOR Reduction (vph)	0	2	0	0	0	141	0	61	165	0	0	0
Lane Group Flow (vph)	48	1033	0	262	1021	232	46	249	128	970	490	122
Turn Type	pm+pt	NA		Prot	NA	pm+ov	Perm	NA	Prot	Split	NA	Free
Protected Phases	7	4		3	8	6		2	2	6	6	
Permitted Phases	4					8	2					Free
Actuated Green, G (s)	36.0	32.8		12.5	42.1	92.9	23.5	23.5	23.5	50.8	50.8	149.6
Effective Green, g (s)	36.0	32.8		12.5	42.1	92.9	23.5	23.5	23.5	50.8	50.8	149.6
Actuated g/C Ratio	0.24	0.22		0.08	0.28	0.62	0.16	0.16	0.16	0.34	0.34	1.00
Clearance Time (s)	7.0	7.5		7.5	8.0	7.5	7.5	7.5	7.5	7.5	7.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	218	1108		286	1431	1730	49	246	236	1093	557	1583
v/s Ratio Prot	0.00	c0.20		c0.08	c0.20	0.05		c0.16	0.08	c0.30	0.30	
v/s Ratio Perm	0.05					0.04	0.15					0.08
v/c Ratio	0.22	0.93		0.92	0.71	0.13	0.94	1.01	0.54	0.89	0.88	0.08
Uniform Delay, d1	44.1	57.3		68.0	48.3	11.7	62.3	63.0	58.1	46.7	46.5	0.0
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.5	13.7		31.9	1.7	0.0	104.4	60.9	2.5	8.9	14.7	0.1
Delay (s)	44.6	71.0		99.9	50.0	11.8	166.8	123.9	60.6	55.6	61.2	0.1
Level of Service	D	E		F	D	B	F	F	E	E	E	A
Approach Delay (s)		69.8			49.3			98.4			53.1	
Approach LOS		E			D			F			D	

Intersection Summary			
HCM 2000 Control Delay	61.4	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	149.6	Sum of lost time (s)	30.0
Intersection Capacity Utilization	90.8%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	985	1436	33	110	1063	194	32	37	140	180	31	605
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.5	8.5		7.0	8.0	8.0		8.5	7.0	8.5	8.5	8.5
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00		1.00	1.00	0.95	0.95	1.00
Frt	1.00	1.00		1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.98	1.00	0.95	0.97	1.00
Satd. Flow (prot)	3433	5068		1770	5085	1583		1820	1583	1681	1709	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.79	1.00	0.71	0.74	1.00
Satd. Flow (perm)	3433	5068		1770	5085	1583		1478	1583	1256	1317	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1037	1512	35	116	1119	204	34	39	147	189	33	637
RTOR Reduction (vph)	0	3	0	0	0	155	0	0	104	0	0	27
Lane Group Flow (vph)	1037	1544	0	116	1119	49	0	73	43	110	112	610
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA	pm+ov	Perm	NA	pt+ov
Protected Phases	1	6		5	2			4	5		8	8 1
Permitted Phases						2	4		4	8		
Actuated Green, G (s)	28.5	39.6		10.3	21.4	21.4		16.1	26.4	16.1	16.1	53.1
Effective Green, g (s)	28.5	39.6		10.3	21.4	21.4		16.1	26.4	16.1	16.1	53.1
Actuated g/C Ratio	0.32	0.44		0.11	0.24	0.24		0.18	0.29	0.18	0.18	0.59
Clearance Time (s)	7.5	8.5		7.0	8.0	8.0		8.5	7.0	8.5	8.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	1087	2229		202	1209	376		264	464	224	235	933
v/s Ratio Prot	c0.30	0.30		0.07	c0.22				0.01			c0.38
v/s Ratio Perm						0.03		0.05	0.02	0.09	0.09	
v/c Ratio	0.95	0.69		0.57	0.93	0.13		0.28	0.09	0.49	0.48	0.65
Uniform Delay, d1	30.1	20.3		37.8	33.5	27.0		31.9	23.1	33.3	33.2	12.3
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	17.2	1.8		3.9	13.3	0.7		0.6	0.1	7.5	6.8	1.7
Delay (s)	47.3	22.1		41.7	46.8	27.7		32.5	23.2	40.8	39.9	14.0
Level of Service	D	C		D	D	C		C	C	D	D	B
Approach Delay (s)		32.2			43.7			26.3			20.8	
Approach LOS		C			D			C			C	

Intersection Summary			
HCM 2000 Control Delay	33.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	82.6%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (vph)	0	0	0	593	0	281	0	740	1193	0	1370	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0		6.0		6.0	4.0		6.0	
Lane Util. Factor				0.97		0.88		0.91	1.00		0.86	
Frt				1.00		0.85		1.00	0.85		1.00	
Flt Protected				0.95		1.00		1.00	1.00		1.00	
Satd. Flow (prot)				3433		2787		5085	1583		6408	
Flt Permitted				0.95		1.00		1.00	1.00		1.00	
Satd. Flow (perm)				3433		2787		5085	1583		6408	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	624	0	296	0	779	1256	0	1442	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	624	0	296	0	779	1256	0	1442	0
Turn Type				Prot		Prot		NA	Free		NA	
Protected Phases				3		3		6			2	
Permitted Phases									Free			
Actuated Green, G (s)				12.5		12.5		15.5	40.0		15.5	
Effective Green, g (s)				12.5		12.5		15.5	40.0		15.5	
Actuated g/C Ratio				0.31		0.31		0.39	1.00		0.39	
Clearance Time (s)				6.0		6.0		6.0			6.0	
Vehicle Extension (s)				3.0		3.0		3.0			3.0	
Lane Grp Cap (vph)				1072		870		1970	1583		2483	
v/s Ratio Prot				0.18		0.11		0.15			0.23	
v/s Ratio Perm									c0.79			
v/c Ratio				0.58		0.34		0.40	0.79		0.58	
Uniform Delay, d1				11.6		10.6		8.9	0.0		9.7	
Progression Factor				1.00		1.00		1.00	1.00		1.00	
Incremental Delay, d2				2.3		1.1		0.1	4.2		0.3	
Delay (s)				13.9		11.6		9.0	4.2		10.0	
Level of Service				B		B		A	A		B	
Approach Delay (s)		0.0			13.1			6.0			10.0	
Approach LOS		A			B			A			B	

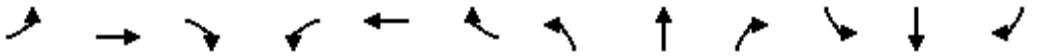
Intersection Summary			
HCM 2000 Control Delay	8.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	1.13		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	85.8%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	NBL	NBR	NET	NER	SWL	SWT
Lane Configurations						
Volume (vph)	0	2146	1333	0	0	606
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0	6.0			6.0
Lane Util. Factor		0.76	0.91			0.86
Frt		0.85	1.00			1.00
Flt Protected		1.00	1.00			1.00
Satd. Flow (prot)		3610	5085			6408
Flt Permitted		1.00	1.00			1.00
Satd. Flow (perm)		3610	5085			6408
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	2259	1403	0	0	638
RTOR Reduction (vph)	0	1	0	0	0	0
Lane Group Flow (vph)	0	2258	1403	0	0	638
Turn Type		Prot	NA			NA
Protected Phases		2	3 4			Free
Permitted Phases						2 8
Actuated Green, G (s)		89.0	39.0			140.0
Effective Green, g (s)		89.0	39.0			140.0
Actuated g/C Ratio		0.64	0.28			1.00
Clearance Time (s)		6.0				
Vehicle Extension (s)		3.0				
Lane Grp Cap (vph)		2294	1416			6408
v/s Ratio Prot		c0.63	c0.28			0.10
v/s Ratio Perm						
v/c Ratio		0.98	0.99			0.10
Uniform Delay, d1		24.8	50.3			0.0
Progression Factor		1.00	1.00			1.00
Incremental Delay, d2		15.5	21.6			0.0
Delay (s)		40.3	72.0			0.0
Level of Service		D	E			A
Approach Delay (s)	40.3		72.0			0.0
Approach LOS	D		E			A

Intersection Summary			
HCM 2000 Control Delay	44.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.03		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	85.8%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	606	2049	527	0	1147	0	215	0	86	0	0	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0		6.0		6.0	4.0	6.0			6.0
Lane Util. Factor	0.97	0.91	1.00		0.91		0.91	0.86	0.95			1.00
Frt	1.00	1.00	0.85		1.00		1.00	0.97	0.85			0.86
Flt Protected	0.95	1.00	1.00		1.00		0.95	0.96	1.00			1.00
Satd. Flow (prot)	3433	5085	1583		5085		3221	1492	1504			1611
Flt Permitted	0.95	1.00	1.00		1.00		0.95	0.96	1.00			1.00
Satd. Flow (perm)	3433	5085	1583		5085		3221	1492	1504			1611
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	638	2157	555	0	1207	0	226	0	91	0	0	12
RTOR Reduction (vph)	0	0	183	0	0	0	0	67	64	0	0	10
Lane Group Flow (vph)	638	2157	372	0	1207	0	163	13	10	0	0	2
Turn Type	Prot	NA	Perm		NA		Prot	NA	custom			Perm
Protected Phases	7	4			8		5	2	5			
Permitted Phases			4									5
Actuated Green, G (s)	15.2	40.2	40.2		19.0		7.8	9.8	7.8			7.8
Effective Green, g (s)	15.2	40.2	40.2		19.0		7.8	9.8	7.8			7.8
Actuated g/C Ratio	0.25	0.67	0.67		0.32		0.13	0.16	0.13			0.13
Clearance Time (s)	6.0	6.0	6.0		6.0		6.0	4.0	6.0			6.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0	3.0			3.0
Lane Grp Cap (vph)	869	3406	1060		1610		418	243	195			209
v/s Ratio Prot	0.19	c0.42			c0.24		c0.05	0.01	0.01			
v/s Ratio Perm			0.23					0.00				0.00
v/c Ratio	0.73	0.63	0.35		0.75		0.39	0.05	0.05			0.01
Uniform Delay, d1	20.5	5.7	4.3		18.4		23.9	21.2	22.9			22.7
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00	1.00			1.00
Incremental Delay, d2	5.5	0.9	0.9		2.0		0.6	0.1	0.1			0.0
Delay (s)	26.0	6.6	5.2		20.3		24.5	21.3	23.0			22.7
Level of Service	C	A	A		C		C	C	C			C
Approach Delay (s)		10.1			20.3			23.3			22.7	
Approach LOS		B			C			C			C	

Intersection Summary			
HCM 2000 Control Delay	13.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	57.3%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	38	93	0	349	0	0	11	61
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					6.0	6.0		6.0			6.0	6.0
Lane Util. Factor					1.00	1.00		0.95			1.00	1.00
Frt					1.00	0.85		1.00			1.00	0.85
Flt Protected					1.00	1.00		1.00			1.00	1.00
Satd. Flow (prot)					1863	1583		3539			1863	1583
Flt Permitted					1.00	1.00		1.00			1.00	1.00
Satd. Flow (perm)					1863	1583		3539			1863	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	0	40	98	0	367	0	0	12	64
RTOR Reduction (vph)	0	0	0	0	0	74	0	0	0	0	0	56
Lane Group Flow (vph)	0	0	0	0	40	24	0	367	0	0	12	8
Turn Type					NA	Perm		NA			NA	Perm
Protected Phases					16			15			5	
Permitted Phases						16						5
Actuated Green, G (s)					14.8	14.8		19.4			7.8	7.8
Effective Green, g (s)					14.8	14.8		19.4			7.8	7.8
Actuated g/C Ratio					0.25	0.25		0.32			0.13	0.13
Clearance Time (s)					6.0	6.0		6.0			6.0	6.0
Vehicle Extension (s)					3.0	3.0		3.0			3.0	3.0
Lane Grp Cap (vph)					459	390		1144			242	205
v/s Ratio Prot					c0.02			c0.10			c0.01	
v/s Ratio Perm						0.02						0.01
v/c Ratio					0.09	0.06		0.32			0.05	0.04
Uniform Delay, d1					17.4	17.3		15.3			22.9	22.8
Progression Factor					1.00	1.00		0.00			1.00	1.00
Incremental Delay, d2					0.4	0.3		0.5			0.1	0.1
Delay (s)					17.8	17.6		0.6			22.9	22.9
Level of Service					B	B		A			C	C
Approach Delay (s)		0.0			17.6			0.6			22.9	
Approach LOS		A			B			A			C	

Intersection Summary			
HCM 2000 Control Delay	7.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.18		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	25.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	236	955	759	342	376	428	583	805	42	796	481	157
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	248	1005	0	360	396	0	614	847	0	838	506	165
Adj No. of Lanes	3	3	1	3	3	1	3	3	1	3	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	365	1045	325	389	1127	351	757	927	289	867	1067	332
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.07	0.21	0.00	0.08	0.22	0.00	0.15	0.18	0.00	0.17	0.21	0.21
Ln Grp Delay, s/veh	42.9	55.4	0.0	68.9	30.4	0.0	41.6	49.4	0.0	59.6	31.5	32.5
Ln Grp LOS	D	E		E	C		D	D		E	C	C
Approach Vol, veh/h		1253			756			1461			1509	
Approach Delay, s/veh		52.9			48.8			46.1			47.2	
Approach LOS		D			D			D			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	14.6	27.4	24.1	23.9	16.0	26.0	21.6	26.4
Change Period (Y+Rc), s	8.0	7.5	8.5	7.5	9.0	7.5	8.0	7.5
Max Green (Gmax), s	9.0	17.5	15.6	16.4	7.0	18.5	16.5	16.0
Max Allow Headway (MAH), s	3.7	4.9	3.7	4.8	3.7	4.9	3.7	4.8
Max Q Clear (g_c+I1), s	6.4	7.9	17.0	16.7	8.4	19.6	12.7	10.3
Green Ext Time (g_e), s	0.2	5.7	0.0	0.0	0.0	0.0	0.9	3.9
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	1.00	1.00	0.00	0.95	0.93

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	5003		5003		5003		5003	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		5085		5085		5085		5085

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		1583		1583		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	
Lanes in Grp	3	0	3	0	3	0	3	0

Grp Vol (v), veh/h	248	0	838	0	360	0	614	0
Grp Sat Flow (s), veh/h/ln	1668	0	1668	0	1668	0	1668	0
Q Serve Time (g_s), s	4.4	0.0	15.0	0.0	6.4	0.0	10.7	0.0
Cycle Q Clear Time (g_c), s	4.4	0.0	15.0	0.0	6.4	0.0	10.7	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	365	0	867	0	389	0	757	0
V/C Ratio (X)	0.68	0.00	0.97	0.00	0.93	0.00	0.81	0.00
Avail Cap (c_a), veh/h	500	0	867	0	389	0	917	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	40.7	0.0	36.9	0.0	41.2	0.0	36.9	0.0
Incr Delay (d2), s/veh	2.2	0.0	22.6	0.0	27.7	0.0	4.7	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	42.9	0.0	59.6	0.0	68.9	0.0	41.6	0.0
1st-Term Q (Q1), veh/ln	2.0	0.0	6.9	0.0	3.0	0.0	4.9	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	1.8	0.0	1.0	0.0	0.3	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	1.56	0.00	1.80	0.00	1.72	0.00
%ile Back of Q (95%), veh/ln	3.7	0.0	13.6	0.0	7.1	0.0	9.0	0.0
%ile Storage Ratio (RQ%)	0.21	0.00	0.76	0.00	0.36	0.00	0.52	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	3	0	3	0	3
Grp Vol (v), veh/h	0	396	0	847	0	1005	0	506
Grp Sat Flow (s), veh/h/ln	0	1695	0	1695	0	1695	0	1695
Q Serve Time (g_s), s	0.0	5.9	0.0	14.7	0.0	17.6	0.0	7.9
Cycle Q Clear Time (g_c), s	0.0	5.9	0.0	14.7	0.0	17.6	0.0	7.9
Lane Grp Cap (c), veh/h	0	1127	0	927	0	1045	0	1067
V/C Ratio (X)	0.00	0.35	0.00	0.91	0.00	0.96	0.00	0.47
Avail Cap (c_a), veh/h	0	1127	0	927	0	1045	0	1067
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	29.6	0.0	36.1	0.0	35.4	0.0	31.2
Incr Delay (d2), s/veh	0.0	0.9	0.0	13.3	0.0	20.0	0.0	0.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	30.4	0.0	49.4	0.0	55.4	0.0	31.5
1st-Term Q (Q1), veh/ln	0.0	2.7	0.0	6.9	0.0	8.2	0.0	3.7
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	1.1	0.0	1.9	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.58	0.00	1.52	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	5.1	0.0	12.7	0.0	15.3	0.0	6.6
%ile Storage Ratio (RQ%)	0.00	0.32	0.00	0.44	0.00	0.37	0.00	0.20
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	0	0	0	0	165
Grp Sat Flow (s), veh/h/ln	0	1583	0	1583	0	1583	0	1583
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.3
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.3
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	351	0	289	0	325	0	332
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50
Avail Cap (c_a), veh/h	0	351	0	289	0	325	0	332
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31.4
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32.5
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.7
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.38
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	48.6
HCM 2010 LOS	D

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Volume (veh/h)	0	61	2803	960	107	706
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	0	64	2951	1011	113	743
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			1299			
pX, platoon unblocked	0.78	0.78			0.78	
vC, conflicting volume	3929	1243			3961	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	3350	0			3391	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	0	92			0	
cM capacity (veh/h)	0	847			61	

Direction, Lane #	NW 1	NE 1	NE 2	NE 3	NE 4	SW 1	SW 2	SW 3	SW 4
Volume Total	64	843	843	843	1432	113	248	248	248
Volume Left	0	0	0	0	0	113	0	0	0
Volume Right	64	0	0	0	1011	0	0	0	0
cSH	847	1700	1700	1700	1700	61	1700	1700	1700
Volume to Capacity	0.08	0.50	0.50	0.50	0.84	1.84	0.15	0.15	0.15
Queue Length 95th (ft)	6	0	0	0	0	262	0	0	0
Control Delay (s)	9.6	0.0	0.0	0.0	0.0	543.2	0.0	0.0	0.0
Lane LOS	A					F			
Approach Delay (s)	9.6	0.0				71.5			
Approach LOS	A								

Intersection Summary			
Average Delay	12.7		
Intersection Capacity Utilization	69.3%	ICU Level of Service	C
Analysis Period (min)	15		

Lane Group	SBL	SBR	NET	NER	SWT
Lane Group Flow (vph)	624	296	779	1256	1442
v/c Ratio	0.58	0.34	0.39	0.79	0.58
Control Delay	14.5	12.3	9.4	5.2	10.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	14.5	12.3	9.4	5.2	10.7
Queue Length 50th (ft)	60	28	42	0	67
Queue Length 95th (ft)	98	53	63	#23	93
Internal Link Dist (ft)			215		227
Turn Bay Length (ft)					
Base Capacity (vph)	1069	868	2034	1583	2563
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.58	0.34	0.38	0.79	0.56

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	NBR	NET	SWT
Lane Group Flow (vph)	2259	1403	638
v/c Ratio	0.98	0.99	0.10
Control Delay	40.4	71.9	0.0
Queue Delay	0.0	39.7	0.0
Total Delay	40.4	111.5	0.0
Queue Length 50th (ft)	827	468	0
Queue Length 95th (ft)	#1030	#578	0
Internal Link Dist (ft)		227	250
Turn Bay Length (ft)			
Base Capacity (vph)	2295	1416	6408
Starvation Cap Reductn	0	511	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.98	1.55	0.10

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	SBL	SBR	NEL	NET	SWT	SWR
Lane Configurations						
Volume (vph)	0	0	92	3387	606	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	500			0
Storage Lanes	0	0	1			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.86	0.91	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	6408	5085	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	6408	5085	0
Link Speed (mph)	45			45	45	
Link Distance (ft)	247			189	328	
Travel Time (s)	3.7			2.9	5.0	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	97	3565	638	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	97	3565	638	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 65.7%		ICU Level of Service C	
Analysis Period (min) 15			

APPENDIX Q

SYNCHRO REPORTS

BUILD 2020 PM

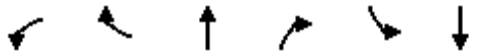
CENTRAL BOULEVARD CORRIDOR

Arterial Level of Service: NB Central Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
PGA Blvd	II	45	11.9	44.9	56.8	0.11	6.9	F
117 Ct	II	45	61.9	10.2	72.1	0.77	38.6	A
SB On Ramp	II	45	52.1	12.6	64.7	0.65	36.1	A
NB Off Ramp	II	45	9.8	13.0	22.8	0.09	14.2	E
Victoria Falls Blvd	II	45	30.1	30.9	61.0	0.30	17.9	D
Hood Rd	II	45	23.7	28.4	52.1	0.23	15.8	E
Donald Ross	II	45	100.8	64.0	164.8	1.26	27.5	C
Total	II		290.3	204.0	494.3	3.41	24.9	C

Arterial Level of Service: SB Central Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Donald Ross	II	45	22.2	42.4	64.6	0.20	11.4	F
Hood Rd	II	45	100.8	24.8	125.6	1.26	36.1	A
Victoria Falls Blvd	II	45	23.7	19.4	43.1	0.23	19.0	D
NB On Ramp	II	45	30.1	15.3	45.4	0.30	24.1	C
SB Off Ramp	II	45	9.8	3.1	12.9	0.09	25.1	C
117 Ct	II	45	52.1	5.8	57.9	0.65	40.4	A
PGA Blvd	II	45	61.9	50.3	112.2	0.77	24.8	C
Total	II		300.6	161.1	461.7	3.51	27.4	C



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	198	145	579	96	95	701
Number	3	18	2	12	1	6
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	208	153	609	101	100	738
Adj No. of Lanes	1	1	2	1	1	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	282	251	2038	912	560	2436
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.16	0.16	0.58	0.58	0.05	0.69
Ln Grp Delay, s/veh	30.0	28.0	7.5	6.5	4.7	4.3
Ln Grp LOS	C	C	A	A	A	A
Approach Vol, veh/h	361		710			838
Approach Delay, s/veh	29.1		7.3			4.4
Approach LOS	C		A			A

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	8			6		
Case No	1.2	7.0	9.0			4.0		
Phs Duration (G+Y+Rc), s	7.3	42.7	15.4			50.0		
Change Period (Y+Rc), s	4.0	5.0	5.0			5.0		
Max Green (Gmax), s	6.0	35.0	60.0			45.0		
Max Allow Headway (MAH), s	3.7	4.8	3.8			4.8		
Max Q Clear (g_c+I1), s	3.3	7.8	9.3			7.4		
Green Ext Time (g_e), s	0.0	10.2	1.1			11.3		
Prob of Phs Call (p_c)	0.84	1.00	1.00			1.00		
Prob of Max Out (p_x)	1.00	0.00	0.00			0.00		

Left-Turn Movement Data								
Assigned Mvmt	1	5	3					
Mvmt Sat Flow, veh/h	1774	0	1774					

Through Movement Data								
Assigned Mvmt		2	8			6		
Mvmt Sat Flow, veh/h		3632	0			3632		

Right-Turn Movement Data								
Assigned Mvmt		12	18			16		
Mvmt Sat Flow, veh/h		1583	1583			0		

Left Lane Group Data								
Assigned Mvmt	1	5	3	0	0	0	0	0
Lane Assignment	(Pr/Pm)							
Lanes in Grp	1	0	1	0	0	0	0	0

Grp Vol (v), veh/h	100	0	208	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1774	0	1774	0	0	0	0	0
Q Serve Time (g_s), s	1.3	0.0	7.3	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	1.3	0.0	7.3	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	736	0	1774	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	39.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	31.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	37.7	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	560	0	282	0	0	0	0	0
V/C Ratio (X)	0.18	0.00	0.74	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	632	0	1628	0	0	0	0	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	4.6	0.0	26.2	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.0	3.8	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	4.7	0.0	30.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.6	0.0	3.6	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	1.00	1.80	0.00	0.00	0.00	0.00	0.00
%ile Back of Q (95%), veh/ln	1.2	0.0	7.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.09	0.00	0.37	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	0	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	609	0	0	0	738	0	0
Grp Sat Flow (s), veh/h/ln	0	1770	0	0	0	1770	0	0
Q Serve Time (g_s), s	0.0	5.8	0.0	0.0	0.0	5.4	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	5.8	0.0	0.0	0.0	5.4	0.0	0.0
Lane Grp Cap (c), veh/h	0	2038	0	0	0	2436	0	0
V/C Ratio (X)	0.00	0.30	0.00	0.00	0.00	0.30	0.00	0.00
Avail Cap (c_a), veh/h	0	2038	0	0	0	2436	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	7.1	0.0	0.0	0.0	4.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.4	0.0	0.0	0.0	0.3	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	7.5	0.0	0.0	0.0	4.3	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	2.8	0.0	0.0	0.0	2.6	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	1.00	0.00	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	5.2	0.0	0.0	0.0	4.8	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.23	0.00	0.00	0.00	0.24	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	18	0	0	16	0	0
Lane Assignment		R	R					
Lanes in Grp	0	1	1	0	0	0	0	0
Grp Vol (v), veh/h	0	101	153	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1583	1583	0	0	0	0	0
Q Serve Time (g_s), s	0.0	1.9	5.9	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	1.9	5.9	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	912	251	0	0	0	0	0
V/C Ratio (X)	0.00	0.11	0.61	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	912	1453	0	0	0	0	0
Upstream Filter (I)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	6.3	25.6	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	2.4	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	6.5	28.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.8	2.6	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.2	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	1.80	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	1.6	4.9	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.11	0.44	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		10.2						
HCM 2010 LOS		B						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	272	29	33	194	29	205	39	1310	132	30	1135	73
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	286	31	35	204	31	216	41	1379	139	32	1195	77
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	382	203	229	213	86	602	180	1516	152	120	1652	739
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.25	0.25	0.25	0.12	0.43	0.43	0.47	0.47	0.47	0.47	0.47	0.47
Ln Grp Delay, s/veh	36.0	0.0	21.9	82.5	0.0	14.9	27.5	32.0	33.0	36.7	17.7	11.3
Ln Grp LOS	D		C	F		B	C	C	C	D	B	B
Approach Vol, veh/h		352			451			1559			1304	
Approach Delay, s/veh		33.3			45.5			32.4			17.8	
Approach LOS		C			D			C			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6		8
Case No		6.0	2.0	6.0		5.0		4.0
Phs Duration (G+Y+Rc), s		39.0	13.0	23.0		39.0		36.0
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0		4.0
Max Green (Gmax), s		35.0	9.0	19.0		35.0		32.0
Max Allow Headway (MAH), s		5.0	3.7	4.8		5.0		4.8
Max Q Clear (g_c+I1), s		31.8	10.6	21.0		37.0		9.8
Green Ext Time (g_e), s		3.1	0.0	0.0		0.0		3.0
Prob of Phs Call (p_c)		1.00	0.99	1.00		1.00		1.00
Prob of Max Out (p_x)		1.00	1.00	1.00		1.00		0.01

Left-Turn Movement Data								
Assigned Mvmt		5	3	7		1		
Mvmt Sat Flow, veh/h		434	1774	1128		343		

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3249		800		3539		203

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		326		903		1583		1411

Left Lane Group Data								
Assigned Mvmt	0	5	3	7	0	1	0	0
Lane Assignment			(Prot)					
Lanes in Grp	0	1	1	1	0	1	0	0

Grp Vol (v), veh/h	0	41	204	286	0	32	0	0
Grp Sat Flow (s), veh/h/ln	0	434	1774	1128	0	343	0	0
Q Serve Time (g_s), s	0.0	6.3	8.6	19.0	0.0	5.2	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	26.7	8.6	19.0	0.0	35.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	434	0	1128	0	343	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	35.0	0.0	19.0	0.0	35.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	14.6	0.0	19.0	0.0	5.2	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	6.3	0.0	19.0	0.0	5.2	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	180	213	382	0	120	0	0
V/C Ratio (X)	0.00	0.23	0.96	0.75	0.00	0.27	0.00	0.00
Avail Cap (c_a), veh/h	0	180	213	382	0	120	0	0
Upstream Filter (I)	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	26.9	32.8	28.0	0.0	35.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.6	49.7	8.0	0.0	1.2	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	27.5	82.5	36.0	0.0	36.7	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.8	4.2	5.9	0.0	0.7	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	2.9	0.8	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	1.61	1.63	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	1.4	11.5	11.0	0.0	1.3	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.13	0.44	1.86	0.00	0.09	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		
Lanes in Grp	0	1	0	0	0	2	0	0
Grp Vol (v), veh/h	0	748	0	0	0	1195	0	0
Grp Sat Flow (s), veh/h/ln	0	1770	0	0	0	1770	0	0
Q Serve Time (g_s), s	0.0	29.3	0.0	0.0	0.0	20.4	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	29.3	0.0	0.0	0.0	20.4	0.0	0.0
Lane Grp Cap (c), veh/h	0	826	0	0	0	1652	0	0
V/C Ratio (X)	0.00	0.91	0.00	0.00	0.00	0.72	0.00	0.00
Avail Cap (c_a), veh/h	0	826	0	0	0	1652	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	18.5	0.0	0.0	0.0	16.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	13.5	0.0	0.0	0.0	1.6	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	32.0	0.0	0.0	0.0	17.7	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	14.1	0.0	0.0	0.0	9.8	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	3.1	0.0	0.0	0.0	0.4	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.40	0.00	1.00	0.00	1.51	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	24.0	0.0	0.0	0.0	15.4	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	1.02	0.00	0.00	0.00	0.73	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	770	0	66	0	77	0	247
Grp Sat Flow (s), veh/h/ln	0	1805	0	1703	0	1583	0	1614
Q Serve Time (g_s), s	0.0	29.8	0.0	2.3	0.0	2.0	0.0	7.8
Cycle Q Clear Time (g_c), s	0.0	29.8	0.0	2.3	0.0	2.0	0.0	7.8
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.18	0.00	0.53	0.00	1.00	0.00	0.87
Lane Grp Cap (c), veh/h	0	842	0	432	0	739	0	689
V/C Ratio (X)	0.00	0.91	0.00	0.15	0.00	0.10	0.00	0.36
Avail Cap (c_a), veh/h	0	842	0	432	0	739	0	689
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	18.6	0.0	21.7	0.0	11.2	0.0	14.6
Incr Delay (d2), s/veh	0.0	14.4	0.0	0.2	0.0	0.1	0.0	0.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	33.0	0.0	21.9	0.0	11.3	0.0	14.9
1st-Term Q (Q1), veh/ln	0.0	14.8	0.0	1.1	0.0	0.9	0.0	3.4
2nd-Term Q (Q2), veh/ln	0.0	3.4	0.0	0.0	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.39	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	25.1	0.0	1.9	0.0	1.6	0.0	6.3
%ile Storage Ratio (RQ%)	0.00	1.06	0.00	0.15	0.00	0.12	0.00	0.24
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	28.9
HCM 2010 LOS	C

Build Alternative 2020 PM

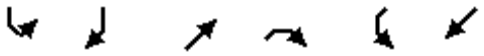
29: Central Blvd & SB On Ramp & SB Off Ramp Corridor: Central Boulevard

Movement	SBL2	SBL	SBR	NWL	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations											
Volume (vph)	109	0	308	0	0	0	781	23	983	528	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0				4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00		1.00				0.86	1.00	0.97	0.95	
Frt	1.00		0.85				1.00	0.85	1.00	1.00	
Flt Protected	0.95		1.00				1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770		1583				6408	1583	3433	3539	
Flt Permitted	0.95		1.00				1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770		1583				6408	1583	3433	3539	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	115	0	324	0	0	0	822	24	1035	556	0
RTOR Reduction (vph)	0	0	105	0	0	0	0	16	0	0	0
Lane Group Flow (vph)	115	0	219	0	0	0	822	8	1035	556	0
Turn Type	Prot		custom				NA	Prot	Prot	NA	
Protected Phases	1		1				2 4	2 4	3	3 4	
Permitted Phases			3 4								
Actuated Green, G (s)	11.1		60.9				29.9	29.9	37.0	49.8	
Effective Green, g (s)	11.1		60.9				29.9	29.9	37.0	49.8	
Actuated g/C Ratio	0.12		0.68				0.33	0.33	0.41	0.55	
Clearance Time (s)	4.0		4.0						4.0		
Vehicle Extension (s)	3.0		3.0						3.0		
Lane Grp Cap (vph)	218		1141				2128	525	1411	1958	
v/s Ratio Prot	c0.06		0.02				c0.13	0.01	c0.30	c0.16	
v/s Ratio Perm			0.11								
v/c Ratio	0.53		0.19				0.39	0.02	0.73	0.28	
Uniform Delay, d1	37.0		5.4				23.0	20.2	22.3	10.7	
Progression Factor	1.00		1.00				1.00	1.00	0.28	0.31	
Incremental Delay, d2	2.3		0.1				0.1	0.0	2.9	0.1	
Delay (s)	39.3		5.5				23.1	20.2	9.1	3.4	
Level of Service	D		A				C	C	A	A	
Approach Delay (s)		14.3		0.0			23.1			7.1	
Approach LOS		B		A			C			A	

Intersection Summary			
HCM 2000 Control Delay	12.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	59.9%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Build Alternative 2020 PM

29: Central Blvd & SB On Ramp & SB Off Ramp Corridor: Central Boulevard



Lane Group	SBL2	SBR	NET	NER	SWL	SWT
Lane Group Flow (vph)	115	324	822	24	1035	556
v/c Ratio	0.53	0.22	0.39	0.04	0.73	0.28
Control Delay	45.1	0.4	24.2	0.1	9.2	3.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	45.1	0.4	24.2	0.1	9.2	3.7
Queue Length 50th (ft)	62	0	102	0	35	18
Queue Length 95th (ft)	110	0	140	0	45	24
Internal Link Dist (ft)			967			394
Turn Bay Length (ft)		800		450	190	
Base Capacity (vph)	354	1484	2127	631	1411	1959
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.32	0.22	0.39	0.04	0.73	0.28

Intersection Summary

Build Alternative 2020 PM

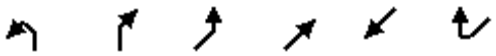
24: Central Blvd & NB Off Ramp/NB On Ramp Corridor: Central Boulevard

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (vph)	43	0	1057	0	0	0	302	588	0	0	1468	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0				4.0	4.0			4.0	4.0
Lane Util. Factor	1.00		0.88				0.97	0.95			0.86	1.00
Frt	1.00		0.85				1.00	1.00			1.00	0.85
Flt Protected	0.95		1.00				0.95	1.00			1.00	1.00
Satd. Flow (prot)	1770		2787				3433	3539			6408	1583
Flt Permitted	0.95		1.00				0.95	1.00			1.00	1.00
Satd. Flow (perm)	1770		2787				3433	3539			6408	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	45	0	1113	0	0	0	318	619	0	0	1545	47
RTOR Reduction (vph)	0	0	278	0	0	0	0	0	0	0	0	26
Lane Group Flow (vph)	45	0	835	0	0	0	318	619	0	0	1545	21
Turn Type	Prot		custom				Prot	NA			NA	Prot
Protected Phases	6		6 11				5 7	13			8	8
Permitted Phases												
Actuated Green, G (s)	22.2		36.1				12.2	35.9			39.6	39.6
Effective Green, g (s)	22.2		36.1				12.2	35.9			39.6	39.6
Actuated g/C Ratio	0.25		0.40				0.14	0.40			0.44	0.44
Clearance Time (s)	4.0							4.0			4.0	4.0
Vehicle Extension (s)	3.0							3.0			3.0	3.0
Lane Grp Cap (vph)	436		1117				465	1411			2819	696
v/s Ratio Prot	0.03		c0.30				c0.09	0.17			c0.24	0.01
v/s Ratio Perm												
v/c Ratio	0.10		0.75				0.68	0.44			0.55	0.03
Uniform Delay, d1	26.2		23.0				37.1	19.7			18.6	14.3
Progression Factor	1.00		1.00				1.35	1.48			1.00	1.00
Incremental Delay, d2	0.1		2.8				3.9	0.2			0.8	0.1
Delay (s)	26.3		25.8				54.1	29.4			19.4	14.4
Level of Service	C		C				D	C			B	B
Approach Delay (s)		25.8			0.0			37.8			19.2	
Approach LOS		C			A			D			B	

Intersection Summary			
HCM 2000 Control Delay	26.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	59.9%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Build Alternative 2020 PM

24: Central Blvd & NB Off Ramp/NB On Ramp Corridor: Central Boulevard



Lane Group	NBL	NBR	NEL	NET	SWT	SWR
Lane Group Flow (vph)	45	1113	318	619	1545	47
v/c Ratio	0.10	0.80	0.69	0.44	0.55	0.06
Control Delay	26.5	17.9	35.5	31.5	19.6	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	26.5	17.9	35.5	31.5	19.6	0.2
Queue Length 50th (ft)	20	186	88	203	185	0
Queue Length 95th (ft)	47	258	131	260	220	0
Internal Link Dist (ft)				394	852	
Turn Bay Length (ft)		550	160			450
Base Capacity (vph)	452	1475	464	1414	2823	785
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.10	0.75	0.69	0.44	0.55	0.06

Intersection Summary

DONALD ROSS CORRIDOR

Arterial Level of Service: EB Donald Ross

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
West Ramp	II	45	46.0	21.0	67.0	0.52	28.1	B
East Ramp	II	45	15.7	21.1	36.8	0.14	14.1	E
Parkside Dr	II	45	42.7	35.5	78.2	0.53	24.6	C
Central Blvd	II	45	52.1	44.8	96.9	0.65	24.2	C
Military Trail	II	45	32.9	45.9	78.8	0.34	15.7	E
Total	II		189.4	168.3	357.7	2.19	22.1	C

Arterial Level of Service: WB Donald Ross

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Military Trail	II	45	21.4	60.0	81.4	0.20	8.7	F
Central Blvd	II	45	32.9	53.8	86.7	0.34	14.2	E
Parkside Dr	II	45	52.1	32.9	85.0	0.65	27.6	C
East Ramp	II	45	42.7	10.0	52.7	0.53	36.5	A
West Ramp	II	45	15.7	24.0	39.7	0.14	13.0	E
Total	II		164.8	180.7	345.5	1.87	19.5	D

HCM 2010 methodology does not support clustered intersections.

HCM 2010 methodology does not support clustered intersections.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	469	819	299	497	898	137	641	113	647	89	115	554
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	494	862	315	523	945	144	675	119	681	94	121	583
Adj No. of Lanes	2	3	1	2	3	1	2	1	1	1	1	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	548	1185	462	708	1182	676	670	484	566	299	322	872
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.10	0.23	0.23	0.14	0.23	0.23	0.19	0.26	0.26	0.06	0.17	0.17
Ln Grp Delay, s/veh	46.4	36.7	36.8	26.8	36.8	16.9	74.0	27.3	137.4	29.4	34.6	29.6
Ln Grp LOS	D	D	D	C	D	B	F	C	F	C	C	C
Approach Vol, veh/h		1671			1612			1475			798	
Approach Delay, s/veh		39.6			31.8			99.5			30.3	
Approach LOS		D			C			F			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	3.0	2.0	3.0	1.1	3.0	1.1	3.0
Phs Duration (G+Y+Rc), s	17.0	30.0	22.0	23.5	17.0	30.1	13.9	31.6
Change Period (Y+Rc), s	8.0	* 8.5	4.0	* 7.5	4.0	8.5	8.5	7.5
Max Green (Gmax), s	9.0	* 24	18.0	* 16	15.0	20.5	6.3	19.7
Max Allow Headway (MAH), s	3.7	4.7	3.7	4.1	3.7	4.7	3.7	4.1
Max Q Clear (g_c+I1), s	11.0	18.2	20.0	18.0	12.4	18.3	6.0	26.1
Green Ext Time (g_e), s	0.0	3.3	0.0	0.0	0.5	2.0	0.0	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00
Prob of Max Out (p_x)	1.00	0.98	1.00	1.00	1.00	0.00	1.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3442		3442		3442		1774	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		5085		1863		5085		1863

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		2787		1583		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Pr/Pm)		(Prot)		(Pr/Pm)		(Pr/Pm)	
Lanes in Grp	2	0	2	0	2	0	1	0

Grp Vol (v), veh/h	494	0	675	0	523	0	94	0
Grp Sat Flow (s), veh/h/ln	1721	0	1721	0	1721	0	1774	0
Q Serve Time (g_s), s	9.0	0.0	18.0	0.0	10.4	0.0	4.0	0.0
Cycle Q Clear Time (g_c), s	9.0	0.0	18.0	0.0	10.4	0.0	4.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	500	0	0	0	460	0	677	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	21.5	0.0	0.0	0.0	21.5	0.0	16.0	0.0
Perm LT Serve Time (g_u), s	5.3	0.0	0.0	0.0	7.1	0.0	16.0	0.0
Perm LT Q Serve Time (g_ps), s	5.3	0.0	0.0	0.0	7.1	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	548	0	670	0	708	0	299	0
V/C Ratio (X)	0.90	0.00	1.01	0.00	0.74	0.00	0.31	0.00
Avail Cap (c_a), veh/h	548	0	670	0	784	0	316	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	28.3	0.0	37.3	0.0	23.5	0.0	28.8	0.0
Incr Delay (d2), s/veh	18.1	0.0	36.8	0.0	3.3	0.0	0.6	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	46.4	0.0	74.0	0.0	26.8	0.0	29.4	0.0
1st-Term Q (Q1), veh/ln	2.0	0.0	8.5	0.0	4.9	0.0	1.9	0.0
2nd-Term Q (Q2), veh/ln	1.4	0.0	3.4	0.0	0.3	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	1.80	0.00	1.72	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	6.1	0.0	21.4	0.0	8.9	0.0	3.6	0.0
%ile Storage Ratio (RQ%)	0.29	0.00	1.55	0.00	0.73	0.00	0.60	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	1	0	3	0	1
Grp Vol (v), veh/h	0	945	0	121	0	862	0	119
Grp Sat Flow (s), veh/h/ln	0	1695	0	1863	0	1695	0	1863
Q Serve Time (g_s), s	0.0	16.2	0.0	5.3	0.0	14.5	0.0	4.7
Cycle Q Clear Time (g_c), s	0.0	16.2	0.0	5.3	0.0	14.5	0.0	4.7
Lane Grp Cap (c), veh/h	0	1182	0	322	0	1185	0	484
V/C Ratio (X)	0.00	0.80	0.00	0.38	0.00	0.73	0.00	0.25
Avail Cap (c_a), veh/h	0	1292	0	322	0	1185	0	484
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	33.5	0.0	33.8	0.0	32.8	0.0	27.1
Incr Delay (d2), s/veh	0.0	3.4	0.0	0.7	0.0	3.9	0.0	0.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	36.8	0.0	34.6	0.0	36.7	0.0	27.3
1st-Term Q (Q1), veh/ln	0.0	7.5	0.0	2.7	0.0	6.8	0.0	2.4
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.1	0.0	0.4	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.58	0.00	1.80	0.00	1.61	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	12.5	0.0	5.0	0.0	11.6	0.0	4.4
%ile Storage Ratio (RQ%)	0.00	0.10	0.00	0.22	0.00	0.11	0.00	0.14
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	2	0	1	0	1
Grp Vol (v), veh/h	0	144	0	583	0	315	0	681
Grp Sat Flow (s), veh/h/ln	0	1583	0	1393	0	1583	0	1583
Q Serve Time (g_s), s	0.0	5.3	0.0	16.0	0.0	16.3	0.0	24.1
Cycle Q Clear Time (g_c), s	0.0	5.3	0.0	16.0	0.0	16.3	0.0	24.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	1583.3	0.0	1393.3	0.0	1583.3	0.0	1583.3
Prot RT Eff Green (g_R), s	0.0	18.0	0.0	13.0	0.0	5.4	0.0	9.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	676	0	872	0	462	0	566
V/C Ratio (X)	0.00	0.21	0.00	0.67	0.00	0.68	0.00	1.20
Avail Cap (c_a), veh/h	0	710	0	872	0	462	0	566
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	16.7	0.0	27.6	0.0	29.0	0.0	29.7
Incr Delay (d2), s/veh	0.0	0.2	0.0	2.0	0.0	7.9	0.0	107.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	16.9	0.0	29.6	0.0	36.8	0.0	137.4
1st-Term Q (Q1), veh/ln	0.0	2.3	0.0	6.4	0.0	7.1	0.0	14.4
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.2	0.0	1.0	0.0	16.9
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.63	0.00	1.57	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	4.2	0.0	10.9	0.0	12.8	0.0	56.3
%ile Storage Ratio (RQ%)	0.00	0.23	0.00	0.92	0.00	0.65	0.00	3.18
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.8
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3

Intersection Summary	
HCM 2010 Ctrl Delay	51.9
HCM 2010 LOS	D

Notes

User approved ignoring U-Turning movement.

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	308	816	276	301	1112	324	151	717	47	430	607	116
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	324	859	291	317	1171	341	159	755	49	453	639	122
Adj No. of Lanes	2	3	1	2	3	1	2	2	1	2	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	313	1153	464	377	1248	389	227	756	338	501	1053	471
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.09	0.23	0.23	0.11	0.25	0.25	0.07	0.21	0.21	0.15	0.30	0.30
Ln Grp Delay, s/veh	110.4	42.3	36.4	61.8	55.1	63.2	54.2	75.6	35.3	66.1	34.1	29.7
Ln Grp LOS	F	D	D	E	E	E	D	E	D	E	C	C
Approach Vol, veh/h		1474			1829			963			1214	
Approach Delay, s/veh		56.1			57.8			70.0			45.6	
Approach LOS		E			E			E			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	19.0	35.0	25.0	31.0	21.1	32.9	15.8	40.2
Change Period (Y+Rc), s	9.0	8.0	9.0	7.5	9.0	8.0	8.5	7.5
Max Green (Gmax), s	10.0	27.0	16.0	23.5	13.0	24.0	16.0	24.0
Max Allow Headway (MAH), s	3.7	4.7	3.7	4.8	3.7	4.7	3.7	4.8
Max Q Clear (g_c+I1), s	12.0	26.8	16.2	25.5	11.9	19.5	7.0	19.0
Green Ext Time (g_e), s	0.0	0.2	0.0	0.0	0.1	4.0	0.3	3.5
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	1.00	1.00	1.00	0.00	0.99

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3442		3442		3442		3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		5085		3539		5085		3539

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		1583		1583		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	
Lanes in Grp	2	0	2	0	2	0	2	0

Grp Vol (v), veh/h	324	0	453	0	317	0	159	0
Grp Sat Flow (s), veh/h/ln	1721	0	1721	0	1721	0	1721	0
Q Serve Time (g_s), s	10.0	0.0	14.2	0.0	9.9	0.0	5.0	0.0
Cycle Q Clear Time (g_c), s	10.0	0.0	14.2	0.0	9.9	0.0	5.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	313	0	501	0	377	0	227	0
V/C Ratio (X)	1.04	0.00	0.90	0.00	0.84	0.00	0.70	0.00
Avail Cap (c_a), veh/h	313	0	501	0	407	0	501	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	50.0	0.0	46.3	0.0	48.0	0.0	50.3	0.0
Incr Delay (d2), s/veh	60.4	0.0	19.9	0.0	13.7	0.0	3.9	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	110.4	0.0	66.1	0.0	61.8	0.0	54.2	0.0
1st-Term Q (Q1), veh/ln	4.7	0.0	6.8	0.0	4.7	0.0	2.4	0.0
2nd-Term Q (Q2), veh/ln	2.6	0.0	1.4	0.0	0.7	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	1.57	0.00	1.70	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	13.2	0.0	12.9	0.0	9.3	0.0	4.5	0.0
%ile Storage Ratio (RQ%)	0.63	0.00	0.64	0.00	0.46	0.00	0.21	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	2	0	3	0	2
Grp Vol (v), veh/h	0	1171	0	755	0	859	0	639
Grp Sat Flow (s), veh/h/ln	0	1695	0	1770	0	1695	0	1770
Q Serve Time (g_s), s	0.0	24.8	0.0	23.5	0.0	17.3	0.0	17.0
Cycle Q Clear Time (g_c), s	0.0	24.8	0.0	23.5	0.0	17.3	0.0	17.0
Lane Grp Cap (c), veh/h	0	1248	0	756	0	1153	0	1053
V/C Ratio (X)	0.00	0.94	0.00	1.00	0.00	0.75	0.00	0.61
Avail Cap (c_a), veh/h	0	1248	0	756	0	1153	0	1053
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	40.7	0.0	43.2	0.0	39.6	0.0	33.1
Incr Delay (d2), s/veh	0.0	14.4	0.0	32.3	0.0	2.7	0.0	1.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	55.1	0.0	75.6	0.0	42.3	0.0	34.1
1st-Term Q (Q1), veh/ln	0.0	11.6	0.0	11.4	0.0	8.1	0.0	8.3
2nd-Term Q (Q2), veh/ln	0.0	1.7	0.0	3.4	0.0	0.3	0.0	0.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.45	0.00	1.43	0.00	1.57	0.00	1.56
%ile Back of Q (95%), veh/ln	0.0	19.2	0.0	21.1	0.0	13.2	0.0	13.3
%ile Storage Ratio (RQ%)	0.00	0.29	0.00	0.93	0.00	0.10	0.00	0.49
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	341	0	49	0	291	0	122
Grp Sat Flow (s), veh/h/ln	0	1583	0	1583	0	1583	0	1583
Q Serve Time (g_s), s	0.0	22.8	0.0	2.8	0.0	17.5	0.0	6.5
Cycle Q Clear Time (g_c), s	0.0	22.8	0.0	2.8	0.0	17.5	0.0	6.5
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	1583.3	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	7.3	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	389	0	338	0	464	0	471
V/C Ratio (X)	0.00	0.88	0.00	0.14	0.00	0.63	0.00	0.26
Avail Cap (c_a), veh/h	0	389	0	338	0	464	0	471
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	39.9	0.0	35.1	0.0	33.7	0.0	29.4
Incr Delay (d2), s/veh	0.0	23.3	0.0	0.2	0.0	2.7	0.0	0.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	63.2	0.0	35.3	0.0	36.4	0.0	29.7
1st-Term Q (Q1), veh/ln	0.0	9.9	0.0	1.2	0.0	7.7	0.0	2.8
2nd-Term Q (Q2), veh/ln	0.0	2.5	0.0	0.0	0.0	0.3	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.46	0.00	1.80	0.00	1.58	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	18.3	0.0	2.2	0.0	12.6	0.0	5.1
%ile Storage Ratio (RQ%)	0.00	1.49	0.00	0.22	0.00	1.09	0.00	0.26
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	56.8
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	320	949	32	198	1163	229	42	872	169	164	1184	419
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	337	999	34	208	1224	241	44	918	178	173	1246	441
Adj No. of Lanes	3	3	1	2	3	1	2	3	1	2	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	356	1260	392	269	1296	404	130	1090	340	522	1669	632
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.07	0.25	0.25	0.08	0.25	0.25	0.04	0.21	0.21	0.15	0.33	0.33
Ln Grp Delay, s/veh	83.1	42.3	30.9	60.0	53.4	40.9	51.0	44.2	37.9	41.7	34.6	32.7
Ln Grp LOS	F	D	C	E	D	D	D	D	D	D	C	C
Approach Vol, veh/h		1370			1673			1140			1860	
Approach Delay, s/veh		52.1			52.4			43.4			34.8	
Approach LOS		D			D			D			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	16.0	34.9	24.5	30.1	16.8	34.1	12.5	42.1
Change Period (Y+Rc), s	8.5	8.0	8.5	7.5	8.5	8.0	8.5	7.5
Max Green (Gmax), s	7.5	26.9	16.0	27.1	8.5	25.9	16.5	26.6
Max Allow Headway (MAH), s	3.7	4.8	3.7	4.7	3.7	4.8	3.7	4.7
Max Q Clear (g_c+I1), s	9.1	26.9	6.7	20.3	8.3	21.4	3.3	26.5
Green Ext Time (g_e), s	0.0	0.0	0.3	2.4	0.0	4.0	0.1	0.1
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	0.00	0.96	1.00	0.00	0.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	5003		3442		3442		3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		5085		5085		5085		5085

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		1583		1583		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	
Lanes in Grp	3	0	2	0	2	0	2	0

Grp Vol (v), veh/h	337	0	173	0	208	0	44	0
Grp Sat Flow (s), veh/h/ln	1668	0	1721	0	1721	0	1721	0
Q Serve Time (g_s), s	7.1	0.0	4.7	0.0	6.3	0.0	1.3	0.0
Cycle Q Clear Time (g_c), s	7.1	0.0	4.7	0.0	6.3	0.0	1.3	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	356	0	522	0	269	0	130	0
V/C Ratio (X)	0.95	0.00	0.33	0.00	0.77	0.00	0.34	0.00
Avail Cap (c_a), veh/h	356	0	522	0	277	0	538	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	48.8	0.0	40.0	0.0	47.7	0.0	49.5	0.0
Incr Delay (d2), s/veh	34.3	0.0	1.7	0.0	12.3	0.0	1.5	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	83.1	0.0	41.7	0.0	60.0	0.0	51.0	0.0
1st-Term Q (Q1), veh/ln	3.2	0.0	2.3	0.0	3.0	0.0	0.6	0.0
2nd-Term Q (Q2), veh/ln	1.1	0.0	0.1	0.0	0.5	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.78	0.00	1.80	0.00	1.80	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	7.8	0.0	4.3	0.0	6.2	0.0	1.2	0.0
%ile Storage Ratio (RQ%)	0.33	0.00	0.23	0.00	0.28	0.00	0.06	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	3	0	3	0	3
Grp Vol (v), veh/h	0	1224	0	918	0	999	0	1246
Grp Sat Flow (s), veh/h/ln	0	1695	0	1695	0	1695	0	1695
Q Serve Time (g_s), s	0.0	24.9	0.0	18.3	0.0	19.4	0.0	23.0
Cycle Q Clear Time (g_c), s	0.0	24.9	0.0	18.3	0.0	19.4	0.0	23.0
Lane Grp Cap (c), veh/h	0	1296	0	1090	0	1260	0	1669
V/C Ratio (X)	0.00	0.94	0.00	0.84	0.00	0.79	0.00	0.75
Avail Cap (c_a), veh/h	0	1296	0	1306	0	1260	0	1669
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	38.6	0.0	39.7	0.0	37.2	0.0	31.5
Incr Delay (d2), s/veh	0.0	14.8	0.0	4.4	0.0	5.2	0.0	3.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	53.4	0.0	44.2	0.0	42.3	0.0	34.6
1st-Term Q (Q1), veh/ln	0.0	11.7	0.0	8.6	0.0	9.1	0.0	10.7
2nd-Term Q (Q2), veh/ln	0.0	1.8	0.0	0.4	0.0	0.6	0.0	0.5

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.45	0.00	1.55	0.00	1.53	0.00	1.49
%ile Back of Q (95%), veh/ln	0.0	19.5	0.0	14.0	0.0	14.8	0.0	16.7
%ile Storage Ratio (RQ%)	0.00	0.51	0.00	0.53	0.00	0.22	0.00	0.55
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	241	0	178	0	34	0	441
Grp Sat Flow (s), veh/h/ln	0	1583	0	1583	0	1583	0	1583
Q Serve Time (g_s), s	0.0	14.1	0.0	10.5	0.0	1.7	0.0	24.5
Cycle Q Clear Time (g_c), s	0.0	14.1	0.0	10.5	0.0	1.7	0.0	24.5
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1583.3
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	404	0	340	0	392	0	632
V/C Ratio (X)	0.00	0.60	0.00	0.52	0.00	0.09	0.00	0.70
Avail Cap (c_a), veh/h	0	404	0	407	0	392	0	632
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	34.6	0.0	36.7	0.0	30.5	0.0	26.4
Incr Delay (d2), s/veh	0.0	6.4	0.0	1.3	0.0	0.4	0.0	6.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	40.9	0.0	37.9	0.0	30.9	0.0	32.7
1st-Term Q (Q1), veh/ln	0.0	6.1	0.0	4.6	0.0	0.8	0.0	10.7
2nd-Term Q (Q2), veh/ln	0.0	0.7	0.0	0.1	0.0	0.0	0.0	1.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.63	0.00	1.76	0.00	1.80	0.00	1.48
%ile Back of Q (95%), veh/ln	0.0	11.1	0.0	8.3	0.0	1.5	0.0	17.4
%ile Storage Ratio (RQ%)	0.00	0.91	0.00	0.39	0.00	0.05	0.00	0.57
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	45.2
HCM 2010 LOS	D

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	3	527	0	35	614	43	6	0	30	28	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	325	-	-	289	-	-	-	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	555	0	37	646	45	6	0	32	29	0	0

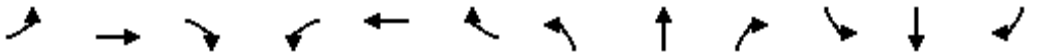
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	692	0	0	555	0	0	958	1326	277	1027	1304	346
Stage 1	-	-	-	-	-	-	561	561	-	743	743	-
Stage 2	-	-	-	-	-	-	397	765	-	284	561	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	899	-	-	1011	-	-	212	154	720	189	159	650
Stage 1	-	-	-	-	-	-	480	508	-	373	420	-
Stage 2	-	-	-	-	-	-	600	410	-	699	508	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	899	-	-	1011	-	-	206	148	720	175	153	650
Mov Cap-2 Maneuver	-	-	-	-	-	-	206	148	-	175	153	-
Stage 1	-	-	-	-	-	-	478	506	-	372	405	-
Stage 2	-	-	-	-	-	-	578	395	-	666	506	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.4	12.6	29.7
HCM LOS			B	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	509	899	-	-	1011	-	-	175	-
HCM Lane V/C Ratio	0.074	0.004	-	-	0.036	-	-	0.168	-
HCM Control Delay (s)	12.6	9	-	-	8.7	-	-	29.7	0
HCM Lane LOS	B	A	-	-	A	-	-	D	A
HCM 95th %tile Q(veh)	0.2	0	-	-	0.1	-	-	0.6	-

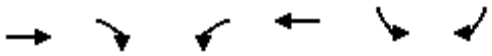
Build Alternative 2020 PM

2: West Ramp & Donald Ross Corridor: Donald Ross Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	489	66	842	740	0	0	0	0	335	0	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0	4.0	7.0	6.0					6.0		4.0
Lane Util. Factor		0.86	1.00	0.86	0.86					0.94		1.00
Frt		1.00	0.85	1.00	1.00					1.00		0.85
Flt Protected		1.00	1.00	0.95	0.99					0.95		1.00
Satd. Flow (prot)		6408	1583	3044	3188					4990		1583
Flt Permitted		1.00	1.00	0.95	0.84					0.95		1.00
Satd. Flow (perm)		6408	1583	3044	2689					4990		1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	515	69	886	779	0	0	0	0	353	0	29
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	515	69	797	868	0	0	0	0	353	0	29
Turn Type		NA	Free	Prot	NA					Prot		Free
Protected Phases		6		5	2					3		
Permitted Phases			Free									Free
Actuated Green, G (s)		25.0	80.0	21.6	53.6					14.4		80.0
Effective Green, g (s)		25.0	80.0	21.6	53.6					14.4		80.0
Actuated g/C Ratio		0.31	1.00	0.27	0.67					0.18		1.00
Clearance Time (s)		6.0		7.0	6.0					6.0		
Vehicle Extension (s)		3.0		3.0	3.0					3.0		
Lane Grp Cap (vph)		2002	1583	821	1936					898		1583
v/s Ratio Prot		0.08		c0.26	0.12					c0.07		
v/s Ratio Perm			0.04		c0.18							0.02
v/c Ratio		0.26	0.04	0.97	0.45					0.39		0.02
Uniform Delay, d1		20.6	0.0	28.9	6.2					28.9		0.0
Progression Factor		1.00	1.00	1.33	2.55					1.00		1.00
Incremental Delay, d2		0.3	0.1	23.5	0.2					0.3		0.0
Delay (s)		20.9	0.1	61.8	16.1					29.2		0.0
Level of Service		C	A	E	B					C		A
Approach Delay (s)		18.4			38.0			0.0			27.0	
Approach LOS		B			D			A			C	

Intersection Summary			
HCM 2000 Control Delay	32.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	19.0
Intersection Capacity Utilization	50.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Lane Group	EBT	EBR	WBL	WBT	SBL	SBR
Lane Group Flow (vph)	515	69	797	868	353	29
v/c Ratio	0.26	0.04	0.97	0.70	0.39	0.02
Control Delay	21.0	0.0	64.1	24.0	29.7	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	21.0	0.0	64.1	24.0	29.7	0.0
Queue Length 50th (ft)	55	0	~263	175	54	0
Queue Length 95th (ft)	76	0	#411	241	78	0
Internal Link Dist (ft)	2056			679		
Turn Bay Length (ft)		433				
Base Capacity (vph)	2002	1583	822	1245	1060	1583
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.26	0.04	0.97	0.70	0.33	0.02

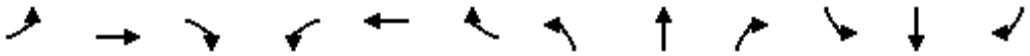
Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Build Alternative 2020 PM

9: East Ramp & Donald Ross Corridor: Donald Ross Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	38	786	0	0	1300	866	282	0	1097	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0			6.0	4.0	6.0		6.0			
Lane Util. Factor	0.97	0.91			0.86	1.00	0.97		0.76			
Frt	1.00	1.00			1.00	0.85	1.00		0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (prot)	3433	5085			6408	1583	3433		3610			
Flt Permitted	0.95	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (perm)	3433	5085			6408	1583	3433		3610			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	40	827	0	0	1368	912	297	0	1155	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	736	0	0	0
Lane Group Flow (vph)	40	827	0	0	1368	912	297	0	419	0	0	0
Turn Type	Prot	NA			NA	Free	Prot		Prot			
Protected Phases	1	6			2		7		7			
Permitted Phases						Free						
Actuated Green, G (s)	2.7	25.0			44.9	80.0	14.4		14.4			
Effective Green, g (s)	2.7	25.0			44.9	80.0	14.4		14.4			
Actuated g/C Ratio	0.03	0.31			0.56	1.00	0.18		0.18			
Clearance Time (s)	6.0	6.0			6.0		6.0		6.0			
Vehicle Extension (s)	3.0	3.0			3.0		3.0		3.0			
Lane Grp Cap (vph)	115	1589			3596	1583	617		649			
v/s Ratio Prot	0.01	0.16			0.21		0.09		0.12			
v/s Ratio Perm						c0.58						
v/c Ratio	0.35	0.52			0.38	0.58	0.48		0.65			
Uniform Delay, d1	37.8	22.6			9.8	0.0	29.4		30.4			
Progression Factor	0.70	0.87			1.00	1.00	1.00		1.00			
Incremental Delay, d2	1.8	1.2			0.3	1.5	0.6		2.2			
Delay (s)	28.2	20.9			10.1	1.5	30.0		32.7			
Level of Service	C	C			B	A	C		C			
Approach Delay (s)		21.3			6.7			32.1			0.0	
Approach LOS		C			A			C			A	

Intersection Summary			
HCM 2000 Control Delay	17.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	19.0
Intersection Capacity Utilization	50.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Build Alternative 2020 PM

9: East Ramp & Donald Ross Corridor: Donald Ross Road

Lane Group	EBL	EBT	WBT	WBR	NBL	NBR
Lane Group Flow (vph)	40	827	1368	912	297	1155
v/c Ratio	0.19	0.52	0.36	0.58	0.48	0.83
Control Delay	27.3	21.1	10.0	1.5	31.6	12.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	27.3	21.1	10.0	1.5	31.6	12.9
Queue Length 50th (ft)	10	82	115	0	68	49
Queue Length 95th (ft)	27	103	141	0	102	108
Internal Link Dist (ft)		679	2740			
Turn Bay Length (ft)						
Base Capacity (vph)	213	1589	3790	1583	729	1473
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.19	0.52	0.36	0.58	0.41	0.78

Intersection Summary

HOOD ROAD CORRIDOR

Arterial Level of Service: EB Hood Road

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Central Blvd	II	45	133.7	29.9	163.6	1.67	36.8	A
Military Trail	II	45	31.0	31.1	62.1	0.31	18.1	D
Total	II		164.7	61.0	225.7	1.98	31.6	B

Arterial Level of Service: WB Hood Road

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Military Trail	II	45	14.9	31.4	46.3	0.14	10.6	F
Central Blvd	II	45	31.0	23.6	54.6	0.31	20.6	D
Total	II		45.9	55.0	100.9	0.45	16.0	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	73	148	81	397	185	72	178	850	554	189	637	145
Future Volume (veh/h)	73	148	81	397	185	72	178	850	554	189	637	145
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	77	156	85	418	195	76	187	895	583	199	671	153
Adj No. of Lanes	2	2	1	2	2	1	2	2	1	2	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	205	383	299	509	696	311	277	1106	495	256	1084	485
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.06	0.11	0.11	0.15	0.20	0.20	0.08	0.31	0.31	0.07	0.31	0.31
Ln Grp Delay, s/veh	31.5	28.6	23.9	38.1	23.2	11.1	35.1	27.7	106.1	44.6	22.6	19.6
Ln Grp LOS	C	C	C	D	C	B	D	C	F	D	C	B
Approach Vol, veh/h		318			689			1665			1023	
Approach Delay, s/veh		28.1			30.9			56.0			26.4	
Approach LOS		C			C			E			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	2	1	3	4	5	6	7	8
Case No	3.0	2.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	27.0	11.0	15.9	13.3	11.4	26.6	10.0	19.2
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green (Gmax), s	21.0	5.0	10.0	20.0	6.0	20.0	5.0	25.0
Max Allow Headway (MAH), s	4.5	4.5	3.7	4.6	3.7	4.5	3.7	4.6
Max Q Clear (g_c+l1), s	17.6	5.8	9.9	5.1	5.6	12.9	3.4	5.1
Green Ext Time (g_e), s	2.3	0.0	0.0	2.2	0.0	3.1	0.0	2.4
Prob of Phs Call (p_c)	1.00	0.98	1.00	1.00	0.97	1.00	1.00	1.00
Prob of Max Out (p_x)	0.00	1.00	1.00	0.03	1.00	0.00	1.00	0.01

Left-Turn Movement Data								
Assigned Mvmt		1	3		5		7	
Mvmt Sat Flow, veh/h		3442	3442		3442		3442	

Through Movement Data								
Assigned Mvmt	2			4		6		8
Mvmt Sat Flow, veh/h	3539			3539		3539		3539

Right-Turn Movement Data								
Assigned Mvmt	12			14		16		18
Mvmt Sat Flow, veh/h	1583			1583		1583		1583

Left Lane Group Data								
Assigned Mvmt	0	1	3	0	5	0	7	0
Lane Assignment		(Prot)	(Prot)		(Prot)		(Prot)	

Lanes in Grp	0	2	2	0	2	0	2	0
Grp Vol (v), veh/h	0	199	418	0	187	0	77	0
Grp Sat Flow (s), veh/h/ln	0	1721	1721	0	1721	0	1721	0
Q Serve Time (g_s), s	0.0	3.8	7.9	0.0	3.6	0.0	1.4	0.0
Cycle Q Clear Time (g_c), s	0.0	3.8	7.9	0.0	3.6	0.0	1.4	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	256	509	0	277	0	205	0
V/C Ratio (X)	0.00	0.78	0.82	0.00	0.68	0.00	0.38	0.00
Avail Cap (c_a), veh/h	0	256	512	0	307	0	256	0
Upstream Filter (I)	0.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	0.0	30.6	27.8	0.0	30.0	0.0	30.4	0.0
Incr Delay (d2), s/veh	0.0	14.0	10.3	0.0	5.1	0.0	1.1	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	44.6	38.1	0.0	35.1	0.0	31.5	0.0
1st-Term Q (Q1), veh/ln	0.0	1.8	3.8	0.0	1.7	0.0	0.7	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.5	0.7	0.0	0.2	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	1.77	0.00	1.80	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	0.0	4.2	8.0	0.0	3.4	0.0	1.3	0.0
%ile Storage Ratio (RQ%)	0.00	0.35	0.37	0.00	0.25	0.00	0.06	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	2	0	0	4	0	6	0	8
Lane Assignment	T			T		T		T
Lanes in Grp	2	0	0	2	0	2	0	2
Grp Vol (v), veh/h	895	0	0	156	0	671	0	195
Grp Sat Flow (s), veh/h/ln	1770	0	0	1770	0	1770	0	1770
Q Serve Time (g_s), s	15.6	0.0	0.0	2.8	0.0	10.9	0.0	3.1
Cycle Q Clear Time (g_c), s	15.6	0.0	0.0	2.8	0.0	10.9	0.0	3.1
Lane Grp Cap (c), veh/h	1106	0	0	383	0	1084	0	696
V/C Ratio (X)	0.81	0.00	0.00	0.41	0.00	0.62	0.00	0.28
Avail Cap (c_a), veh/h	1106	0	0	1053	0	1084	0	1316
Upstream Filter (I)	1.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	21.3	0.0	0.0	28.0	0.0	20.0	0.0	23.0
Incr Delay (d2), s/veh	6.4	0.0	0.0	0.7	0.0	2.7	0.0	0.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	27.7	0.0	0.0	28.6	0.0	22.6	0.0	23.2
1st-Term Q (Q1), veh/ln	7.6	0.0	0.0	1.3	0.0	5.3	0.0	1.5

2nd-Term Q (Q2), veh/ln	1.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.56	0.00	0.00	1.80	0.00	1.69	0.00	1.80
%ile Back of Q (95%), veh/ln	13.4	0.0	0.0	2.5	0.0	9.6	0.0	2.8
%ile Storage Ratio (RQ%)	0.77	0.00	0.00	0.08	0.00	0.26	0.00	0.05
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	12	0	0	14	0	16	0	18
Lane Assignment	R			R		R		R
Lanes in Grp	1	0	0	1	0	1	0	1
Grp Vol (v), veh/h	583	0	0	85	0	153	0	76
Grp Sat Flow (s), veh/h/ln	1583	0	0	1583	0	1583	0	1583
Q Serve Time (g_s), s	11.0	0.0	0.0	3.1	0.0	5.0	0.0	1.9
Cycle Q Clear Time (g_c), s	11.0	0.0	0.0	3.1	0.0	5.0	0.0	1.9
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	1583.3	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	5.4	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	1.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	495	0	0	299	0	485	0	311
V/C Ratio (X)	1.18	0.00	0.00	0.28	0.00	0.32	0.00	0.24
Avail Cap (c_a), veh/h	495	0	0	599	0	485	0	589
Upstream Filter (I)	1.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	6.4	0.0	0.0	23.4	0.0	17.9	0.0	10.7
Incr Delay (d2), s/veh	99.7	0.0	0.0	0.5	0.0	1.7	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	106.1	0.0	0.0	23.9	0.0	19.6	0.0	11.1
1st-Term Q (Q1), veh/ln	6.2	0.0	0.0	1.4	0.0	2.2	0.0	1.1
2nd-Term Q (Q2), veh/ln	13.7	0.0	0.0	0.0	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	35.8	0.0	0.0	2.5	0.0	4.3	0.0	2.0
%ile Storage Ratio (RQ%)	3.25	0.00	0.00	0.09	0.00	0.32	0.00	0.15
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	22.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	40.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	189	357	69	310	366	107	89	680	264	147	632	494
Future Volume (veh/h)	189	357	69	310	366	107	89	680	264	147	632	494
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	199	376	73	326	385	113	94	716	278	155	665	520
Adj No. of Lanes	3	2	1	3	2	1	2	3	1	2	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	333	596	266	416	654	293	164	1161	362	213	1235	490
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.07	0.17	0.17	0.08	0.18	0.18	0.05	0.23	0.23	0.06	0.24	0.24
Ln Grp Delay, s/veh	33.9	28.6	26.3	41.3	27.3	26.2	36.2	27.0	40.1	44.3	25.1	82.4
Ln Grp LOS	C	C	C	D	C	C	D	C	D	D	C	F
Approach Vol, veh/h		648			824			1088			1340	
Approach Delay, s/veh		29.9			32.7			31.2			49.6	
Approach LOS		C			C			C			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	11.9	24.7	13.2	21.1	12.9	23.7	14.4	19.9
Change Period (Y+Rc), s	8.5	7.5	8.5	8.0	8.5	7.5	8.5	8.0
Max Green (Gmax), s	4.0	16.6	5.9	16.0	4.4	16.2	5.9	16.0
Max Allow Headway (MAH), s	3.7	4.5	3.7	4.7	3.7	4.5	3.7	4.7
Max Q Clear (g_c+l1), s	3.9	19.2	4.7	9.1	5.1	13.7	6.5	9.0
Green Ext Time (g_e), s	0.0	0.0	0.1	2.9	0.0	2.2	0.0	2.9
Prob of Phs Call (p_c)	0.84	1.00	0.98	1.00	0.95	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.68	1.00	0.00	1.00	0.68

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3442		5003		3442		5003	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		5085		3539		5085		3539

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		1583		1583		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	3	0	2	0	3	0
Grp Vol (v), veh/h	94	0	199	0	155	0	326	0
Grp Sat Flow (s), veh/h/ln	1721	0	1668	0	1721	0	1668	0
Q Serve Time (g_s), s	1.9	0.0	2.7	0.0	3.1	0.0	4.5	0.0
Cycle Q Clear Time (g_c), s	1.9	0.0	2.7	0.0	3.1	0.0	4.5	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	164	0	333	0	213	0	416	0
V/C Ratio (X)	0.57	0.00	0.60	0.00	0.73	0.00	0.78	0.00
Avail Cap (c_a), veh/h	194	0	416	0	213	0	416	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	33.1	0.0	32.2	0.0	32.7	0.0	31.9	0.0
Incr Delay (d2), s/veh	3.2	0.0	1.7	0.0	11.7	0.0	9.4	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	36.2	0.0	33.9	0.0	44.3	0.0	41.3	0.0
1st-Term Q (Q1), veh/ln	0.9	0.0	1.3	0.0	1.5	0.0	2.1	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.1	0.0	0.3	0.0	0.4	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	1.80	0.00	1.80	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	1.8	0.0	2.4	0.0	3.3	0.0	4.4	0.0
%ile Storage Ratio (RQ%)	0.10	0.00	0.11	0.00	0.14	0.00	0.21	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	2	0	3	0	2
Grp Vol (v), veh/h	0	665	0	385	0	716	0	376
Grp Sat Flow (s), veh/h/ln	0	1695	0	1770	0	1695	0	1770
Q Serve Time (g_s), s	0.0	8.1	0.0	7.1	0.0	9.0	0.0	7.0
Cycle Q Clear Time (g_c), s	0.0	8.1	0.0	7.1	0.0	9.0	0.0	7.0
Lane Grp Cap (c), veh/h	0	1235	0	654	0	1161	0	596
V/C Ratio (X)	0.00	0.54	0.00	0.59	0.00	0.62	0.00	0.63
Avail Cap (c_a), veh/h	0	1235	0	798	0	1161	0	798
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	23.4	0.0	26.4	0.0	24.6	0.0	27.5
Incr Delay (d2), s/veh	0.0	1.7	0.0	0.8	0.0	2.5	0.0	1.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	25.1	0.0	27.3	0.0	27.0	0.0	28.6
1st-Term Q (Q1), veh/ln	0.0	3.8	0.0	3.4	0.0	4.2	0.0	3.4

2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.1	0.0	0.3	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.78	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	7.1	0.0	6.3	0.0	7.9	0.0	6.3
%ile Storage Ratio (RQ%)	0.00	0.19	0.00	0.25	0.00	0.26	0.00	0.11
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	520	0	113	0	278	0	73
Grp Sat Flow (s), veh/h/ln	0	1583	0	1583	0	1583	0	1583
Q Serve Time (g_s), s	0.0	17.2	0.0	4.4	0.0	11.7	0.0	2.9
Cycle Q Clear Time (g_c), s	0.0	17.2	0.0	4.4	0.0	11.7	0.0	2.9
Prot RT Sat Flow (s_R), veh/h/ln	0.0	1583.3	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	4.7	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	490	0	293	0	362	0	266
V/C Ratio (X)	0.00	1.06	0.00	0.39	0.00	0.77	0.00	0.27
Avail Cap (c_a), veh/h	0	490	0	357	0	362	0	357
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	24.5	0.0	25.4	0.0	25.6	0.0	25.7
Incr Delay (d2), s/veh	0.0	57.9	0.0	0.8	0.0	14.5	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	82.4	0.0	26.2	0.0	40.1	0.0	26.3
1st-Term Q (Q1), veh/ln	0.0	9.5	0.0	1.9	0.0	5.1	0.0	1.2
2nd-Term Q (Q2), veh/ln	0.0	7.9	0.0	0.1	0.0	1.5	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.64	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	31.3	0.0	3.6	0.0	10.7	0.0	2.3
%ile Storage Ratio (RQ%)	0.00	1.33	0.00	0.30	0.00	0.89	0.00	0.18
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	7.5	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	37.6
HCM 2010 LOS	D

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Traffic Vol, veh/h	13	228	382	76	44	5
Future Vol, veh/h	13	228	382	76	44	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	150	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	14	240	402	80	46	5

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	402	0	-	0	669	402
Stage 1	-	-	-	-	402	-
Stage 2	-	-	-	-	267	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1157	-	-	-	423	648
Stage 1	-	-	-	-	676	-
Stage 2	-	-	-	-	778	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1157	-	-	-	417	648
Mov Cap-2 Maneuver	-	-	-	-	417	-
Stage 1	-	-	-	-	676	-
Stage 2	-	-	-	-	767	-

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	14.4
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1157	-	-	-	433
HCM Lane V/C Ratio	0.012	-	-	-	0.119
HCM Control Delay (s)	8.1	0	-	-	14.4
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.4

MILITARY TRAIL CORRIDOR

Arterial Level of Service: NB N Military Trail

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
PGA Blvd	II	45	18.9	71.6	90.5	0.17	6.9	F
Kyoto Gardens Dr	II	45	43.4	15.7	59.1	0.49	30.0	B
Hood Road	II	45	104.9	26.1	131.0	1.31	36.0	A
Donald Ross	II	45	102.8	63.9	166.7	1.29	27.8	C
Total	II		270.0	177.3	447.3	3.26	26.3	C

Arterial Level of Service: SB N Military Trail

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Donald Ross	II	45	22.3	46.7	69.0	0.20	10.7	F
Hood Road	II	45	102.8	23.9	126.7	1.29	36.5	A
Kyoto Gardens Dr	II	45	104.9	12.1	117.0	1.31	40.3	A
PGA Blvd	II	45	43.4	48.0	91.4	0.49	19.4	D
Total	II		273.4	130.7	404.1	3.29	29.3	B

Movement	WBL	WBR	WBR2	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SER
Lane Configurations											
Traffic Volume (veh/h)	260	545	121	297	942	319	21	962	51	0	0
Future Volume (veh/h)	260	545	121	297	942	319	21	962	51	0	0
Number	7	14	14	1	6	16	5	2	12		
Initial Q, veh	0	0	0	0	0	0	0	0	0		
Ped-Bike Adj (A_pbT)	1.00	1.00	1.00	1.00		1.00	1.00		1.00		
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900		
Adj Flow Rate, veh/h	274	127	127	313	992	336	22	1013	54		
Adj No. of Lanes	2	1	1	1	3	1	1	3	0		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2		
Opposing Right Turn Influence	Yes			Yes			Yes				
Cap, veh/h	359	165	165	422	3521	1096	30	3801	202		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Prop Arrive On Green	0.10	0.10	0.10	0.69	0.69	0.69	0.02	0.77	0.77		
Ln Grp Delay, s/veh	58.4	62.3	62.3	25.9	7.6	8.3	89.7	4.5	4.7		
Ln Grp LOS	E	E	E	C	A	A	F	A	A		

Approach Vol, veh/h	401				1641			1089			Timer:
Approach Delay, s/veh	59.6				11.2			6.3			Assigned Phs
Approach LOS	E				B			A			Case No
Phs Duration (G+Y+Rc), s			105.0		21.2	9.6	95.4				
Change Period (Y+Rc), s			8.0		8.0	7.5	8.0				
Max Green (Gmax), s			97.0		37.0	4.0	85.5				
Max Allow Headway (MAH), s			5.1		3.8	3.7	5.1				
Max Q Clear (g_c+I1), s			9.5		11.9	3.6	58.9				
Green Ext Time (g_e), s			43.8		1.3	0.0	20.7				
Prob of Phs Call (p_c)			1.00		1.00	0.54	1.00				
Prob of Max Out (p_x)			0.00		0.00	1.00	0.00				

Left-Turn Movement Data											
Assigned Mvmt					7	5	1				
Mvmt Sat Flow, veh/h					3442	1774	527				

Through Movement Data											
Assigned Mvmt			2		4		6				
Mvmt Sat Flow, veh/h			4943		0		5085				

Right-Turn Movement Data											
Assigned Mvmt			12		14		16				
Mvmt Sat Flow, veh/h			263		1583		1583				

Left Lane Group Data											
Assigned Mvmt		0	0	0	7	5	1	0	0		
Lane Assignment						(Prot)					
Lanes in Grp		0	0	0	2	1	1	0	0		
Grp Vol (v), veh/h		0	0	0	274	22	313	0	0		
Grp Sat Flow (s), veh/h/ln		0	0	0	1721	1774	527	0	0		

Q Serve Time (g_s), s	0.0	0.0	0.0	9.8	1.6	56.9	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	9.8	1.6	56.9	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1721	0	527	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	87.4	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	87.4	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	56.9	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	1.00	1.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	359	30	422	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.76	0.73	0.74	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	1009	56	422	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	55.0	61.7	14.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	3.4	28.0	11.2	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	58.4	89.7	25.9	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	4.6	0.8	8.2	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.2	0.2	1.3	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.75	1.80	1.53	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	8.4	1.8	14.5	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.29	0.12	1.23	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	3	0	0
Grp Vol (v), veh/h	0	694	0	0	0	992	0	0
Grp Sat Flow (s), veh/h/ln	0	1695	0	0	0	1695	0	0
Q Serve Time (g_s), s	0.0	7.5	0.0	0.0	0.0	9.4	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	7.5	0.0	0.0	0.0	9.4	0.0	0.0
Lane Grp Cap (c), veh/h	0	2607	0	0	0	3521	0	0
V/C Ratio (X)	0.00	0.27	0.00	0.00	0.00	0.28	0.00	0.00
Avail Cap (c_a), veh/h	0	2607	0	0	0	3521	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	4.2	0.0	0.0	0.0	7.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.0	0.0	0.2	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	4.5	0.0	0.0	0.0	7.6	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	3.5	0.0	0.0	0.0	4.4	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.00	0.00	1.78	0.00	0.00

%ile Back of Q (95%), veh/ln	0.0	6.4	0.0	0.0	0.0	7.9	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.02	0.00	0.00	0.00	0.51	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment		T+R		R		R		
Lanes in Grp	0	1	0	1	0	1	0	0
Grp Vol (v), veh/h	0	373	0	127	0	336	0	0
Grp Sat Flow (s), veh/h/ln	0	1816	0	1583	0	1583	0	0
Q Serve Time (g_s), s	0.0	7.5	0.0	9.9	0.0	10.5	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	7.5	0.0	9.9	0.0	10.5	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.14	0.00	1.00	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	1396	0	165	0	1096	0	0
V/C Ratio (X)	0.00	0.27	0.00	0.77	0.00	0.31	0.00	0.00
Avail Cap (c_a), veh/h	0	1396	0	464	0	1096	0	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	4.2	0.0	55.0	0.0	7.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.5	0.0	7.3	0.0	0.7	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	4.7	0.0	62.3	0.0	8.3	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	3.7	0.0	8.4	0.0	4.6	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.3	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.55	0.00	1.75	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	7.0	0.0	13.6	0.0	8.4	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.03	0.00	0.47	0.00	0.71	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	15.7
HCM 2010 LOS	B

NORTHLAKE BOULEVARD CORRIDOR

Arterial Level of Service: EB Northlake Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Keating Dr	II	45	17.3	22.8	40.1	0.16	14.3	E
West Ramps	II	45	12.7	33.6	46.3	0.12	9.0	F
East Ramps	II	45	11.1	0.2	11.3	0.10	32.5	B
Roan Ln	II	45	8.8	0.7	9.5	0.08	30.7	B
Sandtree Dr	II	45	13.5	24.5	38.0	0.12	11.8	F
Total	II		63.4	81.8	145.2	0.58	14.4	E

Arterial Level of Service: WB Northlake Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Sunrise Dr	II	45	15.3	42.0	57.3	0.14	8.8	F
Roan Ln	II	45	13.5	6.0	19.5	0.12	22.9	C
East Ramps	II	45	8.8	25.1	33.9	0.08	8.6	F
West Ramps	II	45	11.1	12.9	24.0	0.10	15.3	E
Keating Dr	II	45	12.7	10.8	23.5	0.12	17.8	D
Total	II		61.4	96.8	158.2	0.56	12.8	F

Build Alternative 2020 PM

3: Keating Dr & Northlake Blvd Corridor: Northlake Boulevard

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1477	48	151	1807	134	49	3	202	58	2	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0	4.0	5.0	5.0	6.0	6.0	6.0		6.0	
Lane Util. Factor		0.91	1.00	1.00	0.91	1.00	0.95	0.95	1.00		0.95	
Frt		1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85		1.00	
Flt Protected		1.00	1.00	0.95	1.00	1.00	0.95	0.96	1.00		0.95	
Satd. Flow (prot)		5085	1583	1770	5085	1583	1681	1694	1583		3376	
Flt Permitted		1.00	1.00	0.15	1.00	1.00	0.95	0.78	1.00		0.74	
Satd. Flow (perm)		5085	1583	285	5085	1583	1681	1377	1583		2603	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	1555	51	159	1902	141	52	3	213	61	2	0
RTOR Reduction (vph)	0	0	34	0	0	66	0	0	150	0	0	0
Lane Group Flow (vph)	0	1555	17	159	1902	75	28	27	63	0	63	0
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	Prot	NA	Perm	pm+pt	NA	
Protected Phases		6		5	2		7	4		3	8	
Permitted Phases	6		6	2		2			4	8		
Actuated Green, G (s)		22.1	22.1	34.8	34.8	34.8	1.6	19.2	19.2		11.6	
Effective Green, g (s)		22.1	22.1	34.8	34.8	34.8	1.6	19.2	19.2		11.6	
Actuated g/C Ratio		0.34	0.34	0.54	0.54	0.54	0.02	0.30	0.30		0.18	
Clearance Time (s)		5.0	5.0	4.0	5.0	5.0	6.0	6.0	6.0		6.0	
Vehicle Extension (s)		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)		1728	538	351	2722	847	41	414	467		464	
v/s Ratio Prot		c0.31		0.06	c0.37		c0.02	0.00				
v/s Ratio Perm			0.01	0.18		0.05		0.02	c0.04		0.02	
v/c Ratio		0.90	0.03	0.45	0.70	0.09	0.68	0.07	0.13		0.14	
Uniform Delay, d1		20.4	14.3	10.9	11.2	7.4	31.4	16.5	16.8		22.5	
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	
Incremental Delay, d2		8.0	0.1	0.9	1.5	0.2	37.9	0.1	0.1		0.1	
Delay (s)		28.4	14.4	11.9	12.7	7.6	69.4	16.5	16.9		22.6	
Level of Service		C	B	B	B	A	E	B	B		C	
Approach Delay (s)		27.9			12.3			22.4			22.6	
Approach LOS		C			B			C			C	

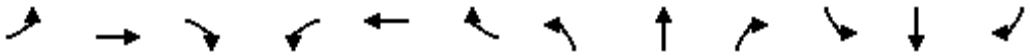
Intersection Summary			
HCM 2000 Control Delay	19.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	21.0
Intersection Capacity Utilization	61.5%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1161	491	1075	1474	0	0	0	0	505	0	703
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0	4.0	7.0	6.5					6.0		6.0
Lane Util. Factor		0.81	1.00	0.97	0.91					0.97		0.88
Frt		1.00	0.85	1.00	1.00					1.00		0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (prot)		7544	1583	3433	5085					3433		2787
Flt Permitted		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (perm)		7544	1583	3433	5085					3433		2787
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	1222	517	1132	1552	0	0	0	0	532	0	740
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	576
Lane Group Flow (vph)	0	1222	517	1132	1552	0	0	0	0	532	0	164
Turn Type		NA	Free	Prot	NA					Prot		Perm
Protected Phases		6		5	2					3		
Permitted Phases			Free									6
Actuated Green, G (s)		17.0	80.0	28.6	52.1					15.4		17.0
Effective Green, g (s)		17.0	80.0	28.6	52.1					15.4		17.0
Actuated g/C Ratio		0.21	1.00	0.36	0.65					0.19		0.21
Clearance Time (s)		6.0		7.0	6.5					6.0		6.0
Vehicle Extension (s)		3.0		3.0	3.0					3.0		3.0
Lane Grp Cap (vph)		1603	1583	1227	3311					660		592
v/s Ratio Prot		c0.16		c0.33	0.31					c0.15		
v/s Ratio Perm			0.33									0.06
v/c Ratio		0.76	0.33	0.92	0.47					0.81		0.28
Uniform Delay, d1		29.6	0.0	24.6	7.0					30.9		26.4
Progression Factor		1.00	1.00	1.37	1.76					1.00		1.00
Incremental Delay, d2		3.5	0.6	6.5	0.2					7.1		1.2
Delay (s)		33.1	0.6	40.3	12.5					38.0		27.5
Level of Service		C	A	D	B					D		C
Approach Delay (s)		23.4			24.2			0.0			31.9	
Approach LOS		C			C			A			C	

Intersection Summary			
HCM 2000 Control Delay	25.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	19.0
Intersection Capacity Utilization	74.4%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

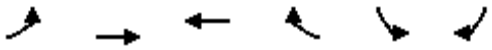
Build Alternative 2020 PM

9: East Ramps & Northlake Blvd Corridor: Northlake Boulevard



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	581	1085	0	0	1896	811	653	0	1118	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	6.0			6.5	4.0	6.0		6.5			
Lane Util. Factor	0.97	0.91			0.81	1.00	0.97		0.88			
Frt	1.00	1.00			1.00	0.85	1.00		0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (prot)	3433	5085			7544	1583	3433		2787			
Flt Permitted	0.95	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (perm)	3433	5085			7544	1583	3433		2787			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	612	1142	0	0	1996	854	687	0	1177	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	749	0	0	0
Lane Group Flow (vph)	612	1142	0	0	1996	854	687	0	428	0	0	0
Turn Type	Prot	NA			NA	Free	Prot		Perm			
Protected Phases	1	6			2		7					
Permitted Phases						Free			2			
Actuated Green, G (s)	17.0	49.5			25.0	80.0	18.5		25.0			
Effective Green, g (s)	17.0	49.5			25.0	80.0	18.5		25.0			
Actuated g/C Ratio	0.21	0.62			0.31	1.00	0.23		0.31			
Clearance Time (s)	7.0	6.0			6.5		6.0		6.5			
Vehicle Extension (s)	3.0	3.0			3.0		3.0		3.0			
Lane Grp Cap (vph)	729	3146			2357	1583	793		870			
v/s Ratio Prot	c0.18	0.22			c0.26		c0.20					
v/s Ratio Perm						0.54			0.15			
v/c Ratio	0.84	0.36			0.85	0.54	0.87		0.49			
Uniform Delay, d1	30.2	7.5			25.7	0.0	29.6		22.3			
Progression Factor	0.56	0.00			0.81	1.00	1.00		1.00			
Incremental Delay, d2	5.4	0.2			3.8	1.3	9.8		2.0			
Delay (s)	22.5	0.2			24.7	1.3	39.4		24.3			
Level of Service	C	A			C	A	D		C			
Approach Delay (s)		8.0			17.7			29.9			0.0	
Approach LOS		A			B			C			A	

Intersection Summary			
HCM 2000 Control Delay	18.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	74.4%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

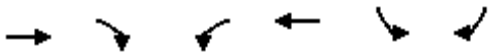


Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	113	2023	2335	77	0	103
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	8.0	6.5	6.5	4.0		4.0
Lane Util. Factor	1.00	0.91	0.76	1.00		1.00
Frt	1.00	1.00	1.00	0.85		0.86
Flt Protected	0.95	1.00	1.00	1.00		1.00
Satd. Flow (prot)	1770	5085	8494	1583		1611
Flt Permitted	0.95	1.00	1.00	1.00		1.00
Satd. Flow (perm)	1770	5085	8494	1583		1611
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	119	2129	2458	81	0	108
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	119	2129	2458	81	0	108
Turn Type	Prot	NA	NA	Free		Free
Protected Phases	1	6	2			
Permitted Phases				Free		Free
Actuated Green, G (s)	4.2	40.0	21.3	40.0		40.0
Effective Green, g (s)	4.2	40.0	21.3	40.0		40.0
Actuated g/C Ratio	0.11	1.00	0.53	1.00		1.00
Clearance Time (s)	8.0	6.5	6.5			
Vehicle Extension (s)	3.0	3.0	3.0			
Lane Grp Cap (vph)	185	5085	4523	1583		1611
v/s Ratio Prot	0.07	c0.42	0.29			
v/s Ratio Perm				0.05		0.07
v/c Ratio	0.64	0.42	0.54	0.05		0.07
Uniform Delay, d1	17.2	0.0	6.2	0.0		0.0
Progression Factor	0.86	1.00	1.00	1.00		1.00
Incremental Delay, d2	6.3	0.2	0.5	0.1		0.1
Delay (s)	21.1	0.2	6.6	0.1		0.1
Level of Service	C	A	A	A		A
Approach Delay (s)		1.3	6.4		0.1	
Approach LOS		A	A		A	

Intersection Summary			
HCM 2000 Control Delay	3.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	14.5
Intersection Capacity Utilization	44.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	136	1629	258	99	1989	120	306	1	97	38	1	117
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.5	7.5	7.0	7.5		6.0	6.5	6.5	6.0	6.5	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91		0.97	0.95	0.95	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.85	0.85	1.00	0.85	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1583	3433	5042		3433	1509	1504	1770	1586	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1583	3433	5042		3433	1509	1504	1770	1586	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	143	1715	272	104	2094	126	322	1	102	40	1	123
RTOR Reduction (vph)	0	0	147	0	6	0	0	40	40	0	115	0
Lane Group Flow (vph)	143	1715	125	104	2214	0	322	12	11	40	9	0
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6						4			
Actuated Green, G (s)	9.0	50.6	50.6	6.0	47.6		19.2	22.8	22.8	3.6	7.2	
Effective Green, g (s)	9.0	50.6	50.6	6.0	47.6		19.2	22.8	22.8	3.6	7.2	
Actuated g/C Ratio	0.08	0.46	0.46	0.05	0.43		0.17	0.21	0.21	0.03	0.07	
Clearance Time (s)	7.0	7.5	7.5	7.0	7.5		6.0	6.5	6.5	6.0	6.5	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	144	2339	728	187	2181		599	312	311	57	103	
v/s Ratio Prot	0.08	c0.34		0.03	c0.44		c0.09	c0.01		c0.02	0.01	
v/s Ratio Perm			0.08						0.01			
v/c Ratio	0.99	0.73	0.17	0.56	1.02		0.54	0.04	0.03	0.70	0.09	
Uniform Delay, d1	50.5	24.2	17.4	50.7	31.2		41.4	34.8	34.8	52.7	48.3	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	72.6	2.1	0.5	3.6	23.1		0.9	0.0	0.0	32.3	0.4	
Delay (s)	123.1	26.3	17.9	54.3	54.3		42.3	34.9	34.9	85.0	48.7	
Level of Service	F	C	B	D	D		D	C	C	F	D	
Approach Delay (s)		31.7			54.3			40.5			57.5	
Approach LOS		C			D			D			E	

Intersection Summary			
HCM 2000 Control Delay	43.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	27.0
Intersection Capacity Utilization	81.5%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Lane Group	EBT	EBR	WBL	WBT	SBL	SBR
Lane Group Flow (vph)	1222	517	1132	1552	532	740
v/c Ratio	0.76	0.33	0.92	0.47	0.81	0.63
Control Delay	33.6	0.5	41.7	12.9	41.5	5.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	33.6	0.5	41.7	12.9	41.5	5.4
Queue Length 50th (ft)	145	0	273	153	130	2
Queue Length 95th (ft)	178	0	m#391	190	#198	50
Internal Link Dist (ft)	533			458		
Turn Bay Length (ft)						
Base Capacity (vph)	1602	1583	1246	3311	686	1168
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.76	0.33	0.91	0.47	0.78	0.63

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBT	WBT	WBR	NBL	NBR
Lane Group Flow (vph)	612	1142	1996	854	687	1177
v/c Ratio	0.84	0.36	0.85	0.54	0.87	0.73
Control Delay	25.7	0.2	25.1	4.0	42.6	5.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	25.7	0.2	25.1	4.0	42.6	5.6
Queue Length 50th (ft)	153	0	148	67	169	17
Queue Length 95th (ft)	m#237	0	184	139	#256	70
Internal Link Dist (ft)		458	348			
Turn Bay Length (ft)				400		
Base Capacity (vph)	729	3147	2359	1583	815	1620
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.84	0.36	0.85	0.54	0.84	0.73

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

PGA BOULEVARD CORRIDOR

Arterial Level of Service: EB PGA Blvd

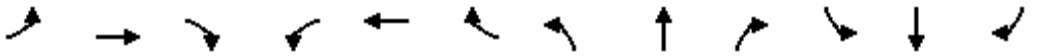
Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
FL Turnpike	II	45	16.8	67.1	83.9	0.15	6.6	F
Central Blvd	II	45	36.7	20.7	57.4	0.39	24.5	C
N Military Trail	II	45	81.7	75.0	156.7	1.02	23.4	C
West Ramps	II	45	20.5	4.3	24.8	0.19	27.3	C
East Ramps	II	45	6.3	13.8	20.1	0.06	10.4	F
Lake Victoria Garden	II	45	56.6	4.5	61.1	0.71	41.6	A
Total	II		218.6	185.4	404.0	2.52	22.4	C

Arterial Level of Service: WB PGA Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Lake Victoria Garden	II	45	13.7	44.8	58.5	0.13	7.8	F
East Ramps	II	45	56.6	0.1	56.7	0.71	44.9	A
West Ramps	II	45	6.3	5.7	12.0	0.06	17.4	D
N Military Trail	II	45	20.5	37.3	57.8	0.19	11.7	F
Central Blvd	II	45	25.0	68.4	93.4	0.24	9.3	F
FL Turnpike	II	45	36.7	106.8	143.5	0.39	9.8	F
Total	II		158.8	263.1	421.9	1.71	14.6	E

Build Alternative 2020 PM

3: FL Turnpike & PGA Blvd Corridor: PGA Boulevard



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	91	740	48	275	1291	736	65	230	805	817	55	94
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.5		7.5	8.0	7.5	7.5	7.5	7.5	7.5	7.5	4.0
Lane Util. Factor	0.97	0.91		0.97	0.91	0.88	1.00	0.95	0.95	0.91	0.91	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	0.91	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.96	1.00
Satd. Flow (prot)	3433	5038		3433	5085	2787	1770	1618	1504	3221	1629	1583
Flt Permitted	0.18	1.00		0.95	1.00	1.00	0.11	1.00	1.00	0.95	0.96	1.00
Satd. Flow (perm)	654	5038		3433	5085	2787	210	1618	1504	3221	1629	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	96	779	51	289	1359	775	68	242	847	860	58	99
RTOR Reduction (vph)	0	6	0	0	0	335	0	39	169	0	0	0
Lane Group Flow (vph)	96	824	0	289	1359	440	68	525	356	611	307	99
Turn Type	pm+pt	NA		Prot	NA	pm+ov	Perm	NA	Prot	Split	NA	Free
Protected Phases	7	4		3	8	6		2	2	6	6	
Permitted Phases	4					8	2					Free
Actuated Green, G (s)	26.1	22.1		11.9	30.0	55.5	35.5	35.5	35.5	25.5	25.5	125.0
Effective Green, g (s)	26.1	22.1		11.9	30.0	55.5	35.5	35.5	35.5	25.5	25.5	125.0
Actuated g/C Ratio	0.21	0.18		0.10	0.24	0.44	0.28	0.28	0.28	0.20	0.20	1.00
Clearance Time (s)	7.0	7.5		7.5	8.0	7.5	7.5	7.5	7.5	7.5	7.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	225	890		326	1220	1237	59	459	427	657	332	1583
v/s Ratio Prot	0.01	0.16		c0.08	c0.27	0.07		c0.32	0.24	c0.19	0.19	
v/s Ratio Perm	0.08					0.09	0.32					0.06
v/c Ratio	0.43	0.93		0.89	1.11	0.36	1.15	1.14	0.83	0.93	0.92	0.06
Uniform Delay, d1	41.6	50.6		55.9	47.5	22.9	44.8	44.8	42.0	48.9	48.8	0.0
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.3	15.2		23.8	63.0	0.2	164.7	88.0	13.1	19.6	30.5	0.1
Delay (s)	42.9	65.8		79.7	110.5	23.1	209.5	132.7	55.1	68.4	79.3	0.1
Level of Service	D	E		E	F	C	F	F	E	E	E	A
Approach Delay (s)		63.4			78.9			102.0			65.1	
Approach LOS		E			E			F			E	

Intersection Summary			
HCM 2000 Control Delay	78.6	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.11		
Actuated Cycle Length (s)	125.0	Sum of lost time (s)	30.0
Intersection Capacity Utilization	97.9%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Build Alternative 2020 PM

10: Central Blvd & PGA Blvd Corridor: PGA Boulevard

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	980	1129	19	158	1557	334	40	35	138	155	27	683
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.5	8.5		7.0	8.0	8.0		8.5	7.0	8.5	8.5	8.5
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00		1.00	1.00	0.95	0.95	1.00
Frt	1.00	1.00		1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.97	1.00	0.95	0.97	1.00
Satd. Flow (prot)	3433	5073		1770	5085	1583		1815	1583	1681	1709	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.78	1.00	0.71	0.74	1.00
Satd. Flow (perm)	3433	5073		1770	5085	1583		1452	1583	1249	1309	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1032	1188	20	166	1639	352	42	37	145	163	28	719
RTOR Reduction (vph)	0	2	0	0	0	243	0	0	99	0	0	28
Lane Group Flow (vph)	1032	1206	0	166	1639	109	0	79	46	95	96	691
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA	pm+ov	Perm	NA	pt+ov
Protected Phases	1	6		5	2			4	5		8	8 1
Permitted Phases						2	4		4	8		
Actuated Green, G (s)	28.7	45.7		14.0	31.0	31.0		16.3	30.3	16.3	16.3	53.5
Effective Green, g (s)	28.7	45.7		14.0	31.0	31.0		16.3	30.3	16.3	16.3	53.5
Actuated g/C Ratio	0.29	0.46		0.14	0.31	0.31		0.16	0.30	0.16	0.16	0.54
Clearance Time (s)	7.5	8.5		7.0	8.0	8.0		8.5	7.0	8.5	8.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	985	2318		247	1576	490		236	479	203	213	846
v/s Ratio Prot	c0.30	0.24		0.09	c0.32				0.01			c0.44
v/s Ratio Perm						0.07		0.05	0.02	0.08	0.07	
v/c Ratio	1.05	0.52		0.67	1.04	0.22		0.33	0.10	0.47	0.45	0.82
Uniform Delay, d1	35.6	19.3		40.8	34.5	25.6		37.1	25.0	37.9	37.8	19.2
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	42.0	0.8		7.0	33.8	1.0		0.8	0.1	7.6	6.7	6.1
Delay (s)	77.6	20.2		47.8	68.3	26.6		37.9	25.1	45.5	44.6	25.4
Level of Service	E	C		D	E	C		D	C	D	D	C
Approach Delay (s)		46.7			59.9			29.6			29.5	
Approach LOS		D			E			C			C	

Intersection Summary			
HCM 2000 Control Delay	48.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.06		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	97.3%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Build Alternative 2020 PM

24: PGA Blvd & West Ramps Corridor: PGA Boulevard

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (vph)	0	0	0	140	0	87	0	745	1400	0	1913	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0		6.0		6.0	4.0		6.0	
Lane Util. Factor				0.97		0.88		0.91	1.00		0.86	
Frt				1.00		0.85		1.00	0.85		1.00	
Flt Protected				0.95		1.00		1.00	1.00		1.00	
Satd. Flow (prot)				3433		2787		5085	1583		6408	
Flt Permitted				0.95		1.00		1.00	1.00		1.00	
Satd. Flow (perm)				3433		2787		5085	1583		6408	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	147	0	92	0	784	1474	0	2014	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	147	0	92	0	784	1474	0	2014	0
Turn Type				Prot		Prot		NA	Free		NA	
Protected Phases				3		3		6			2	
Permitted Phases									Free			
Actuated Green, G (s)				4.8		4.8		23.2	40.0		23.2	
Effective Green, g (s)				4.8		4.8		23.2	40.0		23.2	
Actuated g/C Ratio				0.12		0.12		0.58	1.00		0.58	
Clearance Time (s)				6.0		6.0		6.0			6.0	
Vehicle Extension (s)				3.0		3.0		3.0			3.0	
Lane Grp Cap (vph)				411		334		2949	1583		3716	
v/s Ratio Prot				0.04		0.03		0.15			0.31	
v/s Ratio Perm									c0.93			
v/c Ratio				0.36		0.28		0.27	0.93		0.54	
Uniform Delay, d1				16.2		16.0		4.2	0.0		5.1	
Progression Factor				1.00		1.00		1.00	1.00		1.00	
Incremental Delay, d2				2.4		2.0		0.0	11.3		0.2	
Delay (s)				18.6		18.1		4.2	11.3		5.3	
Level of Service				B		B		A	B		A	
Approach Delay (s)		0.0			18.4			8.8			5.3	
Approach LOS		A			B			A			A	

Intersection Summary			
HCM 2000 Control Delay	7.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	1.33		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	52.6%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	NBL	NBR	NET	NER	SWL	SWT
Lane Configurations						
Volume (vph)	0	1094	885	0	0	1164
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0	6.0			6.0
Lane Util. Factor		0.76	0.91			0.86
Frt		0.85	1.00			1.00
Flt Protected		1.00	1.00			1.00
Satd. Flow (prot)		3610	5085			6408
Flt Permitted		1.00	1.00			1.00
Satd. Flow (perm)		3610	5085			6408
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	1152	932	0	0	1225
RTOR Reduction (vph)	0	94	0	0	0	0
Lane Group Flow (vph)	0	1058	932	0	0	1225
Turn Type		Prot	NA			NA
Protected Phases		2	3 4			Free
Permitted Phases						2 8
Actuated Green, G (s)		24.2	23.8			60.0
Effective Green, g (s)		24.2	23.8			60.0
Actuated g/C Ratio		0.40	0.40			1.00
Clearance Time (s)		6.0				
Vehicle Extension (s)		3.0				
Lane Grp Cap (vph)		1456	2017			6408
v/s Ratio Prot		c0.29	c0.18			0.19
v/s Ratio Perm						
v/c Ratio		0.73	0.46			0.19
Uniform Delay, d1		15.1	13.4			0.0
Progression Factor		1.00	1.00			1.00
Incremental Delay, d2		3.2	0.2			0.0
Delay (s)		18.3	13.5			0.0
Level of Service		B	B			A
Approach Delay (s)	18.3		13.5			0.0
Approach LOS	B		B			A

Intersection Summary			
HCM 2000 Control Delay	10.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	52.6%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	569	1296	423	0	2372	0	300	0	129	0	0	47
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0		6.0		6.0	4.0	6.0			6.0
Lane Util. Factor	0.97	0.91	1.00		0.91		0.91	0.86	0.95			1.00
Frt	1.00	1.00	0.85		1.00		1.00	0.96	0.85			0.86
Flt Protected	0.95	1.00	1.00		1.00		0.95	0.96	1.00			1.00
Satd. Flow (prot)	3433	5085	1583		5085		3221	1482	1504			1611
Flt Permitted	0.95	1.00	1.00		1.00		0.95	0.96	1.00			1.00
Satd. Flow (perm)	3433	5085	1583		5085		3221	1482	1504			1611
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	599	1364	445	0	2497	0	316	0	136	0	0	49
RTOR Reduction (vph)	0	0	109	0	0	0	0	84	86	0	0	43
Lane Group Flow (vph)	599	1364	336	0	2497	0	234	29	19	0	0	6
Turn Type	Prot	NA	Perm		NA		Prot	NA	custom			Perm
Protected Phases	7	4			8		5	2	5			
Permitted Phases			4									5
Actuated Green, G (s)	20.6	75.6	75.6		49.0		12.4	14.4	12.4			12.4
Effective Green, g (s)	20.6	75.6	75.6		49.0		12.4	14.4	12.4			12.4
Actuated g/C Ratio	0.21	0.76	0.76		0.49		0.12	0.14	0.12			0.12
Clearance Time (s)	6.0	6.0	6.0		6.0		6.0	4.0	6.0			6.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0	3.0			3.0
Lane Grp Cap (vph)	707	3844	1196		2491		399	213	186			199
v/s Ratio Prot	c0.17	c0.27			c0.49		c0.07	0.02	0.01			
v/s Ratio Perm			0.21					0.00				0.00
v/c Ratio	0.85	0.35	0.28		1.00		0.59	0.14	0.10			0.03
Uniform Delay, d1	38.2	4.1	3.8		25.5		41.4	37.4	38.9			38.5
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00	1.00			1.00
Incremental Delay, d2	12.0	0.3	0.6		18.6		2.2	0.3	0.2			0.1
Delay (s)	50.2	4.3	4.4		44.1		43.6	37.7	39.1			38.6
Level of Service	D	A	A		D		D	D	D			D
Approach Delay (s)		15.7			44.1			41.1			38.6	
Approach LOS		B			D			D			D	

Intersection Summary			
HCM 2000 Control Delay	31.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	81.8%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	17	236	0	359	0	0	47	230
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					6.0	6.0		6.0			6.0	6.0
Lane Util. Factor					1.00	1.00		0.95			1.00	1.00
Frt					1.00	0.85		1.00			1.00	0.85
Flt Protected					1.00	1.00		1.00			1.00	1.00
Satd. Flow (prot)					1863	1583		3539			1863	1583
Flt Permitted					1.00	1.00		1.00			1.00	1.00
Satd. Flow (perm)					1863	1583		3539			1863	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	0	18	248	0	378	0	0	49	242
RTOR Reduction (vph)	0	0	0	0	0	122	0	0	0	0	0	212
Lane Group Flow (vph)	0	0	0	0	18	126	0	378	0	0	49	30
Turn Type					NA	Perm		NA			NA	Perm
Protected Phases					16			15			5	
Permitted Phases						16						5
Actuated Green, G (s)					51.0	51.0		18.6			12.4	12.4
Effective Green, g (s)					51.0	51.0		18.6			12.4	12.4
Actuated g/C Ratio					0.51	0.51		0.19			0.12	0.12
Clearance Time (s)					6.0	6.0		6.0			6.0	6.0
Vehicle Extension (s)					3.0	3.0		3.0			3.0	3.0
Lane Grp Cap (vph)					950	807		658			231	196
v/s Ratio Prot					0.01			c0.11			c0.03	
v/s Ratio Perm						c0.08						0.02
v/c Ratio					0.02	0.16		0.57			0.21	0.15
Uniform Delay, d1					12.1	13.0		37.1			39.4	39.1
Progression Factor					1.00	1.00		0.32			1.00	1.00
Incremental Delay, d2					0.0	0.4		1.8			0.5	0.4
Delay (s)					12.2	13.5		13.9			39.9	39.5
Level of Service					B	B		B			D	D
Approach Delay (s)		0.0			13.4			13.9			39.5	
Approach LOS		A			B			B			D	

Intersection Summary			
HCM 2000 Control Delay	21.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.26		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	34.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	188	1118	659	568	798	520	701	968	68	809	567	181
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	198	1177	0	598	840	0	738	1019	0	852	597	191
Adj No. of Lanes	3	3	1	3	3	1	3	3	1	3	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	281	1165	363	625	1558	485	857	1038	323	855	1057	329
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.06	0.23	0.00	0.13	0.31	0.00	0.17	0.20	0.00	0.17	0.21	0.21
Ln Grp Delay, s/veh	61.0	75.1	0.0	77.7	35.9	0.0	55.2	70.9	0.0	79.7	43.4	45.4
Ln Grp LOS	E	F		E	D		E	E		E	D	D
Approach Vol, veh/h		1375			1438			1757			1640	
Approach Delay, s/veh		73.1			53.3			64.3			62.5	
Approach LOS		E			D			E			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	14.7	44.3	29.0	32.0	24.0	35.0	28.6	32.4
Change Period (Y+Rc), s	8.0	7.5	8.5	7.5	9.0	7.5	8.0	7.5
Max Green (Gmax), s	8.0	35.5	20.5	24.5	15.0	27.5	24.0	21.5
Max Allow Headway (MAH), s	3.7	4.9	3.7	4.8	3.7	4.9	3.7	4.8
Max Q Clear (g_c+I1), s	6.7	18.5	22.4	25.9	16.3	29.5	19.2	15.0
Green Ext Time (g_e), s	0.1	11.6	0.0	0.0	0.0	0.0	1.4	4.8
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	1.00	1.00	0.00	0.67	0.91

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	5003		5003		5003		5003	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		5085		5085		5085		5085

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		1583		1583		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	
Lanes in Grp	3	0	3	0	3	0	3	0

Grp Vol (v), veh/h	198	0	852	0	598	0	738	0
Grp Sat Flow (s), veh/h/ln	1668	0	1668	0	1668	0	1668	0
Q Serve Time (g_s), s	4.7	0.0	20.4	0.0	14.3	0.0	17.2	0.0
Cycle Q Clear Time (g_c), s	4.7	0.0	20.4	0.0	14.3	0.0	17.2	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	281	0	855	0	625	0	857	0
V/C Ratio (X)	0.70	0.00	1.00	0.00	0.96	0.00	0.86	0.00
Avail Cap (c_a), veh/h	334	0	855	0	625	0	1001	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	55.6	0.0	49.7	0.0	52.2	0.0	48.3	0.0
Incr Delay (d2), s/veh	5.3	0.0	30.0	0.0	25.5	0.0	6.9	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	61.0	0.0	79.7	0.0	77.7	0.0	55.2	0.0
1st-Term Q (Q1), veh/ln	2.1	0.0	9.4	0.0	6.6	0.0	7.9	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	2.4	0.0	1.5	0.0	0.5	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	1.48	0.00	1.58	0.00	1.56	0.00
%ile Back of Q (95%), veh/ln	4.1	0.0	17.4	0.0	12.7	0.0	13.2	0.0
%ile Storage Ratio (RQ%)	0.23	0.00	0.98	0.00	0.65	0.00	0.77	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	3	0	3	0	3
Grp Vol (v), veh/h	0	840	0	1019	0	1177	0	597
Grp Sat Flow (s), veh/h/ln	0	1695	0	1695	0	1695	0	1695
Q Serve Time (g_s), s	0.0	16.5	0.0	23.9	0.0	27.5	0.0	12.6
Cycle Q Clear Time (g_c), s	0.0	16.5	0.0	23.9	0.0	27.5	0.0	12.6
Lane Grp Cap (c), veh/h	0	1558	0	1038	0	1165	0	1057
V/C Ratio (X)	0.00	0.54	0.00	0.98	0.00	1.01	0.00	0.56
Avail Cap (c_a), veh/h	0	1558	0	1038	0	1165	0	1057
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	34.6	0.0	47.5	0.0	46.2	0.0	42.7
Incr Delay (d2), s/veh	0.0	1.3	0.0	23.4	0.0	28.8	0.0	0.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	35.9	0.0	70.9	0.0	75.1	0.0	43.4
1st-Term Q (Q1), veh/ln	0.0	7.7	0.0	11.2	0.0	12.8	0.0	5.9
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	2.3	0.0	3.1	0.0	0.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.58	0.00	1.45	0.00	1.80	0.00	1.67
%ile Back of Q (95%), veh/ln	0.0	12.5	0.0	19.5	0.0	28.7	0.0	10.0
%ile Storage Ratio (RQ%)	0.00	0.79	0.00	0.67	0.00	0.69	0.00	0.30
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	2.9	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	0	0	0	0	191
Grp Sat Flow (s), veh/h/ln	0	1583	0	1583	0	1583	0	1583
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	485	0	323	0	363	0	329
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.58
Avail Cap (c_a), veh/h	0	485	0	323	0	363	0	329
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.8
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	45.4
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.7
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.67
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.9
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.56
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	63.2
HCM 2010 LOS	E

Build Alternative 2020 PM

46: PGA Blvd & RCA Corridor: PGA Boulevard

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Volume (veh/h)	0	515	1545	503	61	1612
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	0	542	1626	529	64	1697
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			1299			
pX, platoon unblocked						
vC, conflicting volume	2585	671			2156	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2585	671			2156	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	0			74	
cM capacity (veh/h)	15	399			246	

Direction, Lane #	NW 1	NE 1	NE 2	NE 3	NE 4	SW 1	SW 2	SW 3	SW 4
Volume Total	542	465	465	465	762	64	566	566	566
Volume Left	0	0	0	0	0	64	0	0	0
Volume Right	542	0	0	0	529	0	0	0	0
cSH	399	1700	1700	1700	1700	246	1700	1700	1700
Volume to Capacity	1.36	0.27	0.27	0.27	0.45	0.26	0.33	0.33	0.33
Queue Length 95th (ft)	645	0	0	0	0	25	0	0	0
Control Delay (s)	204.8	0.0	0.0	0.0	0.0	24.8	0.0	0.0	0.0
Lane LOS	F					C			
Approach Delay (s)	204.8	0.0				0.9			
Approach LOS	F								

Intersection Summary			
Average Delay	25.3		
Intersection Capacity Utilization	69.4%	ICU Level of Service	C
Analysis Period (min)	15		

Lane Group	SBL	SBR	NET	NER	SWT
Lane Group Flow (vph)	147	92	784	1474	2014
v/c Ratio	0.35	0.27	0.27	0.93	0.54
Control Delay	19.6	19.1	4.3	14.9	5.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	19.6	19.1	4.3	14.9	5.7
Queue Length 50th (ft)	16	11	23	0	59
Queue Length 95th (ft)	35	27	35	#142	80
Internal Link Dist (ft)			215		227
Turn Bay Length (ft)					
Base Capacity (vph)	415	337	3051	1583	3844
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.35	0.27	0.26	0.93	0.52

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	NBR	NET	SWT
Lane Group Flow (vph)	1152	932	1225
v/c Ratio	0.74	0.46	0.19
Control Delay	18.0	13.8	0.1
Queue Delay	0.0	0.0	0.0
Total Delay	18.0	13.8	0.1
Queue Length 50th (ft)	131	85	0
Queue Length 95th (ft)	#235	106	0
Internal Link Dist (ft)		227	250
Turn Bay Length (ft)			
Base Capacity (vph)	1547	2288	6408
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.74	0.41	0.19

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Build Alternative 2020 PM

34: PGA Blvd & EB On Ramp Corridor: PGA Boulevard

Lane Group	SBL	SBR	NEL	NET	SWT	SWR
Lane Configurations						
Volume (vph)	0	0	135	1844	1164	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	500			0
Storage Lanes	0	0	1			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.86	0.91	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	6408	5085	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	6408	5085	0
Link Speed (mph)	45			45	45	
Link Distance (ft)	247			189	328	
Travel Time (s)	3.7			2.9	5.0	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	142	1941	1225	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	142	1941	1225	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 75.5%		ICU Level of Service D	
Analysis Period (min) 15			

APPENDIX R

SYNCHRO REPORTS

BUILD 2030 AM

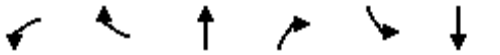
CENTRAL BOULEVARD CORRIDOR

Arterial Level of Service: NB Central Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
PGA Blvd	II	45	11.9	45.9	57.8	0.11	6.8	F
117th Ct	II	45	61.9	12.4	74.3	0.77	37.5	A
SB On Ramp	II	45	52.1	19.4	71.5	0.65	32.7	B
NB Off Ramp	II	45	9.8	34.7	44.5	0.09	7.3	F
Victoria Falls Blvd	II	45	30.0	37.9	67.9	0.30	16.0	E
Hood Rd	II	45	23.7	61.5	85.2	0.23	9.6	F
Donald Ross	II	45	100.8	52.2	153.0	1.26	29.6	B
Total	II		290.2	264.0	554.2	3.41	22.2	C

Arterial Level of Service: SB Central Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Donald Ross	II	45	22.2	69.9	92.1	0.20	8.0	F
Hood Rd	II	45	100.8	38.5	139.3	1.26	32.6	B
	II	45	23.7	12.6	36.3	0.23	22.6	C
NB On Ramp	II	45	30.0	22.6	52.6	0.30	20.7	D
SB Off Ramp	II	45	9.8	5.6	15.4	0.09	21.0	D
117th Ct	II	45	52.1	6.8	58.9	0.65	39.7	A
PGA Blvd	II	45	61.9	89.4	151.3	0.77	18.4	D
Total	II		300.5	245.4	545.9	3.51	23.1	C



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	226	170	1043	214	78	836
Number	3	18	2	12	1	6
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	238	179	1098	225	82	880
Adj No. of Lanes	1	1	2	1	1	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	313	279	2007	898	345	2385
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.18	0.18	0.57	0.57	0.05	0.67
Ln Grp Delay, s/veh	30.0	28.0	10.2	8.0	6.9	5.2
Ln Grp LOS	C	C	B	A	A	A
Approach Vol, veh/h	417		1323			962
Approach Delay, s/veh	29.1		9.8			5.3
Approach LOS	C		A			A

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	8			6		
Case No	1.2	7.0	9.0			4.0		
Phs Duration (G+Y+Rc), s	7.1	42.9	16.8			50.0		
Change Period (Y+Rc), s	4.0	5.0	5.0			5.0		
Max Green (Gmax), s	4.0	37.0	60.0			45.0		
Max Allow Headway (MAH), s	3.7	4.8	3.8			4.8		
Max Q Clear (g_c+I1), s	3.2	15.0	10.5			9.2		
Green Ext Time (g_e), s	0.0	14.6	1.3			19.7		
Prob of Phs Call (p_c)	0.78	1.00	1.00			1.00		
Prob of Max Out (p_x)	1.00	0.00	0.00			0.00		

Left-Turn Movement Data								
Assigned Mvmt	1	5	3					
Mvmt Sat Flow, veh/h	1774	0	1774					

Through Movement Data								
Assigned Mvmt		2	8			6		
Mvmt Sat Flow, veh/h		3632	0			3632		

Right-Turn Movement Data								
Assigned Mvmt		12	18			16		
Mvmt Sat Flow, veh/h		1583	1583			0		

Left Lane Group Data								
Assigned Mvmt	1	5	3	0	0	0	0	0
Lane Assignment	(Pr/Pm)							
Lanes in Grp	1	0	1	0	0	0	0	0

Grp Vol (v), veh/h	82	0	238	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1774	0	1774	0	0	0	0	0
Q Serve Time (g_s), s	1.2	0.0	8.5	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	1.2	0.0	8.5	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	413	0	1774	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	39.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	24.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	37.9	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	345	0	313	0	0	0	0	0
V/C Ratio (X)	0.24	0.00	0.76	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	368	0	1594	0	0	0	0	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	6.5	0.0	26.2	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.4	0.0	3.8	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	6.9	0.0	30.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.5	0.0	4.2	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	1.00	1.77	0.00	0.00	0.00	0.00	0.00
%ile Back of Q (95%), veh/ln	1.0	0.0	8.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.08	0.00	0.42	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	0	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	1098	0	0	0	880	0	0
Grp Sat Flow (s), veh/h/ln	0	1770	0	0	0	1770	0	0
Q Serve Time (g_s), s	0.0	13.0	0.0	0.0	0.0	7.2	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	13.0	0.0	0.0	0.0	7.2	0.0	0.0
Lane Grp Cap (c), veh/h	0	2007	0	0	0	2385	0	0
V/C Ratio (X)	0.00	0.55	0.00	0.00	0.00	0.37	0.00	0.00
Avail Cap (c_a), veh/h	0	2007	0	0	0	2385	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	9.1	0.0	0.0	0.0	4.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.1	0.0	0.0	0.0	0.4	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	10.2	0.0	0.0	0.0	5.2	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	6.3	0.0	0.0	0.0	3.4	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.0	0.0	0.1	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.64	1.00	0.00	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	10.8	0.0	0.0	0.0	6.4	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.47	0.00	0.00	0.00	0.32	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	18	0	0	16	0	0
Lane Assignment		R	R					
Lanes in Grp	0	1	1	0	0	0	0	0
Grp Vol (v), veh/h	0	225	179	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1583	1583	0	0	0	0	0
Q Serve Time (g_s), s	0.0	4.8	7.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	4.8	7.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	898	279	0	0	0	0	0
V/C Ratio (X)	0.00	0.25	0.64	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	898	1422	0	0	0	0	0
Upstream Filter (I)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	7.3	25.5	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.7	2.4	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	8.0	28.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	2.1	3.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.2	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	1.80	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	4.0	5.8	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.27	0.52	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		11.2						
HCM 2010 LOS		B						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	121	13	10	96	12	77	21	1816	153	123	1649	38
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	127	14	11	101	13	81	22	1912	161	129	1736	40
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	232	117	92	111	50	314	180	2009	167	160	2445	1094
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.12	0.12	0.12	0.06	0.23	0.23	0.61	0.61	0.61	0.04	0.69	0.69
Ln Grp Delay, s/veh	43.0	0.0	37.7	101.2	0.0	30.8	19.4	32.4	37.0	49.6	9.9	4.7
Ln Grp LOS	D		D	F		C	B	C	D	D	A	A
Approach Vol, veh/h		152			195			2095			1905	
Approach Delay, s/veh		42.1			67.2			34.6			12.5	
Approach LOS		D			E			C			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4		6		8
Case No	1.2	6.0	2.0	6.0		3.0		4.0
Phs Duration (G+Y+Rc), s	8.0	62.0	10.0	15.5		70.0		25.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0		4.0		4.0
Max Green (Gmax), s	4.0	58.0	6.0	16.0		66.0		26.0
Max Allow Headway (MAH), s	3.7	5.0	3.7	4.5		5.0		4.5
Max Q Clear (g_c+I1), s	4.5	55.1	7.4	11.1		30.4		6.6
Green Ext Time (g_e), s	0.0	2.9	0.0	0.4		33.7		0.9
Prob of Phs Call (p_c)	0.97	1.00	0.93	1.00		1.00		1.00
Prob of Max Out (p_x)	1.00	1.00	1.00	0.81		0.95		0.00

Left-Turn Movement Data								
Assigned Mvmt	1	5	3	7				
Mvmt Sat Flow, veh/h	1774	267	1774	1297				

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3309		968		3539		224

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		275		761		1583		1393

Left Lane Group Data								
Assigned Mvmt	1	5	3	7	0	0	0	0
Lane Assignment	(Pr/Pm)		(Prot)					
Lanes in Grp	1	1	1	1	0	0	0	0

Grp Vol (v), veh/h	129	22	101	127	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1774	267	1774	1297	0	0	0	0
Q Serve Time (g_s), s	2.5	5.2	5.4	9.1	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	2.5	25.6	5.4	9.1	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	200	267	0	1297	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	60.0	58.0	0.0	11.5	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	4.9	37.6	0.0	11.5	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	4.9	5.2	0.0	9.1	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	160	180	111	232	0	0	0	0
V/C Ratio (X)	0.81	0.12	0.91	0.55	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	160	180	111	293	0	0	0	0
Upstream Filter (I)	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	24.2	19.1	44.5	40.9	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	25.3	0.3	56.7	2.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	49.6	19.4	101.2	43.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	2.1	0.4	2.6	3.3	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	1.1	0.0	1.8	0.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	1.80	1.78	1.80	0.00	0.00	0.00	0.00
%ile Back of Q (95%), veh/ln	5.9	0.7	7.8	6.1	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.43	0.07	0.30	1.04	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		
Lanes in Grp	0	1	0	0	0	2	0	0
Grp Vol (v), veh/h	0	1010	0	0	0	1736	0	0
Grp Sat Flow (s), veh/h/ln	0	1770	0	0	0	1770	0	0
Q Serve Time (g_s), s	0.0	49.9	0.0	0.0	0.0	28.4	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	49.9	0.0	0.0	0.0	28.4	0.0	0.0
Lane Grp Cap (c), veh/h	0	1074	0	0	0	2445	0	0
V/C Ratio (X)	0.00	0.94	0.00	0.00	0.00	0.71	0.00	0.00
Avail Cap (c_a), veh/h	0	1075	0	0	0	2446	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	17.2	0.0	0.0	0.0	9.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	15.2	0.0	0.0	0.0	1.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	32.4	0.0	0.0	0.0	9.9	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	24.1	0.0	0.0	0.0	13.7	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	4.5	0.0	0.0	0.0	0.3	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.31	0.00	1.00	0.00	1.44	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	37.4	0.0	0.0	0.0	20.2	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	1.59	0.00	0.00	0.00	0.95	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	1063	0	25	0	40	0	94
Grp Sat Flow (s), veh/h/ln	0	1814	0	1729	0	1583	0	1617
Q Serve Time (g_s), s	0.0	53.1	0.0	1.2	0.0	0.8	0.0	4.6
Cycle Q Clear Time (g_c), s	0.0	53.1	0.0	1.2	0.0	0.8	0.0	4.6
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.15	0.00	0.44	0.00	1.00	0.00	0.86
Lane Grp Cap (c), veh/h	0	1102	0	208	0	1094	0	364
V/C Ratio (X)	0.00	0.97	0.00	0.12	0.00	0.04	0.00	0.26
Avail Cap (c_a), veh/h	0	1102	0	290	0	1094	0	440
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	17.8	0.0	37.5	0.0	4.7	0.0	30.4
Incr Delay (d2), s/veh	0.0	19.2	0.0	0.3	0.0	0.0	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	37.0	0.0	37.7	0.0	4.7	0.0	30.8
1st-Term Q (Q1), veh/ln	0.0	26.3	0.0	0.6	0.0	0.3	0.0	2.0
2nd-Term Q (Q2), veh/ln	0.0	5.9	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.29	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	41.5	0.0	1.1	0.0	0.6	0.0	3.7
%ile Storage Ratio (RQ%)	0.00	1.76	0.00	0.10	0.00	0.04	0.00	0.14
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	26.6
HCM 2010 LOS	C

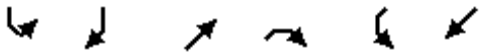
Movement	SBL2	SBL	SBR	NWL	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations											
Volume (vph)	76	0	143	0	0	0	1114	58	1168	771	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0				4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00		1.00				0.86	1.00	0.97	0.95	
Frt	1.00		0.85				1.00	0.85	1.00	1.00	
Flt Protected	0.95		1.00				1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770		1583				6408	1583	3433	3539	
Flt Permitted	0.95		1.00				1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770		1583				6408	1583	3433	3539	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	80	0	151	0	0	0	1173	61	1229	812	0
RTOR Reduction (vph)	0	0	59	0	0	0	0	43	0	0	0
Lane Group Flow (vph)	80	0	92	0	0	0	1173	18	1229	812	0
Turn Type	Prot		custom				NA	Prot	Prot	NA	
Protected Phases	1		1				2 4	2 4	3	3 4	
Permitted Phases			3 4								
Actuated Green, G (s)	5.6		39.8				19.2	19.2	24.2	34.2	
Effective Green, g (s)	5.6		39.8				19.2	19.2	24.2	34.2	
Actuated g/C Ratio	0.09		0.61				0.30	0.30	0.37	0.53	
Clearance Time (s)	4.0		4.0						4.0		
Vehicle Extension (s)	3.0		3.0						3.0		
Lane Grp Cap (vph)	152		1066				1892	467	1278	1862	
v/s Ratio Prot	c0.05		0.01				c0.18	0.01	c0.36	0.23	
v/s Ratio Perm			0.05								
v/c Ratio	0.53		0.09				0.62	0.04	0.96	0.44	
Uniform Delay, d1	28.4		5.2				19.8	16.3	19.9	9.5	
Progression Factor	1.00		1.00				1.00	1.00	1.18	0.42	
Incremental Delay, d2	3.3		0.0				0.6	0.0	12.9	0.1	
Delay (s)	31.7		5.2				20.4	16.4	36.5	4.1	
Level of Service	C		A				C	B	D	A	
Approach Delay (s)		14.4		0.0			20.2			23.6	
Approach LOS		B		A			C			C	

Intersection Summary			
HCM 2000 Control Delay	21.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	69.3%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Build Alternative 2030 AM

29: Central Blvd & SB On Ramp & SB Off Ramp Corridor: Central Boulevard



Lane Group	SBL2	SBR	NET	NER	SWL	SWT
Lane Group Flow (vph)	80	151	1173	61	1229	812
v/c Ratio	0.44	0.11	0.60	0.10	0.93	0.43
Control Delay	35.3	0.1	15.6	0.3	33.3	4.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.3	0.1	15.6	0.3	33.3	4.3
Queue Length 50th (ft)	30	0	78	0	165	23
Queue Length 95th (ft)	68	0	100	0	#332	52
Internal Link Dist (ft)			967			394
Turn Bay Length (ft)		800		450	190	
Base Capacity (vph)	190	1439	1971	591	1320	1905
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.42	0.10	0.60	0.10	0.93	0.43

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Build Alternative 2030 AM

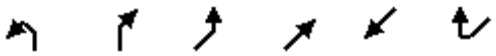
24: Central Blvd & NB Off Ramp/NB On Ramp Corridor: Central Boulevard

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (vph)	23	0	1092	0	0	0	307	883	0	0	1916	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0				4.0	4.0			4.0	4.0
Lane Util. Factor	1.00		0.88				0.97	0.95			0.86	1.00
Frt	1.00		0.85				1.00	1.00			1.00	0.85
Flt Protected	0.95		1.00				0.95	1.00			1.00	1.00
Satd. Flow (prot)	1770		2787				3433	3539			6408	1583
Flt Permitted	0.95		1.00				0.95	1.00			1.00	1.00
Satd. Flow (perm)	1770		2787				3433	3539			6408	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	24	0	1149	0	0	0	323	929	0	0	2017	36
RTOR Reduction (vph)	0	0	238	0	0	0	0	0	0	0	0	21
Lane Group Flow (vph)	24	0	911	0	0	0	323	929	0	0	2017	15
Turn Type	Prot		custom				Prot	NA			NA	Prot
Protected Phases	6		6 11				5 7	13			8	8
Permitted Phases												
Actuated Green, G (s)	14.8		22.8				8.0	26.2			26.2	26.2
Effective Green, g (s)	14.8		22.8				8.0	26.2			26.2	26.2
Actuated g/C Ratio	0.23		0.35				0.12	0.40			0.40	0.40
Clearance Time (s)	4.0							4.0			4.0	4.0
Vehicle Extension (s)	3.0							3.0			3.0	3.0
Lane Grp Cap (vph)	403		977				422	1426			2582	638
v/s Ratio Prot	0.01		c0.33				c0.09	0.26			c0.31	0.01
v/s Ratio Perm												
v/c Ratio	0.06		0.93				0.77	0.65			0.78	0.02
Uniform Delay, d1	19.7		20.4				27.6	15.7			16.9	11.7
Progression Factor	1.00		1.00				0.41	2.07			1.00	1.00
Incremental Delay, d2	0.1		15.1				6.7	0.9			2.4	0.1
Delay (s)	19.7		35.5				18.0	33.4			19.3	11.8
Level of Service	B		D				B	C			B	B
Approach Delay (s)		35.2			0.0			29.4			19.2	
Approach LOS		D			A			C			B	

Intersection Summary			
HCM 2000 Control Delay	26.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	69.3%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Build Alternative 2030 AM

24: Central Blvd & NB Off Ramp/NB On Ramp Corridor: Central Boulevard



Lane Group	NBL	NBR	NEL	NET	SWT	SWR
Lane Group Flow (vph)	24	1149	323	929	2017	36
v/c Ratio	0.06	0.97	0.77	0.63	0.76	0.05
Control Delay	20.9	36.4	19.2	33.6	18.5	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	20.9	36.4	19.2	33.6	18.5	0.1
Queue Length 50th (ft)	8	179	29	221	190	0
Queue Length 95th (ft)	25	#334	#71	278	234	0
Internal Link Dist (ft)				394	841	
Turn Bay Length (ft)		550	160			450
Base Capacity (vph)	381	1185	422	1470	2661	745
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.06	0.97	0.77	0.63	0.76	0.05

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

DONALD ROSS CORRIDOR

Arterial Level of Service: EB Donald Ross

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
West Ramp	II	45	46.0	24.5	70.5	0.52	26.7	C
East Ramp	II	45	15.7	35.8	51.5	0.14	10.0	F
Parkside Dr	II	45	42.7	34.5	77.2	0.53	24.9	C
Central Blvd	II	45	52.1	53.4	105.5	0.65	22.2	C
Military Trail	II	45	32.9	64.0	96.9	0.34	12.7	F
Total	II		189.4	212.2	401.6	2.19	19.7	D

Arterial Level of Service: WB Donald Ross

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Military Trail	II	45	21.4	45.6	67.0	0.20	10.5	F
Central Blvd	II	45	32.9	32.0	64.9	0.34	19.0	D
Parkside Dr	II	45	52.1	26.0	78.1	0.65	30.0	B
East Ramp	II	45	42.7	9.6	52.3	0.53	36.8	A
West Ramp	II	45	15.7	41.9	57.6	0.14	9.0	F
Total	II		164.8	155.1	319.9	1.87	21.0	D

HCM 2010 methodology does not support clustered intersections.

HCM 2010 methodology does not support clustered intersections.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	520	1074	569	408	423	87	373	119	427	116	166	546
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	547	1131	599	429	445	92	393	125	449	122	175	575
Adj No. of Lanes	2	3	1	2	3	1	2	1	1	1	1	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	812	1246	466	457	1062	547	471	426	553	319	364	915
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.12	0.25	0.25	0.13	0.21	0.21	0.14	0.23	0.23	0.05	0.20	0.20
Ln Grp Delay, s/veh	25.0	41.5	172.8	63.0	28.7	19.0	46.0	26.8	33.4	26.3	30.6	24.9
Ln Grp LOS	C	D	F	E	C	B	D	C	C	C	C	C
Approach Vol, veh/h		2277			966			967			872	
Approach Delay, s/veh		72.1			43.0			37.7			26.3	
Approach LOS		E			D			D			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	3.0	2.0	3.0	2.0	3.0	1.1	3.0
Phs Duration (G+Y+Rc), s	18.0	25.8	15.3	23.7	15.0	28.8	12.6	26.4
Change Period (Y+Rc), s	8.0	* 8.5	4.0	* 7.5	4.0	8.5	8.5	7.5
Max Green (Gmax), s	10.0	* 18	12.0	* 16	11.0	20.3	4.1	16.1
Max Allow Headway (MAH), s	3.7	4.6	3.7	4.2	3.7	4.6	3.7	4.2
Max Q Clear (g_c+I1), s	12.0	8.3	11.2	16.5	12.2	22.3	6.1	20.9
Green Ext Time (g_e), s	0.0	7.7	0.1	0.0	0.0	0.0	0.0	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	0.94	1.00
Prob of Max Out (p_x)	1.00	0.82	1.00	1.00	1.00	0.00	1.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3442		3442		3442		1774	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		5085		1863		5085		1863

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		2787		1583		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Pr/Pm)		(Prot)		(Prot)		(Pr/Pm)	
Lanes in Grp	2	0	2	0	2	0	1	0

Grp Vol (v), veh/h	547	0	393	0	429	0	122	0
Grp Sat Flow (s), veh/h/ln	1721	0	1721	0	1721	0	1774	0
Q Serve Time (g_s), s	10.0	0.0	9.2	0.0	10.2	0.0	4.1	0.0
Cycle Q Clear Time (g_c), s	10.0	0.0	9.2	0.0	10.2	0.0	4.1	0.0
Perm LT Sat Flow (s_l), veh/h/ln	838	0	0	0	0	0	835	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	17.3	0.0	0.0	0.0	0.0	0.0	16.2	0.0
Perm LT Serve Time (g_u), s	11.0	0.0	0.0	0.0	0.0	0.0	14.3	0.0
Perm LT Q Serve Time (g_ps), s	4.3	0.0	0.0	0.0	0.0	0.0	1.5	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	812	0	471	0	457	0	319	0
V/C Ratio (X)	0.67	0.00	0.83	0.00	0.94	0.00	0.38	0.00
Avail Cap (c_a), veh/h	812	0	499	0	457	0	319	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	22.8	0.0	34.8	0.0	35.6	0.0	25.6	0.0
Incr Delay (d2), s/veh	2.2	0.0	11.1	0.0	27.4	0.0	0.8	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	25.0	0.0	46.0	0.0	63.0	0.0	26.3	0.0
1st-Term Q (Q1), veh/ln	1.0	0.0	4.4	0.0	4.8	0.0	0.3	0.0
2nd-Term Q (Q2), veh/ln	0.2	0.0	0.7	0.0	1.7	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	1.73	0.00	1.64	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	2.2	0.0	8.8	0.0	10.8	0.0	0.7	0.0
%ile Storage Ratio (RQ%)	0.10	0.00	0.64	0.00	0.88	0.00	0.12	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	1	0	3	0	1
Grp Vol (v), veh/h	0	445	0	175	0	1131	0	125
Grp Sat Flow (s), veh/h/ln	0	1695	0	1863	0	1695	0	1863
Q Serve Time (g_s), s	0.0	6.3	0.0	6.9	0.0	17.9	0.0	4.6
Cycle Q Clear Time (g_c), s	0.0	6.3	0.0	6.9	0.0	17.9	0.0	4.6
Lane Grp Cap (c), veh/h	0	1062	0	364	0	1246	0	426
V/C Ratio (X)	0.00	0.42	0.00	0.48	0.00	0.91	0.00	0.29
Avail Cap (c_a), veh/h	0	1123	0	364	0	1246	0	426
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	28.4	0.0	29.6	0.0	30.4	0.0	26.4
Incr Delay (d2), s/veh	0.0	0.3	0.0	1.0	0.0	11.2	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	28.7	0.0	30.6	0.0	41.5	0.0	26.8
1st-Term Q (Q1), veh/ln	0.0	2.9	0.0	3.5	0.0	8.4	0.0	2.4
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	1.3	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.53	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	5.3	0.0	6.6	0.0	14.8	0.0	4.3
%ile Storage Ratio (RQ%)	0.00	0.04	0.00	0.29	0.00	0.14	0.00	0.12
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	2	0	1	0	1
Grp Vol (v), veh/h	0	92	0	575	0	599	0	449
Grp Sat Flow (s), veh/h/ln	0	1583	0	1393	0	1583	0	1583
Q Serve Time (g_s), s	0.0	3.3	0.0	14.5	0.0	20.3	0.0	18.9
Cycle Q Clear Time (g_c), s	0.0	3.3	0.0	14.5	0.0	20.3	0.0	18.9
Prot RT Sat Flow (s_R), veh/h/ln	0.0	1583.3	0.0	1393.3	0.0	1583.3	0.0	1583.3
Prot RT Eff Green (g_R), s	0.0	11.3	0.0	11.0	0.0	4.1	0.0	10.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	547	0	915	0	466	0	553
V/C Ratio (X)	0.00	0.17	0.00	0.63	0.00	1.28	0.00	0.81
Avail Cap (c_a), veh/h	0	567	0	915	0	466	0	553
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	18.8	0.0	23.5	0.0	29.2	0.0	24.5
Incr Delay (d2), s/veh	0.0	0.1	0.0	1.4	0.0	143.6	0.0	8.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	19.0	0.0	24.9	0.0	172.8	0.0	33.4
1st-Term Q (Q1), veh/ln	0.0	1.5	0.0	5.6	0.0	10.6	0.0	9.2
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.2	0.0	18.6	0.0	1.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.68	0.00	1.80	0.00	1.50
%ile Back of Q (95%), veh/ln	0.0	2.7	0.0	9.7	0.0	52.5	0.0	15.9
%ile Storage Ratio (RQ%)	0.00	0.14	0.00	0.82	0.00	2.67	0.00	0.90
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	33.2	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	52.1
HCM 2010 LOS	D

Notes

User approved ignoring U-Turning movement.

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	150	1275	371	270	540	195	224	929	79	250	689	94
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	158	1342	391	284	568	205	236	978	83	263	725	99
Adj No. of Lanes	2	3	1	2	3	1	3	3	1	3	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	224	1442	561	307	1564	487	355	1113	346	385	812	363
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.07	0.28	0.28	0.09	0.31	0.31	0.07	0.22	0.22	0.08	0.23	0.23
Ln Grp Delay, s/veh	50.7	46.1	31.6	78.4	27.9	30.5	47.9	46.2	32.9	47.6	49.9	32.4
Ln Grp LOS	D	D	C	E	C	C	D	D	C	D	D	C
Approach Vol, veh/h		1891			1057			1297			1087	
Approach Delay, s/veh		43.5			42.0			45.6			47.7	
Approach LOS		D			D			D			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	15.6	39.1	16.8	29.6	18.0	36.6	15.7	30.7
Change Period (Y+Rc), s	9.0	8.0	9.0	7.5	9.0	8.0	8.5	7.5
Max Green (Gmax), s	9.0	29.0	16.0	22.5	9.0	29.0	16.0	23.0
Max Allow Headway (MAH), s	3.7	4.7	3.7	4.8	3.7	4.7	3.7	4.8
Max Q Clear (g_c+I1), s	6.5	12.4	7.2	20.8	10.3	27.9	6.6	22.0
Green Ext Time (g_e), s	0.1	12.5	0.6	1.3	0.0	0.7	0.5	0.8
Prob of Phs Call (p_c)	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	0.02	1.00	1.00	1.00	0.01	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3442		5003		3442		5003	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		5085		5085		5085		3539

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		1583		1583		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	
Lanes in Grp	2	0	3	0	2	0	3	0

Grp Vol (v), veh/h	158	0	263	0	284	0	236	0
Grp Sat Flow (s), veh/h/ln	1721	0	1668	0	1721	0	1668	0
Q Serve Time (g_s), s	4.5	0.0	5.2	0.0	8.3	0.0	4.6	0.0
Cycle Q Clear Time (g_c), s	4.5	0.0	5.2	0.0	8.3	0.0	4.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	224	0	385	0	307	0	355	0
V/C Ratio (X)	0.71	0.00	0.68	0.00	0.93	0.00	0.66	0.00
Avail Cap (c_a), veh/h	307	0	793	0	307	0	793	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	46.3	0.0	45.4	0.0	45.7	0.0	45.7	0.0
Incr Delay (d2), s/veh	4.5	0.0	2.2	0.0	32.7	0.0	2.1	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	50.7	0.0	47.6	0.0	78.4	0.0	47.9	0.0
1st-Term Q (Q1), veh/ln	2.2	0.0	2.4	0.0	3.9	0.0	2.1	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.1	0.0	1.4	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	1.80	0.00	1.71	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	4.1	0.0	4.4	0.0	9.1	0.0	4.0	0.0
%ile Storage Ratio (RQ%)	0.20	0.00	0.22	0.00	0.45	0.00	0.19	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	3	0	3	0	2
Grp Vol (v), veh/h	0	568	0	978	0	1342	0	725
Grp Sat Flow (s), veh/h/ln	0	1695	0	1695	0	1695	0	1770
Q Serve Time (g_s), s	0.0	8.8	0.0	18.8	0.0	25.9	0.0	20.0
Cycle Q Clear Time (g_c), s	0.0	8.8	0.0	18.8	0.0	25.9	0.0	20.0
Lane Grp Cap (c), veh/h	0	1564	0	1113	0	1442	0	812
V/C Ratio (X)	0.00	0.36	0.00	0.88	0.00	0.93	0.00	0.89
Avail Cap (c_a), veh/h	0	1564	0	1133	0	1460	0	812
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	27.3	0.0	38.2	0.0	35.2	0.0	37.7
Incr Delay (d2), s/veh	0.0	0.7	0.0	8.0	0.0	10.9	0.0	12.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	27.9	0.0	46.2	0.0	46.1	0.0	49.9
1st-Term Q (Q1), veh/ln	0.0	4.1	0.0	8.8	0.0	12.1	0.0	9.8
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.8	0.0	1.5	0.0	1.4

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.53	0.00	1.45	0.00	1.49
%ile Back of Q (95%), veh/ln	0.0	7.6	0.0	14.7	0.0	19.5	0.0	16.6
%ile Storage Ratio (RQ%)	0.00	0.12	0.00	0.65	0.00	0.15	0.00	0.61
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	205	0	83	0	391	0	99
Grp Sat Flow (s), veh/h/ln	0	1583	0	1583	0	1583	0	1583
Q Serve Time (g_s), s	0.0	10.4	0.0	4.4	0.0	21.4	0.0	5.2
Cycle Q Clear Time (g_c), s	0.0	10.4	0.0	4.4	0.0	21.4	0.0	5.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	1583.3	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	7.2	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	487	0	346	0	561	0	363
V/C Ratio (X)	0.00	0.42	0.00	0.24	0.00	0.70	0.00	0.27
Avail Cap (c_a), veh/h	0	487	0	353	0	567	0	363
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	27.8	0.0	32.5	0.0	27.9	0.0	32.0
Incr Delay (d2), s/veh	0.0	2.7	0.0	0.4	0.0	3.7	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	30.5	0.0	32.9	0.0	31.6	0.0	32.4
1st-Term Q (Q1), veh/ln	0.0	4.6	0.0	1.9	0.0	9.4	0.0	2.3
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.0	0.0	0.6	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.74	0.00	1.80	0.00	1.52	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	8.5	0.0	3.5	0.0	15.1	0.0	4.2
%ile Storage Ratio (RQ%)	0.00	0.70	0.00	0.34	0.00	1.30	0.00	0.21
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	44.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	407	1273	34	144	702	115	41	978	19	138	1238	373
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	428	1340	36	152	739	121	43	1029	20	145	1303	393
Adj No. of Lanes	3	3	1	2	3	1	2	3	1	2	3	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	519	1376	428	146	1064	331	129	1177	367	517	1751	1248
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.10	0.27	0.27	0.04	0.21	0.21	0.04	0.23	0.23	0.15	0.34	0.34
Ln Grp Delay, s/veh	56.6	57.2	29.4	138.2	42.7	39.1	51.4	45.4	31.9	41.5	33.7	19.5
Ln Grp LOS	E	E	C	F	D	D	D	D	C	D	C	B
Approach Vol, veh/h		1804			1012			1092			1841	
Approach Delay, s/veh		56.5			56.6			45.4			31.3	
Approach LOS		E			E			D			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	19.5	30.3	24.5	32.1	13.0	36.8	12.5	44.1
Change Period (Y+Rc), s	8.5	8.0	8.5	7.5	8.5	8.0	8.5	7.5
Max Green (Gmax), s	11.5	21.8	16.0	28.2	4.5	28.8	16.5	27.7
Max Allow Headway (MAH), s	3.7	4.8	3.7	4.8	3.7	4.8	3.7	4.8
Max Q Clear (g_c+I1), s	10.9	16.3	6.0	22.8	6.5	29.8	3.3	26.0
Green Ext Time (g_e), s	0.1	4.7	0.3	1.9	0.0	0.0	0.1	1.6
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	0.99	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	0.00	0.99	1.00	0.00	0.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	5003		3442		3442		3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		5085		5085		5085		5085

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		1583		1583		2787

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	
Lanes in Grp	3	0	2	0	2	0	2	0

Grp Vol (v), veh/h	428	0	145	0	152	0	43	0
Grp Sat Flow (s), veh/h/ln	1668	0	1721	0	1721	0	1721	0
Q Serve Time (g_s), s	8.9	0.0	4.0	0.0	4.5	0.0	1.3	0.0
Cycle Q Clear Time (g_c), s	8.9	0.0	4.0	0.0	4.5	0.0	1.3	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	519	0	517	0	146	0	129	0
V/C Ratio (X)	0.83	0.00	0.28	0.00	1.04	0.00	0.33	0.00
Avail Cap (c_a), veh/h	541	0	517	0	146	0	534	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	46.8	0.0	40.1	0.0	51.0	0.0	49.9	0.0
Incr Delay (d2), s/veh	9.8	0.0	1.3	0.0	87.0	0.0	1.5	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0
Control Delay (d), s/veh	56.6	0.0	41.5	0.0	138.2	0.0	51.4	0.0
1st-Term Q (Q1), veh/ln	4.1	0.0	1.9	0.0	2.1	0.0	0.6	0.0
2nd-Term Q (Q2), veh/ln	0.5	0.0	0.1	0.0	1.8	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.77	0.00	1.80	0.00	1.80	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	8.1	0.0	3.6	0.0	7.0	0.0	1.2	0.0
%ile Storage Ratio (RQ%)	0.34	0.00	0.19	0.00	0.32	0.00	0.05	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	1.6	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	3	0	3	0	3
Grp Vol (v), veh/h	0	739	0	1029	0	1340	0	1303
Grp Sat Flow (s), veh/h/ln	0	1695	0	1695	0	1695	0	1695
Q Serve Time (g_s), s	0.0	14.3	0.0	20.8	0.0	27.8	0.0	24.0
Cycle Q Clear Time (g_c), s	0.0	14.3	0.0	20.8	0.0	27.8	0.0	24.0
Lane Grp Cap (c), veh/h	0	1064	0	1177	0	1376	0	1751
V/C Ratio (X)	0.00	0.69	0.00	0.87	0.00	0.97	0.00	0.74
Avail Cap (c_a), veh/h	0	1064	0	1347	0	1376	0	1751
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	38.9	0.0	39.4	0.0	38.4	0.0	30.8
Incr Delay (d2), s/veh	0.0	3.7	0.0	6.0	0.0	18.8	0.0	2.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	42.7	0.0	45.4	0.0	57.2	0.0	33.7
1st-Term Q (Q1), veh/ln	0.0	6.7	0.0	9.7	0.0	13.0	0.0	11.2
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.7	0.0	2.4	0.0	0.5

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.62	0.00	1.51	0.00	1.42	0.00	1.48
%ile Back of Q (95%), veh/ln	0.0	11.4	0.0	15.7	0.0	21.9	0.0	17.3
%ile Storage Ratio (RQ%)	0.00	0.30	0.00	0.60	0.00	0.34	0.00	0.57
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	2
Grp Vol (v), veh/h	0	121	0	20	0	36	0	393
Grp Sat Flow (s), veh/h/ln	0	1583	0	1583	0	1583	0	1393
Q Serve Time (g_s), s	0.0	7.0	0.0	1.0	0.0	1.8	0.0	9.6
Cycle Q Clear Time (g_c), s	0.0	7.0	0.0	1.0	0.0	1.8	0.0	9.6
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1393.3
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	331	0	367	0	428	0	1248
V/C Ratio (X)	0.00	0.37	0.00	0.05	0.00	0.08	0.00	0.31
Avail Cap (c_a), veh/h	0	331	0	419	0	428	0	1248
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	36.0	0.0	31.8	0.0	29.0	0.0	18.9
Incr Delay (d2), s/veh	0.0	3.1	0.0	0.1	0.0	0.4	0.0	0.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	39.1	0.0	31.9	0.0	29.4	0.0	19.5
1st-Term Q (Q1), veh/ln	0.0	3.0	0.0	0.5	0.0	0.8	0.0	3.7
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	6.0	0.0	0.8	0.0	1.5	0.0	6.9
%ile Storage Ratio (RQ%)	0.00	0.49	0.00	0.04	0.00	0.05	0.00	0.50
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		46.3						
HCM 2010 LOS		D						

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	3	861	4	12	316	15	1	0	16	60	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	325	-	-	289	-	-	-	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	906	4	13	333	16	1	0	17	63	0	5

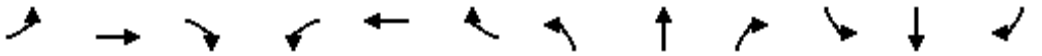
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	348	0	0	911	0	0	1107	1289	455	825	1283	174
Stage 1	-	-	-	-	-	-	915	915	-	366	366	-
Stage 2	-	-	-	-	-	-	192	374	-	459	917	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1208	-	-	743	-	-	165	162	552	265	164	839
Stage 1	-	-	-	-	-	-	294	350	-	626	621	-
Stage 2	-	-	-	-	-	-	791	616	-	551	349	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1208	-	-	743	-	-	161	159	552	253	161	839
Mov Cap-2 Maneuver	-	-	-	-	-	-	161	159	-	253	161	-
Stage 1	-	-	-	-	-	-	293	349	-	624	610	-
Stage 2	-	-	-	-	-	-	772	605	-	533	348	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.3	12.7	22.8
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	483	1208	-	-	743	-	-	253	839
HCM Lane V/C Ratio	0.037	0.003	-	-	0.017	-	-	0.25	0.006
HCM Control Delay (s)	12.7	8	-	-	9.9	-	-	23.9	9.3
HCM Lane LOS	B	A	-	-	A	-	-	C	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0.1	-	-	1	0

Build Alternative 2030 AM

2: West Ramp & Donald Ross Corridor: Donald Ross Road

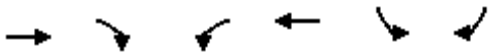


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	694	234	1194	315	0	0	0	0	710	0	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0	4.0	7.0	6.0					6.0		4.0
Lane Util. Factor		0.86	1.00	0.86	0.86					0.94		1.00
Frt		1.00	0.85	1.00	1.00					1.00		0.85
Flt Protected		1.00	1.00	0.95	0.97					0.95		1.00
Satd. Flow (prot)		6408	1583	3044	3117					4990		1583
Flt Permitted		1.00	1.00	0.95	0.54					0.95		1.00
Satd. Flow (perm)		6408	1583	3044	1743					4990		1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	731	246	1257	332	0	0	0	0	747	0	54
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	731	246	842	747	0	0	0	0	747	0	54
Turn Type		NA	Free	Prot	NA					Prot		Free
Protected Phases		6		5	2					3		
Permitted Phases			Free									Free
Actuated Green, G (s)		28.4	90.0	26.0	61.4					16.6		90.0
Effective Green, g (s)		28.4	90.0	26.0	61.4					16.6		90.0
Actuated g/C Ratio		0.32	1.00	0.29	0.68					0.18		1.00
Clearance Time (s)		6.0		7.0	6.0					6.0		
Vehicle Extension (s)		3.0		3.0	3.0					3.0		
Lane Grp Cap (vph)		2022	1583	879	1586					920		1583
v/s Ratio Prot		0.11		c0.28	0.14					c0.15		
v/s Ratio Perm			0.16		c0.19							0.03
v/c Ratio		0.36	0.16	0.96	0.86dl					0.81		0.03
Uniform Delay, d1		23.8	0.0	31.5	6.7					35.2		0.0
Progression Factor		1.00	1.00	1.23	1.19					1.00		1.00
Incremental Delay, d2		0.5	0.2	19.9	0.2					5.5		0.0
Delay (s)		24.3	0.2	58.6	8.2					40.7		0.0
Level of Service		C	A	E	A					D		A
Approach Delay (s)		18.2			34.9			0.0			38.0	
Approach LOS		B			C			A			D	

Intersection Summary			
HCM 2000 Control Delay	30.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	19.0
Intersection Capacity Utilization	58.2%	ICU Level of Service	B
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

c Critical Lane Group



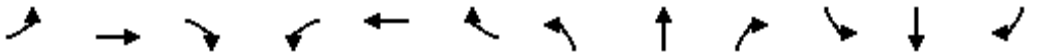
Lane Group	EBT	EBR	WBL	WBT	SBL	SBR
Lane Group Flow (vph)	731	246	842	747	747	54
v/c Ratio	0.36	0.16	0.96	0.86dl	0.81	0.03
Control Delay	24.5	0.2	60.3	41.9	43.3	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	24.5	0.2	60.3	41.9	43.3	0.0
Queue Length 50th (ft)	93	0	251	204	145	0
Queue Length 95th (ft)	120	0	#375	268	187	0
Internal Link Dist (ft)	2056			679		
Turn Bay Length (ft)		433				
Base Capacity (vph)	2023	1583	880	936	942	1583
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.36	0.16	0.96	0.80	0.79	0.03

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Build Alternative 2030 AM

9: East Ramp & Donald Ross Corridor: Donald Ross Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	34	1370	0	0	1407	395	102	0	933	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0			6.0	4.0	6.0		6.0			
Lane Util. Factor	0.97	0.91			0.86	1.00	0.97		0.76			
Frt	1.00	1.00			1.00	0.85	1.00		0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (prot)	3433	5085			6408	1583	3433		3610			
Flt Permitted	0.95	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (perm)	3433	5085			6408	1583	3433		3610			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	36	1442	0	0	1481	416	107	0	982	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	801	0	0	0
Lane Group Flow (vph)	36	1442	0	0	1481	416	107	0	181	0	0	0
Turn Type	Prot	NA			NA	Free	Prot		Prot			
Protected Phases	1	6			2		7		7			
Permitted Phases						Free						
Actuated Green, G (s)	2.4	28.4			53.0	90.0	16.6		16.6			
Effective Green, g (s)	2.4	28.4			53.0	90.0	16.6		16.6			
Actuated g/C Ratio	0.03	0.32			0.59	1.00	0.18		0.18			
Clearance Time (s)	6.0	6.0			6.0		6.0		6.0			
Vehicle Extension (s)	3.0	3.0			3.0		3.0		3.0			
Lane Grp Cap (vph)	91	1604			3773	1583	633		665			
v/s Ratio Prot	0.01	c0.28			c0.23		0.03		0.05			
v/s Ratio Perm						c0.26						
v/c Ratio	0.40	0.90			0.39	0.26	0.17		0.27			
Uniform Delay, d1	43.1	29.4			9.9	0.0	30.9		31.5			
Progression Factor	0.57	0.95			1.00	1.00	1.00		1.00			
Incremental Delay, d2	2.3	7.1			0.3	0.4	0.1		0.2			
Delay (s)	26.9	35.1			10.2	0.4	31.0		31.7			
Level of Service	C	D			B	A	C		C			
Approach Delay (s)		34.9			8.1			31.7			0.0	
Approach LOS		C			A			C			A	

Intersection Summary			
HCM 2000 Control Delay	22.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	19.0
Intersection Capacity Utilization	58.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Build Alternative 2030 AM

9: East Ramp & Donald Ross Corridor: Donald Ross Road

Lane Group	EBL	EBT	WBT	WBR	NBL	NBR
Lane Group Flow (vph)	36	1442	1481	416	107	982
v/c Ratio	0.22	0.90	0.38	0.26	0.17	0.67
Control Delay	26.4	35.8	9.6	0.4	31.5	4.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	26.4	35.8	9.6	0.4	31.5	4.8
Queue Length 50th (ft)	8	187	128	0	26	0
Queue Length 95th (ft)	m15	#386	153	0	49	42
Internal Link Dist (ft)		679	2740			
Turn Bay Length (ft)				400		
Base Capacity (vph)	163	1606	3947	1583	648	1478
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.22	0.90	0.38	0.26	0.17	0.66

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

HOOD ROAD CORRIDOR

Arterial Level of Service: EB Hood Road

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Central Blvd	II	45	133.7	42.7	176.4	1.67	34.1	B
Military Trail	II	45	31.0	44.4	75.4	0.31	14.9	E
Total	II		164.7	87.1	251.8	1.98	28.4	B

Arterial Level of Service: WB Hood Road

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Military Trail	II	45	14.9	26.7	41.6	0.14	11.8	F
Central Blvd	II	45	31.0	27.5	58.5	0.31	19.3	D
Total	II		45.9	54.2	100.1	0.45	16.2	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	137	266	149	629	109	6	148	1005	665	298	1061	87
Future Volume (veh/h)	137	266	149	629	109	6	148	1005	665	298	1061	87
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	144	280	157	662	115	6	156	1058	700	314	1117	92
Adj No. of Lanes	2	2	1	2	2	1	2	2	1	2	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	218	470	296	671	936	419	187	1113	498	336	1266	566
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.06	0.13	0.13	0.20	0.26	0.26	0.05	0.31	0.31	0.10	0.36	0.36
Ln Grp Delay, s/veh	45.6	38.9	35.3	68.1	25.8	12.0	70.1	48.4	203.4	74.1	36.9	20.8
Ln Grp LOS	D	D	D	E	C	B	E	D	F	E	D	C
Approach Vol, veh/h		581			783			1914			1523	
Approach Delay, s/veh		39.6			61.4			106.9			43.6	
Approach LOS		D			E			F			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	2	1	3	4	5	6	7	8
Case No	3.0	2.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	35.0	15.0	24.0	18.3	11.0	39.0	11.9	30.4
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green (Gmax), s	29.0	9.0	18.0	20.0	5.0	33.0	8.0	30.0
Max Allow Headway (MAH), s	4.5	4.6	3.7	4.6	3.7	4.6	3.7	4.6
Max Q Clear (g_c+I1), s	29.0	10.4	19.7	10.3	6.1	29.3	5.8	4.3
Green Ext Time (g_e), s	0.0	0.0	0.0	2.0	0.0	2.6	0.1	2.9
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	0.98	1.00	1.00	1.00
Prob of Max Out (p_x)	0.00	1.00	1.00	0.20	1.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt		1	3		5		7	
Mvmt Sat Flow, veh/h		3442	3442		3442		3442	

Through Movement Data								
Assigned Mvmt	2			4		6		8
Mvmt Sat Flow, veh/h	3539			3539		3539		3539

Right-Turn Movement Data								
Assigned Mvmt	12			14		16		18
Mvmt Sat Flow, veh/h	1583			1583		1583		1583

Left Lane Group Data								
Assigned Mvmt	0	1	3	0	5	0	7	0
Lane Assignment		(Prot)	(Prot)		(Prot)		(Prot)	

Lanes in Grp	0	2	2	0	2	0	2	0
Grp Vol (v), veh/h	0	314	662	0	156	0	144	0
Grp Sat Flow (s), veh/h/ln	0	1721	1721	0	1721	0	1721	0
Q Serve Time (g_s), s	0.0	8.4	17.7	0.0	4.1	0.0	3.8	0.0
Cycle Q Clear Time (g_c), s	0.0	8.4	17.7	0.0	4.1	0.0	3.8	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	336	671	0	187	0	218	0
V/C Ratio (X)	0.00	0.94	0.99	0.00	0.84	0.00	0.66	0.00
Avail Cap (c_a), veh/h	0	336	671	0	187	0	298	0
Upstream Filter (I)	0.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	0.0	41.3	37.0	0.0	43.2	0.0	42.2	0.0
Incr Delay (d2), s/veh	0.0	32.8	31.1	0.0	26.9	0.0	3.4	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	74.1	68.1	0.0	70.1	0.0	45.6	0.0
1st-Term Q (Q1), veh/ln	0.0	4.0	8.4	0.0	2.0	0.0	1.8	0.0
2nd-Term Q (Q2), veh/ln	0.0	1.5	2.9	0.0	0.7	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.70	1.49	0.00	1.80	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	0.0	9.3	16.8	0.0	4.8	0.0	3.4	0.0
%ile Storage Ratio (RQ%)	0.00	0.79	0.77	0.00	0.35	0.00	0.16	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	2	0	0	4	0	6	0	8
Lane Assignment	T			T		T		T
Lanes in Grp	2	0	0	2	0	2	0	2
Grp Vol (v), veh/h	1058	0	0	280	0	1117	0	115
Grp Sat Flow (s), veh/h/ln	1770	0	0	1770	0	1770	0	1770
Q Serve Time (g_s), s	27.0	0.0	0.0	6.9	0.0	27.3	0.0	2.3
Cycle Q Clear Time (g_c), s	27.0	0.0	0.0	6.9	0.0	27.3	0.0	2.3
Lane Grp Cap (c), veh/h	1113	0	0	470	0	1266	0	936
V/C Ratio (X)	0.95	0.00	0.00	0.60	0.00	0.88	0.00	0.12
Avail Cap (c_a), veh/h	1113	0	0	767	0	1266	0	1151
Upstream Filter (I)	1.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	30.9	0.0	0.0	37.7	0.0	27.8	0.0	25.8
Incr Delay (d2), s/veh	17.5	0.0	0.0	1.2	0.0	9.1	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	48.4	0.0	0.0	38.9	0.0	36.9	0.0	25.8
1st-Term Q (Q1), veh/ln	13.1	0.0	0.0	3.3	0.0	13.3	0.0	1.1

2nd-Term Q (Q2), veh/ln	2.7	0.0	0.0	0.1	0.0	1.6	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.41	0.00	0.00	1.80	0.00	1.42	0.00	1.80
%ile Back of Q (95%), veh/ln	22.3	0.0	0.0	6.2	0.0	21.3	0.0	2.0
%ile Storage Ratio (RQ%)	1.29	0.00	0.00	0.21	0.00	0.57	0.00	0.03
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	12	0	0	14	0	16	0	18
Lane Assignment	R			R		R		R
Lanes in Grp	1	0	0	1	0	1	0	1
Grp Vol (v), veh/h	700	0	0	157	0	92	0	6
Grp Sat Flow (s), veh/h/ln	1583	0	0	1583	0	1583	0	1583
Q Serve Time (g_s), s	15.2	0.0	0.0	8.3	0.0	3.7	0.0	0.2
Cycle Q Clear Time (g_c), s	15.2	0.0	0.0	8.3	0.0	3.7	0.0	0.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	1583.3	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	1.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	498	0	0	296	0	566	0	419
V/C Ratio (X)	1.41	0.00	0.00	0.53	0.00	0.16	0.00	0.01
Avail Cap (c_a), veh/h	498	0	0	429	0	566	0	515
Upstream Filter (I)	1.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	8.7	0.0	0.0	33.8	0.0	20.2	0.0	11.9
Incr Delay (d2), s/veh	194.7	0.0	0.0	1.5	0.0	0.6	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	203.4	0.0	0.0	35.3	0.0	20.8	0.0	12.0
1st-Term Q (Q1), veh/ln	8.6	0.0	0.0	3.6	0.0	1.6	0.0	0.1
2nd-Term Q (Q2), veh/ln	26.9	0.0	0.0	0.1	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	63.9	0.0	0.0	6.7	0.0	3.0	0.0	0.2
%ile Storage Ratio (RQ%)	5.79	0.00	0.00	0.23	0.00	0.23	0.00	0.01
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	50.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	71.2
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	334	629	207	296	251	61	11	581	334	167	694	527
Future Volume (veh/h)	334	629	207	296	251	61	11	581	334	167	694	527
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	352	662	218	312	264	64	12	612	352	176	731	555
Adj No. of Lanes	3	2	1	3	2	1	2	3	1	2	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	381	750	335	381	750	335	41	1107	345	207	1353	542
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.08	0.21	0.21	0.08	0.21	0.21	0.01	0.22	0.22	0.06	0.27	0.27
Ln Grp Delay, s/veh	62.3	40.5	31.2	47.3	25.4	24.5	40.6	28.0	83.3	61.9	25.1	69.6
Ln Grp LOS	E	D	C	D	C	C	D	C	F	E	C	F
Approach Vol, veh/h		1232			640			976			1462	
Approach Delay, s/veh		45.1			36.0			48.1			46.4	
Approach LOS		D			D			D			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	9.4	27.4	14.2	23.9	13.0	23.8	14.2	23.9
Change Period (Y+Rc), s	8.5	7.5	8.5	8.0	8.5	7.5	8.5	8.0
Max Green (Gmax), s	4.0	16.8	5.7	16.0	4.5	16.3	5.7	16.0
Max Allow Headway (MAH), s	3.7	4.5	3.7	4.7	3.7	4.5	3.7	4.7
Max Q Clear (g_c+I1), s	2.3	21.9	7.2	6.8	5.8	18.3	6.6	15.6
Green Ext Time (g_e), s	0.0	0.0	0.0	4.4	0.0	0.0	0.0	0.3
Prob of Phs Call (p_c)	0.22	1.00	1.00	1.00	0.97	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.57	1.00	0.00	1.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3442		5003		3442		5003	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		5085		3539		5085		3539

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		1583		1583		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	3	0	2	0	3	0
Grp Vol (v), veh/h	12	0	352	0	176	0	312	0
Grp Sat Flow (s), veh/h/ln	1721	0	1668	0	1721	0	1668	0
Q Serve Time (g_s), s	0.3	0.0	5.2	0.0	3.8	0.0	4.6	0.0
Cycle Q Clear Time (g_c), s	0.3	0.0	5.2	0.0	3.8	0.0	4.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	41	0	381	0	207	0	381	0
V/C Ratio (X)	0.30	0.00	0.92	0.00	0.85	0.00	0.82	0.00
Avail Cap (c_a), veh/h	184	0	381	0	207	0	381	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	36.7	0.0	34.4	0.0	34.8	0.0	34.1	0.0
Incr Delay (d2), s/veh	4.0	0.0	27.9	0.0	27.1	0.0	13.2	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	40.6	0.0	62.3	0.0	61.9	0.0	47.3	0.0
1st-Term Q (Q1), veh/ln	0.1	0.0	2.4	0.0	1.8	0.0	2.1	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	1.0	0.0	0.8	0.0	0.5	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	1.80	0.00	1.80	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	0.3	0.0	6.1	0.0	4.6	0.0	4.6	0.0
%ile Storage Ratio (RQ%)	0.02	0.00	0.29	0.00	0.20	0.00	0.22	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	2	0	3	0	2
Grp Vol (v), veh/h	0	731	0	264	0	612	0	662
Grp Sat Flow (s), veh/h/ln	0	1695	0	1770	0	1695	0	1770
Q Serve Time (g_s), s	0.0	9.2	0.0	4.8	0.0	8.0	0.0	13.6
Cycle Q Clear Time (g_c), s	0.0	9.2	0.0	4.8	0.0	8.0	0.0	13.6
Lane Grp Cap (c), veh/h	0	1353	0	750	0	1107	0	750
V/C Ratio (X)	0.00	0.54	0.00	0.35	0.00	0.55	0.00	0.88
Avail Cap (c_a), veh/h	0	1353	0	756	0	1107	0	756
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	23.5	0.0	25.1	0.0	26.0	0.0	28.6
Incr Delay (d2), s/veh	0.0	1.6	0.0	0.3	0.0	2.0	0.0	11.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	25.1	0.0	25.4	0.0	28.0	0.0	40.5
1st-Term Q (Q1), veh/ln	0.0	4.3	0.0	2.3	0.0	3.7	0.0	6.6

2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.0	0.0	0.2	0.0	1.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.77	0.00	1.80	0.00	1.80	0.00	1.59
%ile Back of Q (95%), veh/ln	0.0	8.0	0.0	4.2	0.0	7.1	0.0	12.5
%ile Storage Ratio (RQ%)	0.00	0.22	0.00	0.17	0.00	0.24	0.00	0.21
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	555	0	64	0	352	0	218
Grp Sat Flow (s), veh/h/ln	0	1583	0	1583	0	1583	0	1583
Q Serve Time (g_s), s	0.0	19.9	0.0	2.5	0.0	16.3	0.0	9.4
Cycle Q Clear Time (g_c), s	0.0	19.9	0.0	2.5	0.0	16.3	0.0	9.4
Prot RT Sat Flow (s_R), veh/h/ln	0.0	1583.3	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	5.7	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	542	0	335	0	345	0	335
V/C Ratio (X)	0.00	1.02	0.00	0.19	0.00	1.02	0.00	0.65
Avail Cap (c_a), veh/h	0	542	0	338	0	345	0	338
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	24.6	0.0	24.2	0.0	29.3	0.0	27.0
Incr Delay (d2), s/veh	0.0	45.0	0.0	0.3	0.0	53.9	0.0	4.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	69.6	0.0	24.5	0.0	83.3	0.0	31.2
1st-Term Q (Q1), veh/ln	0.0	11.2	0.0	1.1	0.0	7.1	0.0	4.1
2nd-Term Q (Q2), veh/ln	0.0	6.8	0.0	0.0	0.0	5.2	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.80	0.00	1.77
%ile Back of Q (95%), veh/ln	0.0	32.3	0.0	2.0	0.0	22.2	0.0	8.0
%ile Storage Ratio (RQ%)	0.00	1.37	0.00	0.16	0.00	1.84	0.00	0.61
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	3.3	0.0	0.0	0.0	1.8	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.3	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	44.9
HCM 2010 LOS	D

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Traffic Vol, veh/h	20	570	324	58	29	10
Future Vol, veh/h	20	570	324	58	29	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	150	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	21	600	341	61	31	11

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	341	0	-	0	983	341
Stage 1	-	-	-	-	341	-
Stage 2	-	-	-	-	642	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1218	-	-	-	276	701
Stage 1	-	-	-	-	720	-
Stage 2	-	-	-	-	524	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1218	-	-	-	269	701
Mov Cap-2 Maneuver	-	-	-	-	269	-
Stage 1	-	-	-	-	720	-
Stage 2	-	-	-	-	510	-

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	17.9
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1218	-	-	-	319
HCM Lane V/C Ratio	0.017	-	-	-	0.129
HCM Control Delay (s)	8	0	-	-	17.9
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.4

MILITARY TRAIL CORRIDOR

Arterial Level of Service: NB N Military Trail

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
PGA Blvd	II	45	18.9	54.5	73.4	0.17	8.5	F
Kyoto Gardens Dr	II	45	43.4	18.3	61.7	0.49	28.8	B
Hood Road	II	45	104.9	26.7	131.6	1.31	35.9	A
Donald Ross	II	45	102.8	36.6	139.4	1.29	33.2	B
Total	II		270.0	136.1	406.1	3.26	28.9	B

Arterial Level of Service: SB N Military Trail

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Donald Ross	II	45	22.3	33.1	55.4	0.20	13.3	E
Hood Road	II	45	102.8	18.6	121.4	1.29	38.1	A
Kyoto Gardens Dr	II	45	104.9	9.5	114.4	1.31	41.3	A
PGA Blvd	II	45	43.4	35.5	78.9	0.49	22.5	C
Total	II		273.4	96.7	370.1	3.29	32.0	B

Movement	WBL	WBR	WBR2	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SER
Lane Configurations											
Volume (veh/h)	243	113	72	45	869	228	76	1001	1	0	0
Number	7	14	14	1	6	16	5	2	12		
Initial Q, veh	0	0	0	0	0	0	0	0	0		
Ped-Bike Adj (A_pbT)	1.00	1.00	1.00	1.00		1.00	1.00		1.00		
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900		
Adj Flow Rate, veh/h	256	76	76	47	915	240	80	1054	1		
Adj No. of Lanes	2	1	1	1	3	1	1	3	0		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2		
Opposing Right Turn Influence	Yes			Yes			Yes				
Cap, veh/h	433	199	199	330	1782	555	101	2919	3		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Prop Arrive On Green	0.13	0.13	0.13	0.35	0.35	0.35	0.06	0.56	0.56		
Ln Grp Delay, s/veh	22.1	21.4	21.4	12.5	14.0	15.0	36.4	6.7	7.2		
Ln Grp LOS	C	C	C	B	B	B	D	A	A		
Approach Vol, veh/h	332				1202			1135			Timer:
Approach Delay, s/veh	21.9				14.1			9.0			Assigned Phs
Approach LOS	C				B			A			Case No
Phs Duration (G+Y+Rc), s			36.0		14.3	10.4	25.6				
Change Period (Y+Rc), s			8.0		8.0	7.5	8.0				
Max Green (Gmax), s			28.0		16.0	4.9	15.6				
Max Allow Headway (MAH), s			4.9		3.8	3.7	4.9				
Max Q Clear (g_c+I1), s			7.6		5.5	4.2	9.2				
Green Ext Time (g_e), s			13.8		0.8	0.0	5.4				
Prob of Phs Call (p_c)			1.00		1.00	0.67	1.00				
Prob of Max Out (p_x)			0.00		0.01	1.00	0.00				
Left-Turn Movement Data											
Assigned Mvmt					7	5	1				
Mvmt Sat Flow, veh/h					3442	1774	533				
Through Movement Data											
Assigned Mvmt			2		4		6				
Mvmt Sat Flow, veh/h			5247		0		5085				
Right-Turn Movement Data											
Assigned Mvmt			12		14		16				
Mvmt Sat Flow, veh/h			5		1583		1583				
Left Lane Group Data											
Assigned Mvmt		0	0	0	7	5	1	0	0		
Lane Assignment						(Prot)					
Lanes in Grp		0	0	0	2	1	1	0	0		
Grp Vol (v), veh/h		0	0	0	256	80	47	0	0		
Grp Sat Flow (s), veh/h/ln		0	0	0	1721	1774	533	0	0		
Q Serve Time (g_s), s		0.0	0.0	0.0	3.5	2.2	3.2	0.0	0.0		

Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	3.5	2.2	3.2	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1721	0	533	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	17.6	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	17.6	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	3.2	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	1.00	1.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	433	101	330	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.59	0.79	0.14	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	1094	173	330	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	20.8	23.4	11.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.3	13.0	0.9	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	22.1	36.4	12.5	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	1.7	1.1	0.5	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.4	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.80	1.80	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	3.1	2.6	1.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.11	0.18	0.08	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	3	0	0
Grp Vol (v), veh/h	0	681	0	0	0	915	0	0
Grp Sat Flow (s), veh/h/ln	0	1695	0	0	0	1695	0	0
Q Serve Time (g_s), s	0.0	5.6	0.0	0.0	0.0	7.2	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	5.6	0.0	0.0	0.0	7.2	0.0	0.0
Lane Grp Cap (c), veh/h	0	1886	0	0	0	1782	0	0
V/C Ratio (X)	0.00	0.36	0.00	0.00	0.00	0.51	0.00	0.00
Avail Cap (c_a), veh/h	0	1886	0	0	0	1782	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	6.2	0.0	0.0	0.0	12.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.5	0.0	0.0	0.0	1.1	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	6.7	0.0	0.0	0.0	14.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	2.6	0.0	0.0	0.0	3.3	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.00	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	4.9	0.0	0.0	0.0	6.3	0.0	0.0

%ile Storage Ratio (RQ%)	0.00	0.02	0.00	0.00	0.00	0.40	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment		T+R		R		R		
Lanes in Grp	0	1	0	1	0	1	0	0
Grp Vol (v), veh/h	0	374	0	76	0	240	0	0
Grp Sat Flow (s), veh/h/ln	0	1862	0	1583	0	1583	0	0
Q Serve Time (g_s), s	0.0	5.6	0.0	2.2	0.0	5.8	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	5.6	0.0	2.2	0.0	5.8	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	1036	0	199	0	555	0	0
V/C Ratio (X)	0.00	0.36	0.00	0.38	0.00	0.43	0.00	0.00
Avail Cap (c_a), veh/h	0	1036	0	503	0	555	0	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	6.2	0.0	20.2	0.0	12.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.0	0.0	1.2	0.0	2.4	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	7.2	0.0	21.4	0.0	15.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	2.8	0.0	2.0	0.0	2.5	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.1	0.0	0.4	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	5.6	0.0	3.7	0.0	5.2	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.02	0.00	0.13	0.00	0.44	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	12.9
HCM 2010 LOS	B

NORTHLAKE BOULEVARD CORRIDOR

Arterial Level of Service: EB Northlake Blvd

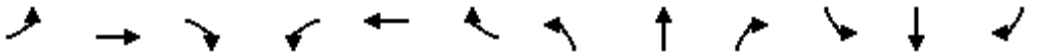
Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Keating Dr	II	45	17.3	37.3	54.6	0.16	10.5	F
West Ramps	II	45	12.7	50.1	62.8	0.12	6.7	F
East Ramps	II	45	11.1	8.5	19.6	0.10	18.7	D
Roan Ln	II	45	8.8	0.3	9.1	0.08	32.1	B
Sandtree Dr	II	45	13.5	29.9	43.4	0.12	10.3	F
Total	II		63.4	126.1	189.5	0.58	11.1	F

Arterial Level of Service: WB Northlake Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Sunrise Dr	II	45	15.3	24.7	40.0	0.14	12.6	F
Roan Ln	II	45	13.5	5.2	18.7	0.12	23.9	C
East Ramps	II	45	8.8	30.3	39.1	0.08	7.5	F
West Ramps	II	45	11.1	7.3	18.4	0.10	19.9	D
Keating Dr	II	45	12.7	11.4	24.1	0.12	17.3	D
Total	II		61.4	78.9	140.3	0.56	14.5	E

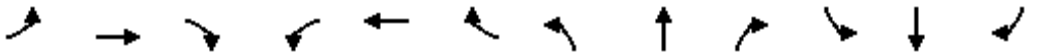
Build Alternative 2030 AM

3: Keating Dr & Northlake Blvd Corridor: Northlake Boulevard



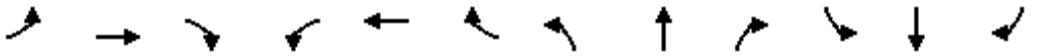
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	2165	119	252	1378	74	71	0	138	160	3	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0	4.0	5.0	5.0	6.0	6.0	6.0		6.0	
Lane Util. Factor		0.91	1.00	1.00	0.91	1.00	0.95	0.95	1.00		0.95	
Frt		1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85		1.00	
Flt Protected		1.00	1.00	0.95	1.00	1.00	0.95	0.95	1.00		0.95	
Satd. Flow (prot)		5085	1583	1770	5085	1583	1681	1681	1583		3373	
Flt Permitted		1.00	1.00	0.09	1.00	1.00	0.95	0.44	1.00		0.73	
Satd. Flow (perm)		5085	1583	171	5085	1583	1681	781	1583		2568	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	2279	125	265	1451	78	75	0	145	168	3	0
RTOR Reduction (vph)	0	0	70	0	0	29	0	0	109	0	0	0
Lane Group Flow (vph)	0	2279	55	265	1451	49	37	38	36	0	171	0
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	Prot	NA	Perm	pm+pt	NA	
Protected Phases		6		5	2		7	4		3	8	
Permitted Phases	6		6	2		2			4	8		
Actuated Green, G (s)		39.5	39.5	56.9	56.9	56.9	3.0	22.1	22.1		13.1	
Effective Green, g (s)		39.5	39.5	56.9	56.9	56.9	3.0	22.1	22.1		13.1	
Actuated g/C Ratio		0.44	0.44	0.63	0.63	0.63	0.03	0.25	0.25		0.15	
Clearance Time (s)		5.0	5.0	4.0	5.0	5.0	6.0	6.0	6.0		6.0	
Vehicle Extension (s)		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)		2231	694	346	3214	1000	56	221	388		373	
v/s Ratio Prot		c0.45		c0.11	0.29		c0.02	0.01				
v/s Ratio Perm			0.03	0.37		0.03		0.04	0.02		c0.07	
v/c Ratio		1.02	0.08	0.77	0.45	0.05	0.66	0.17	0.09		0.46	
Uniform Delay, d1		25.2	14.7	23.9	8.5	6.3	43.0	26.7	26.2		35.2	
Progression Factor		1.00	1.00	0.86	1.33	1.00	1.00	1.00	1.00		1.00	
Incremental Delay, d2		24.7	0.2	9.3	0.4	0.1	25.5	0.4	0.1		0.9	
Delay (s)		49.9	14.9	30.0	11.8	6.4	68.5	27.1	26.3		36.1	
Level of Service		D	B	C	B	A	E	C	C		D	
Approach Delay (s)		48.1			14.2			33.5			36.1	
Approach LOS		D			B			C			D	

Intersection Summary			
HCM 2000 Control Delay	33.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	21.0
Intersection Capacity Utilization	83.8%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



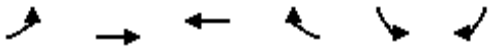
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1627	673	956	1002	0	0	0	0	647	0	532
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0	4.0	7.0	6.5					6.0		6.0
Lane Util. Factor		0.81	1.00	0.97	0.91					0.97		0.88
Frt		1.00	0.85	1.00	1.00					1.00		0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (prot)		7544	1583	3433	5085					3433		2787
Flt Permitted		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (perm)		7544	1583	3433	5085					3433		2787
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	1713	708	1006	1055	0	0	0	0	681	0	560
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	409
Lane Group Flow (vph)	0	1713	708	1006	1055	0	0	0	0	681	0	151
Turn Type		NA	Free	Prot	NA					Prot		Perm
Protected Phases		6		5	2					3		
Permitted Phases			Free									6
Actuated Green, G (s)		24.2	90.0	27.8	58.5					19.0		24.2
Effective Green, g (s)		24.2	90.0	27.8	58.5					19.0		24.2
Actuated g/C Ratio		0.27	1.00	0.31	0.65					0.21		0.27
Clearance Time (s)		6.0		7.0	6.5					6.0		6.0
Vehicle Extension (s)		3.0		3.0	3.0					3.0		3.0
Lane Grp Cap (vph)		2028	1583	1060	3305					724		749
v/s Ratio Prot		c0.23		c0.29	0.21					c0.20		
v/s Ratio Perm			0.45									0.05
v/c Ratio		0.84	0.45	0.95	0.32					0.94		0.20
Uniform Delay, d1		31.1	0.0	30.4	7.0					34.9		25.4
Progression Factor		1.54	1.00	1.00	1.00					1.00		1.00
Incremental Delay, d2		2.0	0.4	16.6	0.3					20.3		0.6
Delay (s)		49.9	0.4	47.0	7.2					55.2		26.0
Level of Service		D	A	D	A					E		C
Approach Delay (s)		35.4			26.6			0.0			42.0	
Approach LOS		D			C			A			D	

Intersection Summary			
HCM 2000 Control Delay	33.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	19.0
Intersection Capacity Utilization	80.4%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



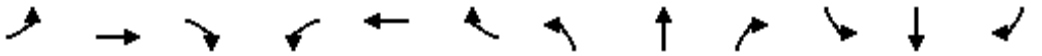
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	856	1418	0	0	1292	551	666	0	1059	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	6.0			6.5	4.0	6.0		6.5			
Lane Util. Factor	0.97	0.91			0.81	1.00	0.97		0.88			
Frt	1.00	1.00			1.00	0.85	1.00		0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (prot)	3433	5085			7544	1583	3433		2787			
Flt Permitted	0.95	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (perm)	3433	5085			7544	1583	3433		2787			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	901	1493	0	0	1360	580	701	0	1115	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	688	0	0	0
Lane Group Flow (vph)	901	1493	0	0	1360	580	701	0	427	0	0	0
Turn Type	Prot	NA			NA	Free	Prot		Perm			
Protected Phases	1	6			2		7					
Permitted Phases						Free			2			
Actuated Green, G (s)	21.0	46.1			17.6	75.0	16.9		17.6			
Effective Green, g (s)	21.0	46.1			17.6	75.0	16.9		17.6			
Actuated g/C Ratio	0.28	0.61			0.23	1.00	0.23		0.23			
Clearance Time (s)	7.0	6.0			6.5		6.0		6.5			
Vehicle Extension (s)	3.0	3.0			3.0		3.0		3.0			
Lane Grp Cap (vph)	961	3125			1770	1583	773		654			
v/s Ratio Prot	c0.26	0.29			c0.18		c0.20					
v/s Ratio Perm						0.37			0.15			
v/c Ratio	0.94	0.48			0.77	0.37	0.91		0.65			
Uniform Delay, d1	26.4	7.9			26.8	0.0	28.3		25.9			
Progression Factor	1.00	1.00			1.00	1.00	1.00		1.00			
Incremental Delay, d2	15.9	0.5			3.3	0.7	14.2		5.0			
Delay (s)	42.3	8.4			30.1	0.7	42.5		31.0			
Level of Service	D	A			C	A	D		C			
Approach Delay (s)		21.2			21.3			35.4			0.0	
Approach LOS		C			C			D			A	

Intersection Summary			
HCM 2000 Control Delay	25.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	80.4%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



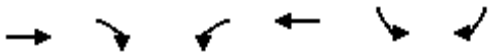
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	83	2147	1574	72	0	176
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	8.0	6.5	6.5	4.0		4.0
Lane Util. Factor	1.00	0.91	0.76	1.00		1.00
Frt	1.00	1.00	1.00	0.85		0.86
Flt Protected	0.95	1.00	1.00	1.00		1.00
Satd. Flow (prot)	1770	5085	8494	1583		1611
Flt Permitted	0.95	1.00	1.00	1.00		1.00
Satd. Flow (perm)	1770	5085	8494	1583		1611
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	87	2260	1657	76	0	185
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	87	2260	1657	76	0	185
Turn Type	Prot	NA	NA	Free		Free
Protected Phases	1	6	2			
Permitted Phases				Free		Free
Actuated Green, G (s)	4.2	40.0	21.3	40.0		40.0
Effective Green, g (s)	4.2	40.0	21.3	40.0		40.0
Actuated g/C Ratio	0.11	1.00	0.53	1.00		1.00
Clearance Time (s)	8.0	6.5	6.5			
Vehicle Extension (s)	3.0	3.0	3.0			
Lane Grp Cap (vph)	185	5085	4523	1583		1611
v/s Ratio Prot	0.05	c0.44	0.20			
v/s Ratio Perm				0.05		0.11
v/c Ratio	0.47	0.44	0.37	0.05		0.11
Uniform Delay, d1	16.9	0.0	5.4	0.0		0.0
Progression Factor	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	1.9	0.3	0.2	0.1		0.1
Delay (s)	18.7	0.3	5.7	0.1		0.1
Level of Service	B	A	A	A		A
Approach Delay (s)		1.0	5.4		0.1	
Approach LOS		A	A		A	

Intersection Summary			
HCM 2000 Control Delay	2.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	14.5
Intersection Capacity Utilization	46.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	92	1819	236	103	1251	61	273	1	89	86	1	122
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.5	7.5	7.0	7.5		6.0	6.5	6.5	6.0	6.5	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91		0.97	0.95	0.95	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.85	0.85	1.00	0.85	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1583	3433	5050		3433	1510	1504	1770	1585	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1583	3433	5050		3433	1510	1504	1770	1585	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	97	1915	248	108	1317	64	287	1	94	91	1	128
RTOR Reduction (vph)	0	0	149	0	6	0	0	39	39	0	118	0
Lane Group Flow (vph)	97	1915	99	108	1375	0	287	9	8	91	11	0
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6						4			
Actuated Green, G (s)	7.1	36.0	36.0	5.5	34.4		14.4	15.9	15.9	5.6	7.1	
Effective Green, g (s)	7.1	36.0	36.0	5.5	34.4		14.4	15.9	15.9	5.6	7.1	
Actuated g/C Ratio	0.08	0.40	0.40	0.06	0.38		0.16	0.18	0.18	0.06	0.08	
Clearance Time (s)	7.0	7.5	7.5	7.0	7.5		6.0	6.5	6.5	6.0	6.5	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	139	2034	633	209	1930		549	266	265	110	125	
v/s Ratio Prot	0.05	c0.38		0.03	c0.27		c0.08	0.01		c0.05	0.01	
v/s Ratio Perm			0.06						0.01			
v/c Ratio	0.70	0.94	0.16	0.52	0.71		0.52	0.03	0.03	0.83	0.09	
Uniform Delay, d1	40.4	26.0	17.3	41.0	23.6		34.7	30.7	30.7	41.7	38.4	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	14.2	10.3	0.5	2.2	2.3		0.9	0.1	0.0	37.6	0.3	
Delay (s)	54.6	36.2	17.8	43.1	25.9		35.6	30.7	30.7	79.3	38.8	
Level of Service	D	D	B	D	C		D	C	C	E	D	
Approach Delay (s)		35.0			27.1			34.4			55.5	
Approach LOS		D			C			C			E	

Intersection Summary			
HCM 2000 Control Delay	33.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	27.0
Intersection Capacity Utilization	76.4%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Lane Group	EBT	EBR	WBL	WBT	SBL	SBR
Lane Group Flow (vph)	1713	708	1006	1055	681	560
v/c Ratio	0.84	0.45	0.95	0.32	0.94	0.48
Control Delay	50.1	1.5	49.4	7.3	57.9	4.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	50.1	1.5	49.4	7.3	57.9	4.0
Queue Length 50th (ft)	252	0	285	86	197	0
Queue Length 95th (ft)	m265	m0	#411	108	#304	41
Internal Link Dist (ft)	533			458		
Turn Bay Length (ft)						
Base Capacity (vph)	2031	1583	1068	3305	724	1159
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.84	0.45	0.94	0.32	0.94	0.48

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Build Alternative 2030 AM

9: East Ramps & Northlake Blvd Corridor: Northlake Boulevard

Lane Group	EBL	EBT	WBT	WBR	NBL	NBR
Lane Group Flow (vph)	901	1493	1360	580	701	1115
v/c Ratio	0.94	0.48	0.77	0.37	0.91	0.83
Control Delay	45.4	8.5	30.3	0.7	46.0	12.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	45.4	8.5	30.3	0.7	46.0	12.1
Queue Length 50th (ft)	210	123	146	0	163	47
Queue Length 95th (ft)	#324	154	179	0	#261	#138
Internal Link Dist (ft)		458	348			
Turn Bay Length (ft)				400		
Base Capacity (vph)	961	3125	1770	1583	778	1342
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.94	0.48	0.77	0.37	0.90	0.83

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

PGA BOULEVARD CORRIDOR

Arterial Level of Service: EB PGA Blvd

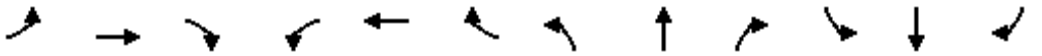
Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
FL Turnpike	II	45	16.8	89.1	105.9	0.15	5.2	F
Central Blvd	II	45	36.7	22.7	59.4	0.39	23.7	C
N Military Trail	II	45	81.7	70.4	152.1	1.02	24.2	C
West Ramps	II	45	20.5	9.5	30.0	0.19	22.6	C
East Ramps	II	45	6.3	105.2	111.5	0.06	1.9	F
RCA	II	45	25.6	0.7	26.3	0.25	33.7	B
Lake Victoria Garden	II	45	41.9	8.0	49.9	0.46	33.2	B
Total	II		229.5	305.6	535.1	2.52	16.9	E

Arterial Level of Service: WB PGA Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Lake Victoria Garden	II	45	13.7	42.4	56.1	0.13	8.1	F
RCA	II	45	41.9	0.1	42.0	0.46	39.5	A
East Ramps	II	45	25.6	0.0	25.6	0.25	34.6	B
West Ramps	II	45	6.3	11.2	17.5	0.06	12.0	F
N Military Trail	II	45	20.5	35.6	56.1	0.19	12.1	F
Central Blvd	II	45	25.0	68.1	93.1	0.24	9.3	F
FL Turnpike	II	45	36.7	52.8	89.5	0.39	15.7	E
Total	II		169.7	210.2	379.9	1.71	16.2	E

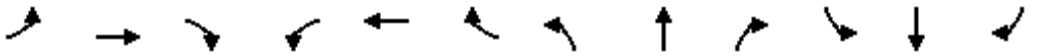
Build Alternative 2030 AM

3: FL Turnpike & PGA Blvd Corridor: PGA Boulevard



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	49	1076	36	250	1080	394	44	75	498	1370	159	129
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.5		7.5	8.0	7.5	7.5	7.5	7.5	7.5	7.5	4.0
Lane Util. Factor	0.97	0.91		0.97	0.91	0.88	1.00	0.95	0.95	0.91	0.91	1.00
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.89	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.97	1.00
Satd. Flow (prot)	3433	5061		3433	5085	2787	1770	1572	1504	3221	1638	1583
Flt Permitted	0.14	1.00		0.95	1.00	1.00	0.20	1.00	1.00	0.95	0.97	1.00
Satd. Flow (perm)	490	5061		3433	5085	2787	363	1572	1504	3221	1638	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	52	1133	38	263	1137	415	46	79	524	1442	167	136
RTOR Reduction (vph)	0	2	0	0	0	148	0	53	169	0	0	0
Lane Group Flow (vph)	52	1169	0	263	1137	267	46	257	124	1067	542	136
Turn Type	pm+pt	NA		Prot	NA	pm+ov	Perm	NA	Prot	Split	NA	Free
Protected Phases	7	4		3	8	6		2	2	6	6	
Permitted Phases	4					8	2					Free
Actuated Green, G (s)	38.3	35.1		11.9	43.8	97.3	20.5	20.5	20.5	53.5	53.5	151.0
Effective Green, g (s)	38.3	35.1		11.9	43.8	97.3	20.5	20.5	20.5	53.5	53.5	151.0
Actuated g/C Ratio	0.25	0.23		0.08	0.29	0.64	0.14	0.14	0.14	0.35	0.35	1.00
Clearance Time (s)	7.0	7.5		7.5	8.0	7.5	7.5	7.5	7.5	7.5	7.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	186	1176		270	1474	1795	49	213	204	1141	580	1583
v/s Ratio Prot	0.01	c0.23		c0.08	c0.22	0.05		c0.16	0.08	c0.33	0.33	
v/s Ratio Perm	0.06					0.04	0.13					0.09
v/c Ratio	0.28	0.99		0.97	0.77	0.15	0.94	1.21	0.61	0.94	0.93	0.09
Uniform Delay, d1	43.5	57.8		69.4	49.0	10.6	64.6	65.2	61.4	47.1	47.1	0.0
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.8	24.6		47.2	2.6	0.0	104.4	129.1	5.0	13.7	22.4	0.1
Delay (s)	44.3	82.4		116.6	51.6	10.6	169.0	194.4	66.5	60.8	69.4	0.1
Level of Service	D	F		F	D	B	F	F	E	E	E	A
Approach Delay (s)		80.8			51.6			134.8			58.8	
Approach LOS		F			D			F			E	

Intersection Summary			
HCM 2000 Control Delay	70.4	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.01		
Actuated Cycle Length (s)	151.0	Sum of lost time (s)	30.0
Intersection Capacity Utilization	96.0%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1111	1604	38	115	1168	200	36	41	181	229	35	709
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.5	8.5		7.0	8.0	8.0		8.5	7.0	8.5	8.5	8.5
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00		1.00	1.00	0.95	0.95	1.00
Frt	1.00	1.00		1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.98	1.00	0.95	0.96	1.00
Satd. Flow (prot)	3433	5068		1770	5085	1583		1820	1583	1681	1707	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.78	1.00	0.70	0.73	1.00
Satd. Flow (perm)	3433	5068		1770	5085	1583		1449	1583	1246	1293	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1169	1688	40	121	1229	211	38	43	191	241	37	746
RTOR Reduction (vph)	0	3	0	0	0	161	0	0	114	0	0	27
Lane Group Flow (vph)	1169	1725	0	121	1229	50	0	81	77	137	141	719
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA	pm+ov	Perm	NA	pt+ov
Protected Phases	1	6		5	2			4	5		8	8 1
Permitted Phases						2	4		4	8		
Actuated Green, G (s)	28.5	41.0		8.7	21.2	21.2		16.3	25.0	16.3	16.3	53.3
Effective Green, g (s)	28.5	41.0		8.7	21.2	21.2		16.3	25.0	16.3	16.3	53.3
Actuated g/C Ratio	0.32	0.46		0.10	0.24	0.24		0.18	0.28	0.18	0.18	0.59
Clearance Time (s)	7.5	8.5		7.0	8.0	8.0		8.5	7.0	8.5	8.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	1087	2308		171	1197	372		262	439	225	234	937
v/s Ratio Prot	c0.34	0.34		0.07	c0.24				0.02			c0.45
v/s Ratio Perm						0.03		0.06	0.03	0.11	0.11	
v/c Ratio	1.08	0.75		0.71	1.03	0.13		0.31	0.18	0.61	0.60	0.77
Uniform Delay, d1	30.8	20.2		39.4	34.4	27.2		32.0	24.7	33.9	33.9	13.7
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	50.0	2.3		12.6	33.1	0.7		0.7	0.2	11.7	11.0	3.8
Delay (s)	80.7	22.5		52.0	67.5	27.9		32.6	24.9	45.6	44.9	17.5
Level of Service	F	C		D	E	C		C	C	D	D	B
Approach Delay (s)		46.0			60.9			27.2			25.0	
Approach LOS		D			E			C			C	

Intersection Summary			
HCM 2000 Control Delay	45.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.05		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	91.5%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (vph)	0	0	0	642	0	305	0	806	1293	0	1557	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0		6.0		6.0	4.0		6.0	
Lane Util. Factor				0.97		0.88		0.91	1.00		0.86	
Frt				1.00		0.85		1.00	0.85		1.00	
Flt Protected				0.95		1.00		1.00	1.00		1.00	
Satd. Flow (prot)				3433		2787		5085	1583		6408	
Flt Permitted				0.95		1.00		1.00	1.00		1.00	
Satd. Flow (perm)				3433		2787		5085	1583		6408	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	676	0	321	0	848	1361	0	1639	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	676	0	321	0	848	1361	0	1639	0
Turn Type				Prot		Prot		NA	Free		NA	
Protected Phases				3		3		6			2	
Permitted Phases									Free			
Actuated Green, G (s)				12.1		12.1		15.9	40.0		15.9	
Effective Green, g (s)				12.1		12.1		15.9	40.0		15.9	
Actuated g/C Ratio				0.30		0.30		0.40	1.00		0.40	
Clearance Time (s)				6.0		6.0		6.0			6.0	
Vehicle Extension (s)				3.0		3.0		3.0			3.0	
Lane Grp Cap (vph)				1038		843		2021	1583		2547	
v/s Ratio Prot				0.20		0.12		0.17			0.26	
v/s Ratio Perm									c0.86			
v/c Ratio				0.65		0.38		0.42	0.86		0.64	
Uniform Delay, d1				12.1		11.0		8.7	0.0		9.8	
Progression Factor				1.00		1.00		1.00	1.00		1.00	
Incremental Delay, d2				3.2		1.3		0.1	6.3		0.6	
Delay (s)				15.3		12.3		8.9	6.3		10.3	
Level of Service				B		B		A	A		B	
Approach Delay (s)		0.0			14.3			7.3			10.3	
Approach LOS		A			B			A			B	

Intersection Summary			
HCM 2000 Control Delay	9.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	1.23		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	112.2%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	NBL	NBR	NET	NER	SWL	SWT
Lane Configurations						
Volume (vph)	0	2400	1448	0	0	703
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0	6.0			6.0
Lane Util. Factor		0.76	0.91			0.86
Frt		0.85	1.00			1.00
Flt Protected		1.00	1.00			1.00
Satd. Flow (prot)		3610	5085			6408
Flt Permitted		1.00	1.00			1.00
Satd. Flow (perm)		3610	5085			6408
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	2526	1524	0	0	740
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	2526	1524	0	0	740
Turn Type		Prot	NA			NA
Protected Phases		2	3 4			Free
Permitted Phases						2 8
Actuated Green, G (s)		97.0	41.0			150.0
Effective Green, g (s)		97.0	41.0			150.0
Actuated g/C Ratio		0.65	0.27			1.00
Clearance Time (s)		6.0				
Vehicle Extension (s)		3.0				
Lane Grp Cap (vph)		2334	1389			6408
v/s Ratio Prot		c0.70	c0.30			0.12
v/s Ratio Perm						
v/c Ratio		1.08	1.10			0.12
Uniform Delay, d1		26.5	54.5			0.0
Progression Factor		1.00	1.00			1.00
Incremental Delay, d2		45.2	55.3			0.0
Delay (s)		71.7	109.8			0.0
Level of Service		E	F			A
Approach Delay (s)	71.7		109.8			0.0
Approach LOS	E		F			A

Intersection Summary			
HCM 2000 Control Delay	72.8	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.14		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	112.2%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	629	2386	546	0	1294	0	215	0	86	0	0	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0		6.0		6.0	4.0	6.0			6.0
Lane Util. Factor	0.97	0.91	1.00		0.91		0.91	0.86	0.95			1.00
Frt	1.00	1.00	0.85		1.00		1.00	0.97	0.85			0.86
Flt Protected	0.95	1.00	1.00		1.00		0.95	0.96	1.00			1.00
Satd. Flow (prot)	3433	5085	1583		5085		3221	1492	1504			1611
Flt Permitted	0.95	1.00	1.00		1.00		0.95	0.96	1.00			1.00
Satd. Flow (perm)	3433	5085	1583		5085		3221	1492	1504			1611
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	662	2512	575	0	1362	0	226	0	91	0	0	12
RTOR Reduction (vph)	0	0	177	0	0	0	0	68	65	0	0	11
Lane Group Flow (vph)	662	2512	398	0	1362	0	163	12	9	0	0	1
Turn Type	Prot	NA	Perm		NA		Prot	NA	custom			Perm
Protected Phases	7	4			8		5	2	5			
Permitted Phases			4									5
Actuated Green, G (s)	21.0	45.0	45.0		18.0		8.0	10.0	8.0			8.0
Effective Green, g (s)	21.0	45.0	45.0		18.0		8.0	10.0	8.0			8.0
Actuated g/C Ratio	0.32	0.69	0.69		0.28		0.12	0.15	0.12			0.12
Clearance Time (s)	6.0	6.0	6.0		6.0		6.0	4.0	6.0			6.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0	3.0			3.0
Lane Grp Cap (vph)	1109	3520	1095		1408		396	229	185			198
v/s Ratio Prot	0.19	c0.49			c0.27		c0.05	0.01	0.01			
v/s Ratio Perm			0.25					0.00				0.00
v/c Ratio	0.60	0.71	0.36		0.97		0.41	0.05	0.05			0.01
Uniform Delay, d1	18.5	6.1	4.1		23.2		26.3	23.5	25.1			25.0
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00	1.00			1.00
Incremental Delay, d2	2.4	1.3	0.9		16.6		0.7	0.1	0.1			0.0
Delay (s)	20.8	7.3	5.0		39.8		27.0	23.6	25.3			25.0
Level of Service	C	A	A		D		C	C	C			C
Approach Delay (s)		9.4			39.8			25.7			25.0	
Approach LOS		A			D			C			C	

Intersection Summary			
HCM 2000 Control Delay	18.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	60.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	38	93	0	349	0	0	11	61
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					6.0	6.0		6.0			6.0	6.0
Lane Util. Factor					1.00	1.00		0.95			1.00	1.00
Frt					1.00	0.85		1.00			1.00	0.85
Flt Protected					1.00	1.00		1.00			1.00	1.00
Satd. Flow (prot)					1863	1583		3539			1863	1583
Flt Permitted					1.00	1.00		1.00			1.00	1.00
Satd. Flow (perm)					1863	1583		3539			1863	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	0	40	98	0	367	0	0	12	64
RTOR Reduction (vph)	0	0	0	0	0	68	0	0	0	0	0	56
Lane Group Flow (vph)	0	0	0	0	40	30	0	367	0	0	12	8
Turn Type					NA	Perm		NA			NA	Perm
Protected Phases					16			15			5	
Permitted Phases						16						5
Actuated Green, G (s)					19.8	19.8		19.2			8.0	8.0
Effective Green, g (s)					19.8	19.8		19.2			8.0	8.0
Actuated g/C Ratio					0.30	0.30		0.30			0.12	0.12
Clearance Time (s)					6.0	6.0		6.0			6.0	6.0
Vehicle Extension (s)					3.0	3.0		3.0			3.0	3.0
Lane Grp Cap (vph)					567	482		1045			229	194
v/s Ratio Prot					c0.02			c0.10			c0.01	
v/s Ratio Perm						0.02						0.00
v/c Ratio					0.07	0.06		0.35			0.05	0.04
Uniform Delay, d1					16.1	16.0		18.0			25.2	25.1
Progression Factor					1.00	1.00		0.38			1.00	1.00
Incremental Delay, d2					0.2	0.2		0.8			0.1	0.1
Delay (s)					16.3	16.3		7.6			25.3	25.2
Level of Service					B	B		A			C	C
Approach Delay (s)		0.0			16.3			7.6			25.2	
Approach LOS		A			B			A			C	

Intersection Summary			
HCM 2000 Control Delay	12.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.18		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	25.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Volume (vph)	0	101	3107	1054	125	819
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		1.00	0.86		1.00	0.91
Frt		0.86	0.96		1.00	1.00
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		1611	6164		1770	5085
Flt Permitted		1.00	1.00		0.10	1.00
Satd. Flow (perm)		1611	6164		186	5085
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	106	3271	1109	132	862
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	106	4380	0	132	862
Turn Type		Perm	NA		Perm	NA
Protected Phases			4			8
Permitted Phases		8			8	
Actuated Green, G (s)		40.0	40.0		40.0	40.0
Effective Green, g (s)		40.0	40.0		40.0	40.0
Actuated g/C Ratio		1.00	1.00		1.00	1.00
Clearance Time (s)		4.0	4.0		4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Lane Grp Cap (vph)		1611	6164		186	5085
v/s Ratio Prot			c0.71			0.17
v/s Ratio Perm		0.07			0.71	
v/c Ratio		0.07	0.71		0.71	0.17
Uniform Delay, d1		0.0	0.0		0.0	0.0
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.0	0.4		11.7	0.0
Delay (s)		0.0	0.4		11.7	0.0
Level of Service		A	A		B	A
Approach Delay (s)	0.0		0.4			1.6
Approach LOS	A		A			A

Intersection Summary			
HCM 2000 Control Delay	0.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	4.0
Intersection Capacity Utilization	76.3%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	266	1107	862	372	405	464	615	864	43	823	572	178
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	280	1165	0	392	426	0	647	909	0	866	602	187
Adj No. of Lanes	3	3	1	3	3	1	3	3	1	3	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	386	1151	359	350	1166	363	774	956	298	953	1164	362
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.08	0.23	0.00	0.07	0.23	0.00	0.15	0.19	0.00	0.19	0.23	0.23
Ln Grp Delay, s/veh	48.8	68.1	0.0	130.9	33.3	0.0	47.2	58.5	0.0	51.8	34.1	35.0
Ln Grp LOS	D	F		F	C		D	E		D	C	C
Approach Vol, veh/h		1445			818			1556			1655	
Approach Delay, s/veh		64.4			80.1			53.8			43.5	
Approach LOS		E			F			D			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	15.7	30.4	27.6	26.3	16.0	30.1	23.5	30.4
Change Period (Y+Rc), s	8.0	7.5	8.5	7.5	9.0	7.5	8.0	7.5
Max Green (Gmax), s	10.0	20.5	19.2	18.8	7.0	22.5	18.0	20.5
Max Allow Headway (MAH), s	3.7	4.9	3.7	4.8	3.7	4.9	3.7	4.8
Max Q Clear (g_c+I1), s	7.5	9.0	18.9	19.7	9.0	24.6	14.6	12.4
Green Ext Time (g_e), s	0.2	7.2	0.1	0.0	0.0	0.0	0.9	5.6
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	1.00	1.00	0.00	1.00	0.81

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	5003		5003		5003		5003	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		5085		5085		5085		5085

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		1583		1583		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	
Lanes in Grp	3	0	3	0	3	0	3	0

Grp Vol (v), veh/h	280	0	866	0	392	0	647	0
Grp Sat Flow (s), veh/h/ln	1668	0	1668	0	1668	0	1668	0
Q Serve Time (g_s), s	5.5	0.0	16.9	0.0	7.0	0.0	12.6	0.0
Cycle Q Clear Time (g_c), s	5.5	0.0	16.9	0.0	7.0	0.0	12.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	386	0	953	0	350	0	774	0
V/C Ratio (X)	0.73	0.00	0.91	0.00	1.12	0.00	0.84	0.00
Avail Cap (c_a), veh/h	500	0	961	0	350	0	901	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	45.1	0.0	39.6	0.0	46.5	0.0	41.0	0.0
Incr Delay (d2), s/veh	3.7	0.0	12.2	0.0	84.4	0.0	6.1	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	48.8	0.0	51.8	0.0	130.9	0.0	47.2	0.0
1st-Term Q (Q1), veh/ln	2.5	0.0	7.8	0.0	3.2	0.0	5.8	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	1.1	0.0	2.7	0.0	0.4	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	1.55	0.00	1.80	0.00	1.66	0.00
%ile Back of Q (95%), veh/ln	4.8	0.0	13.7	0.0	10.7	0.0	10.3	0.0
%ile Storage Ratio (RQ%)	0.26	0.00	0.77	0.00	0.54	0.00	0.60	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	10.5	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	3	0	3	0	3
Grp Vol (v), veh/h	0	426	0	909	0	1165	0	602
Grp Sat Flow (s), veh/h/ln	0	1695	0	1695	0	1695	0	1695
Q Serve Time (g_s), s	0.0	7.0	0.0	17.7	0.0	22.6	0.0	10.4
Cycle Q Clear Time (g_c), s	0.0	7.0	0.0	17.7	0.0	22.6	0.0	10.4
Lane Grp Cap (c), veh/h	0	1166	0	956	0	1151	0	1164
V/C Ratio (X)	0.00	0.37	0.00	0.95	0.00	1.01	0.00	0.52
Avail Cap (c_a), veh/h	0	1166	0	956	0	1151	0	1164
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	32.4	0.0	40.1	0.0	38.7	0.0	33.7
Incr Delay (d2), s/veh	0.0	0.9	0.0	18.4	0.0	29.5	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	33.3	0.0	58.5	0.0	68.1	0.0	34.1
1st-Term Q (Q1), veh/ln	0.0	3.3	0.0	8.2	0.0	10.6	0.0	4.8
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	1.6	0.0	3.1	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.52	0.00	1.80	0.00	1.74
%ile Back of Q (95%), veh/ln	0.0	6.1	0.0	15.0	0.0	24.7	0.0	8.5
%ile Storage Ratio (RQ%)	0.00	0.39	0.00	0.52	0.00	0.59	0.00	0.25
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	3.4	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	0	0	0	0	187
Grp Sat Flow (s), veh/h/ln	0	1583	0	1583	0	1583	0	1583
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.3
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.3
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	363	0	298	0	359	0	362
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.52
Avail Cap (c_a), veh/h	0	363	0	298	0	359	0	362
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.7
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.5
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.76
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.2
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.46
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	57.4
HCM 2010 LOS	E

Lane Group	SBL	SBR	NET	NER	SWT
Lane Group Flow (vph)	676	321	848	1361	1639
v/c Ratio	0.65	0.38	0.42	0.86	0.64
Control Delay	15.7	12.7	9.5	8.3	11.2
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	15.7	12.7	9.5	8.3	11.2
Queue Length 50th (ft)	66	31	46	0	80
Queue Length 95th (ft)	107	58	69	#80	109
Internal Link Dist (ft)			215		227
Turn Bay Length (ft)					
Base Capacity (vph)	1039	844	2034	1583	2563
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.65	0.38	0.42	0.86	0.64

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	NBR	NET	SWT
Lane Group Flow (vph)	2526	1524	740
v/c Ratio	1.08	1.10	0.12
Control Delay	72.0	105.2	0.0
Queue Delay	0.0	3.2	0.0
Total Delay	72.0	108.4	0.0
Queue Length 50th (ft)	~1210	~616	0
Queue Length 95th (ft)	#1311	#713	0
Internal Link Dist (ft)		227	250
Turn Bay Length (ft)			
Base Capacity (vph)	2334	1389	6408
Starvation Cap Reductn	0	508	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	1.08	1.73	0.12

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	SBL	SBR	NEL	NET	SWT	SWR
Lane Configurations						
Volume (vph)	0	0	102	3746	703	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	500			0
Storage Lanes	0	0	1			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.86	0.91	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	6408	5085	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	6408	5085	0
Link Speed (mph)	45			45	45	
Link Distance (ft)	247			189	328	
Travel Time (s)	3.7			2.9	5.0	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	107	3943	740	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	107	3943	740	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 73.1%		ICU Level of Service D	
Analysis Period (min) 15			

APPENDIX S

SYNCHRO REPORTS

BUILD 2030 PM

CENTRAL BOULEVARD CORRIDOR

Arterial Level of Service: NB Central Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
PGA Blvd	II	45	11.9	63.9	75.8	0.11	5.2	F
117th Ct	II	45	61.9	11.6	73.5	0.77	37.9	A
SB On Ramp	II	45	52.1	14.7	66.8	0.65	35.0	A
NB Off Ramp	II	45	9.8	23.9	33.7	0.09	9.6	F
Victoria Falls Blvd	II	45	30.0	55.4	85.4	0.30	12.8	F
Hood Rd	II	45	23.7	39.6	63.3	0.23	13.0	F
Donald Ross	II	45	100.8	64.2	165.0	1.26	27.5	C
Total	II		290.2	273.3	563.5	3.41	21.8	D

Arterial Level of Service: SB Central Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Donald Ross	II	45	22.2	69.1	91.3	0.20	8.0	F
Hood Rd	II	45	100.8	29.2	130.0	1.26	34.9	B
	II	45	23.7	23.0	46.7	0.23	17.6	D
NB On Ramp	II	45	30.0	24.4	54.4	0.30	20.1	D
SB Off Ramp	II	45	9.8	3.8	13.6	0.09	23.8	C
117th Ct	II	45	52.1	6.9	59.0	0.65	39.6	A
PGA Blvd	II	45	61.9	113.1	175.0	0.77	15.9	E
Total	II		300.5	269.5	570.0	3.51	22.2	C

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	224	162	726	120	112	883
Number	3	18	2	12	1	6
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	236	171	764	126	118	929
Adj No. of Lanes	1	1	2	1	1	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	311	277	1988	889	477	2389
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.18	0.18	0.56	0.56	0.05	0.67
Ln Grp Delay, s/veh	30.0	27.7	8.7	7.3	5.7	5.3
Ln Grp LOS	C	C	A	A	A	A
Approach Vol, veh/h	407		890			1047
Approach Delay, s/veh	29.0		8.5			5.3
Approach LOS	C		A			A

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	8			6		
Case No	1.2	7.0	9.0			4.0		
Phs Duration (G+Y+Rc), s	7.6	42.4	16.7			50.0		
Change Period (Y+Rc), s	4.0	5.0	5.0			5.0		
Max Green (Gmax), s	6.0	35.0	60.0			45.0		
Max Allow Headway (MAH), s	3.7	4.8	3.8			4.8		
Max Q Clear (g_c+I1), s	3.7	10.0	10.4			9.7		
Green Ext Time (g_e), s	0.1	13.0	1.2			15.3		
Prob of Phs Call (p_c)	0.89	1.00	1.00			1.00		
Prob of Max Out (p_x)	1.00	0.00	0.00			0.00		
Left-Turn Movement Data								
Assigned Mvmt	1	5	3					
Mvmt Sat Flow, veh/h	1774	0	1774					
Through Movement Data								
Assigned Mvmt		2	8			6		
Mvmt Sat Flow, veh/h		3632	0			3632		
Right-Turn Movement Data								
Assigned Mvmt		12	18			16		
Mvmt Sat Flow, veh/h		1583	1583			0		
Left Lane Group Data								
Assigned Mvmt	1	5	3	0	0	0	0	0
Lane Assignment	(Pr/Pm)							
Lanes in Grp	1	0	1	0	0	0	0	0

Grp Vol (v), veh/h	118	0	236	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1774	0	1774	0	0	0	0	0
Q Serve Time (g_s), s	1.7	0.0	8.4	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	1.7	0.0	8.4	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	622	0	1774	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	39.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	29.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	37.4	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	477	0	311	0	0	0	0	0
V/C Ratio (X)	0.25	0.00	0.76	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	542	0	1597	0	0	0	0	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	5.4	0.0	26.2	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.0	3.8	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	5.7	0.0	30.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.8	0.0	4.1	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	1.00	1.78	0.00	0.00	0.00	0.00	0.00
%ile Back of Q (95%), veh/ln	1.5	0.0	7.9	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.11	0.00	0.42	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	0	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	764	0	0	0	929	0	0
Grp Sat Flow (s), veh/h/ln	0	1770	0	0	0	1770	0	0
Q Serve Time (g_s), s	0.0	8.0	0.0	0.0	0.0	7.7	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	8.0	0.0	0.0	0.0	7.7	0.0	0.0
Lane Grp Cap (c), veh/h	0	1988	0	0	0	2389	0	0
V/C Ratio (X)	0.00	0.38	0.00	0.00	0.00	0.39	0.00	0.00
Avail Cap (c_a), veh/h	0	1988	0	0	0	2389	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	8.2	0.0	0.0	0.0	4.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.6	0.0	0.0	0.0	0.5	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	8.7	0.0	0.0	0.0	5.3	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	3.9	0.0	0.0	0.0	3.7	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.0	0.0	0.2	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	1.00	0.00	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	7.3	0.0	0.0	0.0	7.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.32	0.00	0.00	0.00	0.35	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	18	0	0	16	0	0
Lane Assignment		R	R					
Lanes in Grp	0	1	1	0	0	0	0	0
Grp Vol (v), veh/h	0	126	171	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1583	1583	0	0	0	0	0
Q Serve Time (g_s), s	0.0	2.5	6.7	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	2.5	6.7	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	889	277	0	0	0	0	0
V/C Ratio (X)	0.00	0.14	0.62	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	889	1425	0	0	0	0	0
Upstream Filter (I)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	7.0	25.4	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.3	2.2	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	7.3	27.7	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	1.1	2.9	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.2	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	1.80	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	2.1	5.5	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.14	0.50	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		10.6						
HCM 2010 LOS		B						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	272	29	23	198	29	229	41	1724	155	41	1412	88
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	286	31	24	208	31	241	43	1815	163	43	1486	93
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	326	230	178	194	70	545	135	1794	159	65	1930	864
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.24	0.24	0.24	0.11	0.38	0.38	0.55	0.55	0.55	0.55	0.55	0.55
Ln Grp Delay, s/veh	65.7	0.0	33.3	135.0	0.0	25.8	40.3	53.5	60.6	76.4	21.5	12.1
Ln Grp LOS	E		C	F		C	D	D	F	E	C	B
Approach Vol, veh/h		341			480			2021			1622	
Approach Delay, s/veh		60.5			73.1			56.8			22.5	
Approach LOS		E			E			E			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6		8
Case No		6.0	2.0	6.0		5.0		4.0
Phs Duration (G+Y+Rc), s		64.0	16.0	30.0		64.0		46.0
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0		4.0
Max Green (Gmax), s		60.0	12.0	26.0		60.0		42.0
Max Allow Headway (MAH), s		5.1	3.7	4.8		5.1		4.8
Max Q Clear (g_c+I1), s		62.0	14.0	28.0		62.0		15.8
Green Ext Time (g_e), s		0.0	0.0	0.0		0.0		3.2
Prob of Phs Call (p_c)		1.00	1.00	1.00		1.00		1.00
Prob of Max Out (p_x)		1.00	1.00	1.00		1.00		0.00

Left-Turn Movement Data								
Assigned Mvmt		5	3	7		1		
Mvmt Sat Flow, veh/h		323	1774	1103		219		

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3290		975		3539		184

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		291		755		1583		1427

Left Lane Group Data								
Assigned Mvmt	0	5	3	7	0	1	0	0
Lane Assignment			(Prot)					
Lanes in Grp	0	1	1	1	0	1	0	0

Grp Vol (v), veh/h	0	43	208	286	0	43	0	0
Grp Sat Flow (s), veh/h/ln	0	323	1774	1103	0	219	0	0
Q Serve Time (g_s), s	0.0	13.2	12.0	26.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	49.4	12.0	26.0	0.0	60.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	323	0	1103	0	219	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	60.0	0.0	26.0	0.0	60.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	23.8	0.0	26.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	13.2	0.0	26.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	135	194	326	0	65	0	0
V/C Ratio (X)	0.00	0.32	1.07	0.88	0.00	0.66	0.00	0.00
Avail Cap (c_a), veh/h	0	135	194	326	0	65	0	0
Upstream Filter (I)	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	39.0	49.0	43.2	0.0	55.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.3	86.0	22.6	0.0	21.4	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	40.3	135.0	65.7	0.0	76.4	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	1.2	5.9	8.7	0.0	1.3	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	4.6	2.0	0.0	0.4	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	1.80	1.50	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	2.2	18.9	16.1	0.0	3.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.20	0.71	2.72	0.00	0.22	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	3.6	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		
Lanes in Grp	0	1	0	0	0	2	0	0
Grp Vol (v), veh/h	0	964	0	0	0	1486	0	0
Grp Sat Flow (s), veh/h/ln	0	1770	0	0	0	1770	0	0
Q Serve Time (g_s), s	0.0	59.8	0.0	0.0	0.0	36.2	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	59.8	0.0	0.0	0.0	36.2	0.0	0.0
Lane Grp Cap (c), veh/h	0	965	0	0	0	1930	0	0
V/C Ratio (X)	0.00	1.00	0.00	0.00	0.00	0.77	0.00	0.00
Avail Cap (c_a), veh/h	0	965	0	0	0	1930	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	25.0	0.0	0.0	0.0	19.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	28.5	0.0	0.0	0.0	2.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	53.5	0.0	0.0	0.0	21.5	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	28.9	0.0	0.0	0.0	17.5	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	7.7	0.0	0.0	0.0	0.5	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.27	0.00	1.00	0.00	1.39	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	46.5	0.0	0.0	0.0	25.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	1.97	0.00	0.00	0.00	1.18	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	1014	0	55	0	93	0	272
Grp Sat Flow (s), veh/h/ln	0	1811	0	1730	0	1583	0	1611
Q Serve Time (g_s), s	0.0	60.0	0.0	2.8	0.0	3.1	0.0	13.8
Cycle Q Clear Time (g_c), s	0.0	60.0	0.0	2.8	0.0	3.1	0.0	13.8
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.16	0.00	0.44	0.00	1.00	0.00	0.89
Lane Grp Cap (c), veh/h	0	988	0	409	0	864	0	615
V/C Ratio (X)	0.00	1.03	0.00	0.13	0.00	0.11	0.00	0.44
Avail Cap (c_a), veh/h	0	988	0	409	0	864	0	615
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	25.0	0.0	33.1	0.0	12.1	0.0	25.3
Incr Delay (d2), s/veh	0.0	35.6	0.0	0.1	0.0	0.1	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	60.6	0.0	33.3	0.0	12.1	0.0	25.8
1st-Term Q (Q1), veh/ln	0.0	29.6	0.0	1.3	0.0	1.4	0.0	6.1
2nd-Term Q (Q2), veh/ln	0.0	9.8	0.0	0.0	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.80	0.00	1.66
%ile Back of Q (95%), veh/ln	0.0	71.0	0.0	2.4	0.0	2.5	0.0	10.3
%ile Storage Ratio (RQ%)	0.00	3.01	0.00	0.21	0.00	0.18	0.00	0.39
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	6.6	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	46.3
HCM 2010 LOS	D

Build Alternative 2030 PM

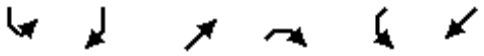
29: Central Blvd & SB On Ramp & SB Off Ramp Corridor: Central Boulevard

Movement	SBL2	SBL	SBR	NWL	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations											
Volume (vph)	122	0	343	0	0	0	961	25	1096	721	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0				4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00		1.00				0.86	1.00	0.97	0.95	
Frt	1.00		0.85				1.00	0.85	1.00	1.00	
Flt Protected	0.95		1.00				1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770		1583				6408	1583	3433	3539	
Flt Permitted	0.95		1.00				1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770		1583				6408	1583	3433	3539	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	128	0	361	0	0	0	1012	26	1154	759	0
RTOR Reduction (vph)	0	0	314	0	0	0	0	18	0	0	0
Lane Group Flow (vph)	128	0	47	0	0	0	1012	8	1154	759	0
Turn Type	Prot		Perm				NA	Prot	Prot	NA	
Protected Phases	1						2 4	2 4	3	3 4	
Permitted Phases			1								
Actuated Green, G (s)	11.8		11.8				29.2	29.2	37.0	49.0	
Effective Green, g (s)	11.8		11.8				29.2	29.2	37.0	49.0	
Actuated g/C Ratio	0.13		0.13				0.32	0.32	0.41	0.54	
Clearance Time (s)	4.0		4.0						4.0		
Vehicle Extension (s)	3.0		3.0						3.0		
Lane Grp Cap (vph)	232		207				2079	513	1411	1926	
v/s Ratio Prot	c0.07						c0.16	0.01	c0.34	c0.21	
v/s Ratio Perm			0.03								
v/c Ratio	0.55		0.23				0.49	0.02	0.82	0.39	
Uniform Delay, d1	36.6		35.0				24.4	20.6	23.5	11.9	
Progression Factor	1.00		1.00				1.00	1.00	0.27	0.28	
Incremental Delay, d2	2.8		0.6				0.2	0.0	4.1	0.1	
Delay (s)	39.4		35.6				24.6	20.7	10.4	3.5	
Level of Service	D		D				C	C	B	A	
Approach Delay (s)		36.6		0.0			24.5			7.7	
Approach LOS		D		A			C			A	

Intersection Summary			
HCM 2000 Control Delay	16.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	68.4%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Build Alternative 2030 PM

29: Central Blvd & SB On Ramp & SB Off Ramp Corridor: Central Boulevard



Lane Group	SBL2	SBR	NET	NER	SWL	SWT
Lane Group Flow (vph)	128	361	1012	26	1154	759
v/c Ratio	0.55	0.68	0.49	0.04	0.82	0.39
Control Delay	45.1	10.3	25.9	0.1	10.7	3.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	45.1	10.3	25.9	0.1	10.7	3.9
Queue Length 50th (ft)	69	0	133	0	39	25
Queue Length 95th (ft)	119	65	178	0	45	32
Internal Link Dist (ft)			967			394
Turn Bay Length (ft)		800		450	190	
Base Capacity (vph)	354	617	2080	620	1411	1926
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.36	0.59	0.49	0.04	0.82	0.39

Intersection Summary

Build Alternative 2030 PM

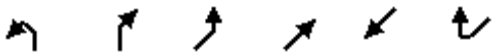
24: Central Blvd & NB Off Ramp/NB On Ramp Corridor: Central Boulevard

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (vph)	48	0	1179	0	0	0	342	741	0	0	1769	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0				4.0	4.0			4.0	4.0
Lane Util. Factor	1.00		0.88				0.97	0.95			0.86	1.00
Frt	1.00		0.85				1.00	1.00			1.00	0.85
Flt Protected	0.95		1.00				0.95	1.00			1.00	1.00
Satd. Flow (prot)	1770		2787				3433	3539			6408	1583
Flt Permitted	0.95		1.00				0.95	1.00			1.00	1.00
Satd. Flow (perm)	1770		2787				3433	3539			6408	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	51	0	1241	0	0	0	360	780	0	0	1862	47
RTOR Reduction (vph)	0	0	221	0	0	0	0	0	0	0	0	27
Lane Group Flow (vph)	51	0	1020	0	0	0	360	780	0	0	1862	20
Turn Type	Prot		custom				Prot	NA			NA	Prot
Protected Phases	6		6 11				5 7	13			8	8
Permitted Phases												
Actuated Green, G (s)	23.0		38.8				12.0	33.2			39.0	39.0
Effective Green, g (s)	23.0		38.8				12.0	33.2			39.0	39.0
Actuated g/C Ratio	0.26		0.43				0.13	0.37			0.43	0.43
Clearance Time (s)	4.0							4.0			4.0	4.0
Vehicle Extension (s)	3.0							3.0			3.0	3.0
Lane Grp Cap (vph)	452		1201				457	1305			2776	685
v/s Ratio Prot	0.03		c0.37				c0.10	0.22			c0.29	0.01
v/s Ratio Perm												
v/c Ratio	0.11		0.85				0.79	0.60			0.67	0.03
Uniform Delay, d1	25.7		23.0				37.8	23.0			20.4	14.6
Progression Factor	1.00		1.00				1.39	1.42			1.00	1.00
Incremental Delay, d2	0.1		5.8				7.9	0.7			1.3	0.1
Delay (s)	25.8		28.8				60.2	33.2			21.7	14.7
Level of Service	C		C				E	C			C	B
Approach Delay (s)		28.6			0.0			41.7			21.5	
Approach LOS		C			A			D			C	

Intersection Summary			
HCM 2000 Control Delay	28.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	68.4%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Build Alternative 2030 PM

24: Central Blvd & NB Off Ramp/NB On Ramp Corridor: Central Boulevard



Lane Group	NBL	NBR	NEL	NET	SWT	SWR
Lane Group Flow (vph)	51	1241	360	780	1862	47
v/c Ratio	0.11	0.87	0.79	0.60	0.67	0.06
Control Delay	26.6	23.7	41.7	35.3	21.9	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	26.6	23.7	41.7	35.3	21.9	0.2
Queue Length 50th (ft)	22	250	101	256	238	0
Queue Length 95th (ft)	51	362	#162	317	279	0
Internal Link Dist (ft)				394	844	
Turn Bay Length (ft)		550	160			450
Base Capacity (vph)	452	1454	457	1304	2776	775
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.11	0.85	0.79	0.60	0.67	0.06

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

DONALD ROSS CORRIDOR

Arterial Level of Service: EB Donald Ross

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
West Ramp	II	45	46.0	25.6	71.6	0.52	26.3	C
East Ramp	II	45	15.7	25.7	41.4	0.14	12.5	F
Parkside Dr	II	45	42.7	40.7	83.4	0.53	23.1	C
Central Blvd	II	45	52.1	45.0	97.1	0.65	24.1	C
Military Trail	II	45	32.9	49.3	82.2	0.34	15.0	E
Total	II		189.4	186.3	375.7	2.19	21.0	D

Arterial Level of Service: WB Donald Ross

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Military Trail	II	45	21.4	64.8	86.2	0.20	8.2	F
Central Blvd	II	45	32.9	63.9	96.8	0.34	12.7	F
Parkside Dr	II	45	52.1	47.6	99.7	0.65	23.5	C
East Ramp	II	45	42.7	9.5	52.2	0.53	36.8	A
West Ramp	II	45	15.7	17.8	33.5	0.14	15.4	E
Total	II		164.8	203.6	368.4	1.87	18.3	D

HCM 2010 methodology does not support clustered intersections.

HCM 2010 methodology does not support clustered intersections.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	505	897	322	603	1088	166	715	126	733	99	128	618
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	532	944	339	635	1145	175	753	133	772	104	135	651
Adj No. of Lanes	2	3	1	2	3	1	2	1	1	1	1	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	519	1103	445	731	1157	679	692	481	577	294	315	914
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.11	0.22	0.22	0.16	0.23	0.23	0.20	0.26	0.26	0.06	0.17	0.17
Ln Grp Delay, s/veh	75.4	44.1	42.7	35.7	60.3	17.5	98.4	28.3	194.1	30.2	36.1	30.5
Ln Grp LOS	F	D	D	D	E	B	F	C	F	C	D	C
Approach Vol, veh/h		1815			1955			1658			890	
Approach Delay, s/veh		53.0			48.5			137.3			31.3	
Approach LOS		D			D			F			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	3.0	2.0	3.0	1.1	3.0	1.1	3.0
Phs Duration (G+Y+Rc), s	18.0	30.0	23.0	23.5	19.0	29.0	14.6	31.9
Change Period (Y+Rc), s	8.0	* 8.5	4.0	* 7.5	4.0	8.5	8.5	7.5
Max Green (Gmax), s	10.0	* 22	19.0	* 16	15.0	19.5	6.7	20.3
Max Allow Headway (MAH), s	3.7	4.7	3.7	4.1	3.7	4.7	3.7	4.1
Max Q Clear (g_c+I1), s	12.0	23.2	21.0	18.0	15.3	20.5	6.5	26.4
Green Ext Time (g_e), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	0.93	1.00
Prob of Max Out (p_x)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3442		3442		3442		1774	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		5085		1863		5085		1863

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		2787		1583		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Pr/Pm)		(Prot)		(Pr/Pm)		(Pr/Pm)	
Lanes in Grp	2	0	2	0	2	0	1	0

Grp Vol (v), veh/h	532	0	753	0	635	0	104	0
Grp Sat Flow (s), veh/h/ln	1721	0	1721	0	1721	0	1774	0
Q Serve Time (g_s), s	10.0	0.0	19.0	0.0	13.3	0.0	4.5	0.0
Cycle Q Clear Time (g_c), s	10.0	0.0	19.0	0.0	13.3	0.0	4.5	0.0
Perm LT Sat Flow (s_l), veh/h/ln	402	0	0	0	416	0	613	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	20.5	0.0	0.0	0.0	20.5	0.0	16.0	0.0
Perm LT Serve Time (g_u), s	0.3	0.0	0.0	0.0	3.6	0.0	16.0	0.0
Perm LT Q Serve Time (g_ps), s	0.3	0.0	0.0	0.0	3.6	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	519	0	692	0	731	0	294	0
V/C Ratio (X)	1.03	0.00	1.09	0.00	0.87	0.00	0.35	0.00
Avail Cap (c_a), veh/h	519	0	692	0	731	0	306	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	29.4	0.0	37.8	0.0	24.7	0.0	29.5	0.0
Incr Delay (d2), s/veh	46.0	0.0	60.7	0.0	11.0	0.0	0.7	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	75.4	0.0	98.4	0.0	35.7	0.0	30.2	0.0
1st-Term Q (Q1), veh/ln	2.0	0.0	8.9	0.0	6.3	0.0	2.2	0.0
2nd-Term Q (Q2), veh/ln	3.3	0.0	5.8	0.0	1.1	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	1.80	0.00	1.60	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	9.6	0.0	26.6	0.0	11.8	0.0	4.0	0.0
%ile Storage Ratio (RQ%)	0.45	0.00	1.93	0.00	0.97	0.00	0.68	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	3.2	0.0	15.3	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	1	0	3	0	1
Grp Vol (v), veh/h	0	1145	0	135	0	944	0	133
Grp Sat Flow (s), veh/h/ln	0	1695	0	1863	0	1695	0	1863
Q Serve Time (g_s), s	0.0	21.2	0.0	6.1	0.0	16.9	0.0	5.4
Cycle Q Clear Time (g_c), s	0.0	21.2	0.0	6.1	0.0	16.9	0.0	5.4
Lane Grp Cap (c), veh/h	0	1157	0	315	0	1103	0	481
V/C Ratio (X)	0.00	0.99	0.00	0.43	0.00	0.86	0.00	0.28
Avail Cap (c_a), veh/h	0	1157	0	315	0	1103	0	481
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	36.4	0.0	35.2	0.0	35.6	0.0	28.0
Incr Delay (d2), s/veh	0.0	23.9	0.0	0.9	0.0	8.6	0.0	0.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	60.3	0.0	36.1	0.0	44.1	0.0	28.3
1st-Term Q (Q1), veh/ln	0.0	9.9	0.0	3.2	0.0	7.9	0.0	2.8
2nd-Term Q (Q2), veh/ln	0.0	2.6	0.0	0.1	0.0	0.9	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.47	0.00	1.80	0.00	1.55	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	18.2	0.0	5.8	0.0	13.6	0.0	5.1
%ile Storage Ratio (RQ%)	0.00	0.14	0.00	0.25	0.00	0.13	0.00	0.20
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	2	0	1	0	1
Grp Vol (v), veh/h	0	175	0	651	0	339	0	772
Grp Sat Flow (s), veh/h/ln	0	1583	0	1393	0	1583	0	1583
Q Serve Time (g_s), s	0.0	6.7	0.0	16.0	0.0	18.5	0.0	24.4
Cycle Q Clear Time (g_c), s	0.0	6.7	0.0	16.0	0.0	18.5	0.0	24.4
Prot RT Sat Flow (s_R), veh/h/ln	0.0	1583.3	0.0	1393.3	0.0	1583.3	0.0	1583.3
Prot RT Eff Green (g_R), s	0.0	19.0	0.0	15.0	0.0	6.1	0.0	10.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	679	0	914	0	445	0	577
V/C Ratio (X)	0.00	0.26	0.00	0.71	0.00	0.76	0.00	1.34
Avail Cap (c_a), veh/h	0	679	0	914	0	445	0	577
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	17.3	0.0	27.8	0.0	31.1	0.0	30.0
Incr Delay (d2), s/veh	0.0	0.2	0.0	2.6	0.0	11.6	0.0	164.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	17.5	0.0	30.5	0.0	42.7	0.0	194.1
1st-Term Q (Q1), veh/ln	0.0	2.9	0.0	7.5	0.0	8.1	0.0	14.9
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.3	0.0	1.4	0.0	26.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.59	0.00	1.53	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	5.3	0.0	12.4	0.0	14.6	0.0	74.1
%ile Storage Ratio (RQ%)	0.00	0.28	0.00	1.05	0.00	0.74	0.00	4.18
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	48.9
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3

Intersection Summary	
HCM 2010 Ctrl Delay	70.7
HCM 2010 LOS	E

Notes

User approved ignoring U-Turning movement.

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	377	874	316	306	1273	345	226	975	60	430	815	173
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	397	920	333	322	1340	363	238	1026	63	453	858	182
Adj No. of Lanes	2	3	1	2	3	1	3	3	1	3	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	412	1468	563	379	1419	442	333	1146	357	544	961	430
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.12	0.29	0.29	0.11	0.28	0.28	0.07	0.23	0.23	0.11	0.27	0.27
Ln Grp Delay, s/veh	90.0	39.6	34.7	67.9	58.1	57.9	60.2	55.5	39.4	62.8	54.6	38.3
Ln Grp LOS	F	D	C	E	E	E	E	E	D	E	D	D
Approach Vol, veh/h		1650			2025			1327			1493	
Approach Delay, s/veh		50.7			59.6			55.6			55.1	
Approach LOS		D			E			E			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	24.0	43.0	22.6	35.8	22.8	44.2	16.9	41.5
Change Period (Y+Rc), s	9.0	8.0	9.0	7.5	9.0	8.0	8.5	7.5
Max Green (Gmax), s	15.0	35.0	16.0	30.5	16.0	34.0	16.5	30.5
Max Allow Headway (MAH), s	3.7	4.7	3.7	4.8	3.7	4.7	3.7	4.8
Max Q Clear (g_c+I1), s	16.4	34.3	13.1	26.6	13.5	23.5	7.8	31.2
Green Ext Time (g_e), s	0.0	0.6	0.5	1.7	0.3	9.2	0.5	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	1.00	1.00	0.91	0.02	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3442		5003		3442		5003	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		5085		5085		5085		3539

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		1583		1583		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	
Lanes in Grp	2	0	3	0	2	0	3	0

Grp Vol (v), veh/h	397	0	453	0	322	0	238	0
Grp Sat Flow (s), veh/h/ln	1721	0	1668	0	1721	0	1668	0
Q Serve Time (g_s), s	14.4	0.0	11.1	0.0	11.5	0.0	5.8	0.0
Cycle Q Clear Time (g_c), s	14.4	0.0	11.1	0.0	11.5	0.0	5.8	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	412	0	544	0	379	0	333	0
V/C Ratio (X)	0.96	0.00	0.83	0.00	0.85	0.00	0.71	0.00
Avail Cap (c_a), veh/h	412	0	638	0	439	0	658	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	54.9	0.0	54.8	0.0	54.8	0.0	57.3	0.0
Incr Delay (d2), s/veh	35.0	0.0	8.1	0.0	13.1	0.0	2.8	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	90.0	0.0	62.8	0.0	67.9	0.0	60.2	0.0
1st-Term Q (Q1), veh/ln	6.8	0.0	5.1	0.0	5.5	0.0	2.7	0.0
2nd-Term Q (Q2), veh/ln	2.0	0.0	0.4	0.0	0.7	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.55	0.00	1.70	0.00	1.66	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	13.7	0.0	9.4	0.0	10.3	0.0	5.0	0.0
%ile Storage Ratio (RQ%)	0.65	0.00	0.47	0.00	0.51	0.00	0.24	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	3	0	3	0	2
Grp Vol (v), veh/h	0	1340	0	1026	0	920	0	858
Grp Sat Flow (s), veh/h/ln	0	1695	0	1695	0	1695	0	1770
Q Serve Time (g_s), s	0.0	32.3	0.0	24.6	0.0	19.7	0.0	29.2
Cycle Q Clear Time (g_c), s	0.0	32.3	0.0	24.6	0.0	19.7	0.0	29.2
Lane Grp Cap (c), veh/h	0	1419	0	1146	0	1468	0	961
V/C Ratio (X)	0.00	0.94	0.00	0.90	0.00	0.63	0.00	0.89
Avail Cap (c_a), veh/h	0	1419	0	1237	0	1468	0	961
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	44.2	0.0	47.1	0.0	38.7	0.0	43.9
Incr Delay (d2), s/veh	0.0	13.8	0.0	8.4	0.0	0.8	0.0	10.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	58.1	0.0	55.5	0.0	39.6	0.0	54.6
1st-Term Q (Q1), veh/ln	0.0	15.1	0.0	11.5	0.0	9.2	0.0	14.3
2nd-Term Q (Q2), veh/ln	0.0	1.8	0.0	0.9	0.0	0.1	0.0	1.4

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.40	0.00	1.47	0.00	1.54	0.00	1.41
%ile Back of Q (95%), veh/ln	0.0	23.7	0.0	18.2	0.0	14.3	0.0	22.2
%ile Storage Ratio (RQ%)	0.00	0.37	0.00	0.80	0.00	0.11	0.00	0.82
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	363	0	63	0	333	0	182
Grp Sat Flow (s), veh/h/ln	0	1583	0	1583	0	1583	0	1583
Q Serve Time (g_s), s	0.0	26.9	0.0	4.0	0.0	21.5	0.0	11.9
Cycle Q Clear Time (g_c), s	0.0	26.9	0.0	4.0	0.0	21.5	0.0	11.9
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	1583.3	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	8.4	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	442	0	357	0	563	0	430
V/C Ratio (X)	0.00	0.82	0.00	0.18	0.00	0.59	0.00	0.42
Avail Cap (c_a), veh/h	0	442	0	385	0	563	0	430
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	42.3	0.0	39.2	0.0	33.0	0.0	37.6
Incr Delay (d2), s/veh	0.0	15.7	0.0	0.2	0.0	1.7	0.0	0.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	57.9	0.0	39.4	0.0	34.7	0.0	38.3
1st-Term Q (Q1), veh/ln	0.0	11.7	0.0	1.8	0.0	9.4	0.0	5.2
2nd-Term Q (Q2), veh/ln	0.0	1.9	0.0	0.0	0.0	0.3	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.44	0.00	1.80	0.00	1.53	0.00	1.72
%ile Back of Q (95%), veh/ln	0.0	19.7	0.0	3.2	0.0	14.8	0.0	9.0
%ile Storage Ratio (RQ%)	0.00	1.61	0.00	0.31	0.00	1.27	0.00	0.45
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	55.5
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	368	1079	36	206	1242	247	45	978	180	168	1195	431
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	387	1136	38	217	1307	260	47	1029	189	177	1258	454
Adj No. of Lanes	3	3	1	2	3	1	2	3	1	2	3	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	410	1372	427	273	1359	423	119	1184	369	475	1710	1165
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.08	0.27	0.27	0.08	0.27	0.27	0.03	0.23	0.23	0.14	0.34	0.34
Ln Grp Delay, s/veh	83.7	45.7	32.1	66.6	58.8	43.8	57.0	48.5	39.9	47.7	36.8	24.4
Ln Grp LOS	F	D	C	E	E	D	E	D	D	D	D	C
Approach Vol, veh/h		1561			1784			1265			1889	
Approach Delay, s/veh		54.8			57.5			47.5			34.9	
Approach LOS		D			E			D			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	18.0	39.0	24.5	34.5	17.7	39.3	12.5	46.5
Change Period (Y+Rc), s	8.5	8.0	8.5	7.5	8.5	8.0	8.5	7.5
Max Green (Gmax), s	9.5	31.0	16.0	31.0	9.5	31.0	16.5	30.5
Max Allow Headway (MAH), s	3.7	4.8	3.7	4.7	3.7	4.8	3.7	4.7
Max Q Clear (g_c+I1), s	10.9	31.4	7.4	24.6	9.2	26.4	3.6	27.3
Green Ext Time (g_e), s	0.0	0.0	0.3	2.4	0.0	4.3	0.1	3.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	0.00	0.97	1.00	0.00	0.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	5003		3442		3442		3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		5085		5085		5085		5085

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		1583		1583		2787

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	
Lanes in Grp	3	0	2	0	2	0	2	0

Grp Vol (v), veh/h	387	0	177	0	217	0	47	0
Grp Sat Flow (s), veh/h/ln	1668	0	1721	0	1721	0	1721	0
Q Serve Time (g_s), s	8.9	0.0	5.4	0.0	7.2	0.0	1.6	0.0
Cycle Q Clear Time (g_c), s	8.9	0.0	5.4	0.0	7.2	0.0	1.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	410	0	475	0	273	0	119	0
V/C Ratio (X)	0.94	0.00	0.37	0.00	0.79	0.00	0.40	0.00
Avail Cap (c_a), veh/h	410	0	475	0	282	0	490	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	53.0	0.0	45.4	0.0	52.5	0.0	54.8	0.0
Incr Delay (d2), s/veh	30.7	0.0	2.2	0.0	14.2	0.0	2.1	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	83.7	0.0	47.7	0.0	66.6	0.0	57.0	0.0
1st-Term Q (Q1), veh/ln	4.1	0.0	2.6	0.0	3.4	0.0	0.7	0.0
2nd-Term Q (Q2), veh/ln	1.2	0.0	0.1	0.0	0.5	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.71	0.00	1.80	0.00	1.80	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	9.1	0.0	4.9	0.0	7.2	0.0	1.4	0.0
%ile Storage Ratio (RQ%)	0.38	0.00	0.26	0.00	0.32	0.00	0.07	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	3	0	3	0	3
Grp Vol (v), veh/h	0	1307	0	1029	0	1136	0	1258
Grp Sat Flow (s), veh/h/ln	0	1695	0	1695	0	1695	0	1695
Q Serve Time (g_s), s	0.0	29.4	0.0	22.6	0.0	24.4	0.0	25.3
Cycle Q Clear Time (g_c), s	0.0	29.4	0.0	22.6	0.0	24.4	0.0	25.3
Lane Grp Cap (c), veh/h	0	1359	0	1184	0	1372	0	1710
V/C Ratio (X)	0.00	0.96	0.00	0.87	0.00	0.83	0.00	0.74
Avail Cap (c_a), veh/h	0	1359	0	1359	0	1372	0	1710
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	41.9	0.0	42.8	0.0	39.8	0.0	34.0
Incr Delay (d2), s/veh	0.0	16.8	0.0	5.7	0.0	5.9	0.0	2.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	58.8	0.0	48.5	0.0	45.7	0.0	36.8
1st-Term Q (Q1), veh/ln	0.0	13.8	0.0	10.6	0.0	11.4	0.0	11.8
2nd-Term Q (Q2), veh/ln	0.0	2.1	0.0	0.6	0.0	0.7	0.0	0.5

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.41	0.00	1.49	0.00	1.47	0.00	1.47
%ile Back of Q (95%), veh/ln	0.0	22.5	0.0	16.7	0.0	17.8	0.0	18.0
%ile Storage Ratio (RQ%)	0.00	0.59	0.00	0.64	0.00	0.28	0.00	0.59
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	2
Grp Vol (v), veh/h	0	260	0	189	0	38	0	454
Grp Sat Flow (s), veh/h/ln	0	1583	0	1583	0	1583	0	1393
Q Serve Time (g_s), s	0.0	16.7	0.0	12.1	0.0	2.1	0.0	13.1
Cycle Q Clear Time (g_c), s	0.0	16.7	0.0	12.1	0.0	2.1	0.0	13.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1393.3
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.5
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	423	0	369	0	427	0	1165
V/C Ratio (X)	0.00	0.61	0.00	0.51	0.00	0.09	0.00	0.39
Avail Cap (c_a), veh/h	0	423	0	423	0	427	0	1165
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	37.3	0.0	38.8	0.0	31.7	0.0	23.5
Incr Delay (d2), s/veh	0.0	6.5	0.0	1.1	0.0	0.4	0.0	1.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	43.8	0.0	39.9	0.0	32.1	0.0	24.4
1st-Term Q (Q1), veh/ln	0.0	7.3	0.0	5.2	0.0	0.9	0.0	5.0
2nd-Term Q (Q2), veh/ln	0.0	0.8	0.0	0.1	0.0	0.0	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.58	0.00	1.71	0.00	1.80	0.00	1.72
%ile Back of Q (95%), veh/ln	0.0	12.7	0.0	9.2	0.0	1.7	0.0	8.9
%ile Storage Ratio (RQ%)	0.00	1.04	0.00	0.43	0.00	0.06	0.00	0.65
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	48.3
HCM 2010 LOS	D

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	3	593	0	36	722	45	6	0	30	28	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	325	-	-	289	-	-	-	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	624	0	38	760	47	6	0	32	29	0	0

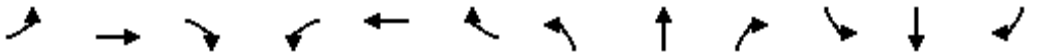
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	807	0	0	624	0	0	1087	1514	312	1177	1490	404
Stage 1	-	-	-	-	-	-	631	631	-	859	859	-
Stage 2	-	-	-	-	-	-	456	883	-	318	631	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	814	-	-	953	-	-	170	119	684	146	123	596
Stage 1	-	-	-	-	-	-	436	473	-	317	371	-
Stage 2	-	-	-	-	-	-	554	362	-	668	473	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	814	-	-	953	-	-	164	114	684	135	118	596
Mov Cap-2 Maneuver	-	-	-	-	-	-	164	114	-	135	118	-
Stage 1	-	-	-	-	-	-	434	471	-	316	356	-
Stage 2	-	-	-	-	-	-	532	348	-	635	471	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.4	13.8	39
HCM LOS			B	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	448	814	-	-	953	-	-	135	-
HCM Lane V/C Ratio	0.085	0.004	-	-	0.04	-	-	0.218	-
HCM Control Delay (s)	13.8	9.4	-	-	8.9	-	-	39	0
HCM Lane LOS	B	A	-	-	A	-	-	E	A
HCM 95th %tile Q(veh)	0.3	0	-	-	0.1	-	-	0.8	-

Build Alternative 2030 PM

2: West Ramp & Donald Ross Corridor: Donald Ross Road

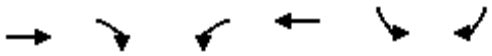


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	546	72	945	853	0	0	0	0	375	0	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0	4.0	7.0	6.0					6.0		4.0
Lane Util. Factor		0.86	1.00	0.86	0.86					0.94		1.00
Frt		1.00	0.85	1.00	1.00					1.00		0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (prot)		6408	1583	3044	3188					4990		1583
Flt Permitted		1.00	1.00	0.95	0.80					0.95		1.00
Satd. Flow (perm)		6408	1583	3044	2560					4990		1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	575	76	995	898	0	0	0	0	395	0	33
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	575	76	895	998	0	0	0	0	395	0	33
Turn Type		NA	Free	Prot	NA					Prot		Free
Protected Phases		6		5	2					3		
Permitted Phases			Free									Free
Actuated Green, G (s)		26.6	90.0	28.7	62.3					15.7		90.0
Effective Green, g (s)		26.6	90.0	28.7	62.3					15.7		90.0
Actuated g/C Ratio		0.30	1.00	0.32	0.69					0.17		1.00
Clearance Time (s)		6.0		7.0	6.0					6.0		
Vehicle Extension (s)		3.0		3.0	3.0					3.0		
Lane Grp Cap (vph)		1893	1583	970	1972					870		1583
v/s Ratio Prot		0.09		c0.29	0.16					c0.08		
v/s Ratio Perm			0.05		c0.19							0.02
v/c Ratio		0.30	0.05	0.92	0.51					0.45		0.02
Uniform Delay, d1		24.5	0.0	29.6	6.6					33.3		0.0
Progression Factor		1.00	1.00	1.02	1.20					1.00		1.00
Incremental Delay, d2		0.4	0.1	13.0	0.2					0.4		0.0
Delay (s)		24.9	0.1	43.1	8.1					33.7		0.0
Level of Service		C	A	D	A					C		A
Approach Delay (s)		22.0			24.7			0.0			31.1	
Approach LOS		C			C			A			C	

Intersection Summary			
HCM 2000 Control Delay	25.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	19.0
Intersection Capacity Utilization	55.1%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Build Alternative 2030 PM

2: West Ramp & Donald Ross Corridor: Donald Ross Road



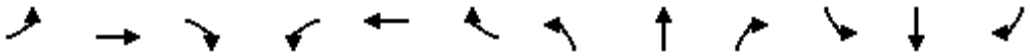
Lane Group	EBT	EBR	WBL	WBT	SBL	SBR
Lane Group Flow (vph)	575	76	895	998	395	33
v/c Ratio	0.30	0.05	0.92	0.75	0.45	0.02
Control Delay	25.6	0.1	45.4	17.8	34.8	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	25.6	0.1	45.4	17.8	34.8	0.0
Queue Length 50th (ft)	75	0	233	158	70	0
Queue Length 95th (ft)	100	0	#384	229	100	0
Internal Link Dist (ft)	2056			679		
Turn Bay Length (ft)		433				
Base Capacity (vph)	1890	1583	991	1327	942	1583
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.30	0.05	0.90	0.75	0.42	0.02

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Build Alternative 2030 PM

9: East Ramp & Donald Ross Corridor: Donald Ross Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	41	880	0	0	1472	963	326	0	1206	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0			6.0	4.0	6.0		6.0			
Lane Util. Factor	0.97	0.91			0.86	1.00	0.97		0.76			
Frt	1.00	1.00			1.00	0.85	1.00		0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (prot)	3433	5085			6408	1583	3433		3610			
Flt Permitted	0.95	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (perm)	3433	5085			6408	1583	3433		3610			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	43	926	0	0	1549	1014	343	0	1269	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	995	0	0	0
Lane Group Flow (vph)	43	926	0	0	1549	1014	343	0	274	0	0	0
Turn Type	Prot	NA			NA	Free	Prot		Prot			
Protected Phases	1	6			2		7		7			
Permitted Phases						Free						
Actuated Green, G (s)	2.4	26.6			53.9	90.0	15.7		15.7			
Effective Green, g (s)	2.4	26.6			53.9	90.0	15.7		15.7			
Actuated g/C Ratio	0.03	0.30			0.60	1.00	0.17		0.17			
Clearance Time (s)	6.0	6.0			6.0		6.0		6.0			
Vehicle Extension (s)	3.0	3.0			3.0		3.0		3.0			
Lane Grp Cap (vph)	91	1502			3837	1583	598		629			
v/s Ratio Prot	0.01	0.18			0.24		0.10		0.08			
v/s Ratio Perm						c0.64						
v/c Ratio	0.47	0.62			0.40	0.64	0.57		0.44			
Uniform Delay, d1	43.2	27.3			9.5	0.0	34.1		33.2			
Progression Factor	0.61	0.85			1.00	1.00	1.00		1.00			
Incremental Delay, d2	3.7	1.8			0.3	2.0	1.3		0.5			
Delay (s)	30.2	25.1			9.9	2.0	35.4		33.7			
Level of Service	C	C			A	A	D		C			
Approach Delay (s)		25.3			6.8			34.0			0.0	
Approach LOS		C			A			C			A	

Intersection Summary			
HCM 2000 Control Delay	18.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	19.0
Intersection Capacity Utilization	55.1%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Build Alternative 2030 PM

9: East Ramp & Donald Ross Corridor: Donald Ross Road

Lane Group	EBL	EBT	WBT	WBR	NBL	NBR
Lane Group Flow (vph)	43	926	1549	1014	343	1269
v/c Ratio	0.24	0.62	0.39	0.64	0.57	0.78
Control Delay	28.8	25.7	9.5	2.0	37.9	7.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	28.8	25.7	9.5	2.0	37.9	7.0
Queue Length 50th (ft)	13	102	136	0	91	13
Queue Length 95th (ft)	29	123	161	0	134	59
Internal Link Dist (ft)		679	2740			
Turn Bay Length (ft)				400		
Base Capacity (vph)	176	1499	4005	1583	648	1659
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.24	0.62	0.39	0.64	0.53	0.76

Intersection Summary

HOOD ROAD CORRIDOR

Arterial Level of Service: EB Hood Road

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Central Blvd	II	45	133.7	35.8	169.5	1.67	35.5	A
Military Trail	II	45	31.0	32.7	63.7	0.31	17.7	D
Total	II		164.7	68.5	233.2	1.98	30.6	B

Arterial Level of Service: WB Hood Road

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Military Trail	II	45	14.9	30.6	45.5	0.14	10.8	F
Central Blvd	II	45	31.0	26.9	57.9	0.31	19.5	D
Total	II		45.9	57.5	103.4	0.45	15.6	E

Build Alternative 2030 PM

5: Central Blvd & Hood Road Corridor: Hood Road

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	102	171	98	501	223	102	215	1075	674	189	887	218
Future Volume (veh/h)	102	171	98	501	223	102	215	1075	674	189	887	218
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	107	180	103	527	235	107	226	1132	709	199	934	229
Adj No. of Lanes	2	2	1	2	2	1	2	2	1	2	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	193	405	301	566	789	353	261	1254	561	218	1209	541
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.06	0.11	0.11	0.16	0.22	0.22	0.08	0.35	0.35	0.06	0.34	0.34
Ln Grp Delay, s/veh	38.8	33.4	28.4	54.9	25.8	13.9	60.9	35.0	139.3	75.1	28.1	22.5
Ln Grp LOS	D	C	C	D	C	B	E	C	F	E	C	C
Approach Vol, veh/h		390			869			2067			1362	
Approach Delay, s/veh		33.6			42.0			73.6			34.0	
Approach LOS		C			D			E			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	2	1	3	4	5	6	7	8
Case No	3.0	2.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	34.0	11.0	19.0	15.0	12.0	33.0	10.4	23.6
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green (Gmax), s	28.0	5.0	13.0	20.0	6.0	27.0	6.0	27.0
Max Allow Headway (MAH), s	4.5	4.6	3.7	4.6	3.7	4.6	3.7	4.6
Max Q Clear (g_c+I1), s	26.0	6.5	13.9	6.5	7.1	20.7	4.4	6.4
Green Ext Time (g_e), s	1.6	0.0	0.0	2.6	0.0	3.7	0.0	3.0
Prob of Phs Call (p_c)	1.00	0.99	1.00	1.00	0.99	1.00	1.00	1.00
Prob of Max Out (p_x)	0.00	1.00	1.00	0.08	1.00	0.00	1.00	0.01

Left-Turn Movement Data								
Assigned Mvmt		1	3		5		7	
Mvmt Sat Flow, veh/h		3442	3442		3442		3442	

Through Movement Data								
Assigned Mvmt	2			4		6		8
Mvmt Sat Flow, veh/h	3539			3539		3539		3539

Right-Turn Movement Data								
Assigned Mvmt	12			14		16		18
Mvmt Sat Flow, veh/h	1583			1583		1583		1583

Left Lane Group Data								
Assigned Mvmt	0	1	3	0	5	0	7	0
Lane Assignment		(Prot)	(Prot)		(Prot)		(Prot)	

Lanes in Grp	0	2	2	0	2	0	2	0
Grp Vol (v), veh/h	0	199	527	0	226	0	107	0
Grp Sat Flow (s), veh/h/ln	0	1721	1721	0	1721	0	1721	0
Q Serve Time (g_s), s	0.0	4.5	11.9	0.0	5.1	0.0	2.4	0.0
Cycle Q Clear Time (g_c), s	0.0	4.5	11.9	0.0	5.1	0.0	2.4	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	218	566	0	261	0	193	0
V/C Ratio (X)	0.00	0.91	0.93	0.00	0.87	0.00	0.55	0.00
Avail Cap (c_a), veh/h	0	218	566	0	261	0	261	0
Upstream Filter (I)	0.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	0.0	36.8	32.6	0.0	36.1	0.0	36.3	0.0
Incr Delay (d2), s/veh	0.0	38.3	22.3	0.0	24.7	0.0	2.5	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	75.1	54.9	0.0	60.9	0.0	38.8	0.0
1st-Term Q (Q1), veh/ln	0.0	2.2	5.6	0.0	2.4	0.0	1.1	0.0
2nd-Term Q (Q2), veh/ln	0.0	1.2	1.8	0.0	0.9	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	1.60	0.00	1.80	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	0.0	6.0	11.8	0.0	6.0	0.0	2.2	0.0
%ile Storage Ratio (RQ%)	0.00	0.50	0.55	0.00	0.44	0.00	0.10	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	2	0	0	4	0	6	0	8
Lane Assignment	T			T		T		T
Lanes in Grp	2	0	0	2	0	2	0	2
Grp Vol (v), veh/h	1132	0	0	180	0	934	0	235
Grp Sat Flow (s), veh/h/ln	1770	0	0	1770	0	1770	0	1770
Q Serve Time (g_s), s	24.0	0.0	0.0	3.8	0.0	18.7	0.0	4.4
Cycle Q Clear Time (g_c), s	24.0	0.0	0.0	3.8	0.0	18.7	0.0	4.4
Lane Grp Cap (c), veh/h	1254	0	0	405	0	1209	0	789
V/C Ratio (X)	0.90	0.00	0.00	0.44	0.00	0.77	0.00	0.30
Avail Cap (c_a), veh/h	1254	0	0	895	0	1209	0	1209
Upstream Filter (I)	1.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	24.2	0.0	0.0	32.7	0.0	23.3	0.0	25.6
Incr Delay (d2), s/veh	10.7	0.0	0.0	0.8	0.0	4.8	0.0	0.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	35.0	0.0	0.0	33.4	0.0	28.1	0.0	25.8
1st-Term Q (Q1), veh/ln	11.6	0.0	0.0	1.8	0.0	9.1	0.0	2.1

2nd-Term Q (Q2), veh/ln	1.9	0.0	0.0	0.0	0.0	0.8	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.45	0.00	0.00	1.80	0.00	1.52	0.00	1.80
%ile Back of Q (95%), veh/ln	19.5	0.0	0.0	3.4	0.0	15.0	0.0	3.9
%ile Storage Ratio (RQ%)	1.13	0.00	0.00	0.11	0.00	0.40	0.00	0.06
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	12	0	0	14	0	16	0	18
Lane Assignment	R			R		R		R
Lanes in Grp	1	0	0	1	0	1	0	1
Grp Vol (v), veh/h	709	0	0	103	0	229	0	107
Grp Sat Flow (s), veh/h/ln	1583	0	0	1583	0	1583	0	1583
Q Serve Time (g_s), s	14.3	0.0	0.0	4.5	0.0	8.8	0.0	3.2
Cycle Q Clear Time (g_c), s	14.3	0.0	0.0	4.5	0.0	8.8	0.0	3.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	1583.3	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	6.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	1.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	561	0	0	301	0	541	0	353
V/C Ratio (X)	1.26	0.00	0.00	0.34	0.00	0.42	0.00	0.30
Avail Cap (c_a), veh/h	561	0	0	521	0	541	0	541
Upstream Filter (I)	1.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	6.6	0.0	0.0	27.7	0.0	20.0	0.0	13.4
Incr Delay (d2), s/veh	132.6	0.0	0.0	0.7	0.0	2.4	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	139.3	0.0	0.0	28.4	0.0	22.5	0.0	13.9
1st-Term Q (Q1), veh/ln	6.1	0.0	0.0	1.9	0.0	3.8	0.0	1.4
2nd-Term Q (Q2), veh/ln	20.7	0.0	0.0	0.1	0.0	0.4	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	48.1	0.0	0.0	3.6	0.0	7.5	0.0	2.6
%ile Storage Ratio (RQ%)	4.37	0.00	0.00	0.12	0.00	0.57	0.00	0.19
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	37.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	52.9
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	202	426	87	367	415	114	100	767	291	149	642	503
Future Volume (veh/h)	202	426	87	367	415	114	100	767	291	149	642	503
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	213	448	92	386	437	120	105	807	306	157	676	529
Adj No. of Lanes	3	2	1	3	2	1	2	3	1	2	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	341	653	292	408	700	313	174	1146	357	205	1191	479
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.07	0.18	0.18	0.08	0.20	0.20	0.05	0.23	0.23	0.06	0.23	0.23
Ln Grp Delay, s/veh	36.1	29.5	26.2	64.1	27.7	26.0	37.9	29.4	49.4	49.5	26.4	98.0
Ln Grp LOS	D	C	C	E	C	C	D	C	D	D	C	F
Approach Vol, veh/h		753			943			1218			1362	
Approach Delay, s/veh		31.0			42.4			35.2			56.9	
Approach LOS		C			D			D			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	12.2	24.4	13.4	22.3	12.8	23.8	14.4	21.3
Change Period (Y+Rc), s	8.5	7.5	8.5	8.0	8.5	7.5	8.5	8.0
Max Green (Gmax), s	4.1	16.5	5.1	16.8	4.3	16.3	5.9	16.0
Max Allow Headway (MAH), s	3.7	4.5	3.7	4.7	3.7	4.5	3.7	4.7
Max Q Clear (g_c+I1), s	4.2	18.9	5.0	10.2	5.3	15.4	7.6	10.6
Green Ext Time (g_e), s	0.0	0.0	0.0	3.2	0.0	0.8	0.0	2.8
Prob of Phs Call (p_c)	0.88	1.00	0.99	1.00	0.96	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.76	1.00	0.00	1.00	0.90

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3442		5003		3442		5003	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		5085		3539		5085		3539

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		1583		1583		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	3	0	2	0	3	0
Grp Vol (v), veh/h	105	0	213	0	157	0	386	0
Grp Sat Flow (s), veh/h/ln	1721	0	1668	0	1721	0	1668	0
Q Serve Time (g_s), s	2.2	0.0	3.0	0.0	3.3	0.0	5.6	0.0
Cycle Q Clear Time (g_c), s	2.2	0.0	3.0	0.0	3.3	0.0	5.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	174	0	341	0	205	0	408	0
V/C Ratio (X)	0.60	0.00	0.62	0.00	0.77	0.00	0.95	0.00
Avail Cap (c_a), veh/h	195	0	353	0	205	0	408	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	33.6	0.0	32.8	0.0	33.5	0.0	33.1	0.0
Incr Delay (d2), s/veh	4.2	0.0	3.3	0.0	16.0	0.0	31.1	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	37.9	0.0	36.1	0.0	49.5	0.0	64.1	0.0
1st-Term Q (Q1), veh/ln	1.0	0.0	1.4	0.0	1.5	0.0	2.5	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.1	0.0	0.5	0.0	1.2	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	1.80	0.00	1.80	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	2.0	0.0	2.7	0.0	3.6	0.0	6.7	0.0
%ile Storage Ratio (RQ%)	0.12	0.00	0.13	0.00	0.15	0.00	0.32	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	2	0	3	0	2
Grp Vol (v), veh/h	0	676	0	437	0	807	0	448
Grp Sat Flow (s), veh/h/ln	0	1695	0	1770	0	1695	0	1770
Q Serve Time (g_s), s	0.0	8.5	0.0	8.2	0.0	10.6	0.0	8.6
Cycle Q Clear Time (g_c), s	0.0	8.5	0.0	8.2	0.0	10.6	0.0	8.6
Lane Grp Cap (c), veh/h	0	1191	0	700	0	1146	0	653
V/C Ratio (X)	0.00	0.57	0.00	0.62	0.00	0.70	0.00	0.69
Avail Cap (c_a), veh/h	0	1191	0	822	0	1146	0	783
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	24.5	0.0	26.6	0.0	25.8	0.0	27.5
Incr Delay (d2), s/veh	0.0	2.0	0.0	1.1	0.0	3.6	0.0	2.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	26.4	0.0	27.7	0.0	29.4	0.0	29.5
1st-Term Q (Q1), veh/ln	0.0	3.9	0.0	4.0	0.0	4.9	0.0	4.2

2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.1	0.0	0.4	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.71	0.00	1.79
%ile Back of Q (95%), veh/ln	0.0	7.5	0.0	7.4	0.0	9.1	0.0	7.8
%ile Storage Ratio (RQ%)	0.00	0.20	0.00	0.29	0.00	0.31	0.00	0.13
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	529	0	120	0	306	0	92
Grp Sat Flow (s), veh/h/ln	0	1583	0	1583	0	1583	0	1583
Q Serve Time (g_s), s	0.0	16.9	0.0	4.8	0.0	13.4	0.0	3.6
Cycle Q Clear Time (g_c), s	0.0	16.9	0.0	4.8	0.0	13.4	0.0	3.6
Prot RT Sat Flow (s_R), veh/h/ln	0.0	1583.3	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	4.9	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	479	0	313	0	357	0	292
V/C Ratio (X)	0.00	1.10	0.00	0.38	0.00	0.86	0.00	0.32
Avail Cap (c_a), veh/h	0	479	0	368	0	357	0	350
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	25.2	0.0	25.2	0.0	26.9	0.0	25.5
Incr Delay (d2), s/veh	0.0	72.8	0.0	0.8	0.0	22.5	0.0	0.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	98.0	0.0	26.0	0.0	49.4	0.0	26.2
1st-Term Q (Q1), veh/ln	0.0	9.5	0.0	2.1	0.0	5.9	0.0	1.6
2nd-Term Q (Q2), veh/ln	0.0	9.7	0.0	0.1	0.0	2.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.58	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	34.5	0.0	3.8	0.0	12.8	0.0	2.9
%ile Storage Ratio (RQ%)	0.00	1.46	0.00	0.31	0.00	1.06	0.00	0.22
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	12.5	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	42.9
HCM 2010 LOS	D

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Traffic Vol, veh/h	19	346	509	91	44	5
Future Vol, veh/h	19	346	509	91	44	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	150	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	20	364	536	96	46	5

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	536	0	-	0	940	536
Stage 1	-	-	-	-	536	-
Stage 2	-	-	-	-	404	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1032	-	-	-	293	545
Stage 1	-	-	-	-	587	-
Stage 2	-	-	-	-	674	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1032	-	-	-	286	545
Mov Cap-2 Maneuver	-	-	-	-	587	-
Stage 1	-	-	-	-	587	-
Stage 2	-	-	-	-	658	-

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	11.8
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1032	-	-	-	582
HCM Lane V/C Ratio	0.019	-	-	-	0.089
HCM Control Delay (s)	8.6	0	-	-	11.8
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.3

MILITARY TRAIL CORRIDOR

Arterial Level of Service: NB N Military Trail

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
PGA Blvd	II	45	18.9	77.0	95.9	0.17	6.5	F
Kyoto Gardens Dr	II	45	43.4	15.3	58.7	0.49	30.2	B
Hood Road	II	45	104.9	28.0	132.9	1.31	35.5	A
Donald Ross	II	45	102.8	44.6	147.4	1.29	31.4	B
Total	II		270.0	164.9	434.9	3.26	27.0	C

Arterial Level of Service: SB N Military Trail

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Donald Ross	II	45	22.3	36.9	59.2	0.20	12.4	F
Hood Road	II	45	102.8	24.6	127.4	1.29	36.3	A
Kyoto Gardens Dr	II	45	104.9	11.5	116.4	1.31	40.5	A
PGA Blvd	II	45	43.4	48.7	92.1	0.49	19.3	D
Total	II		273.4	121.7	395.1	3.29	30.0	B

Movement	WBL	WBR	WBR2	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SER
Lane Configurations											
Traffic Volume (veh/h)	290	613	149	321	1087	340	23	1060	58	0	0
Future Volume (veh/h)	290	613	149	321	1087	340	23	1060	58	0	0
Number	7	14	14	1	6	16	5	2	12		
Initial Q, veh	0	0	0	0	0	0	0	0	0		
Ped-Bike Adj (A_pbT)	1.00	1.00	1.00	1.00		1.00	1.00		1.00		
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900		
Adj Flow Rate, veh/h	305	157	157	338	1144	358	24	1116	61		
Adj No. of Lanes	2	1	1	1	3	1	1	3	0		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2		
Opposing Right Turn Influence	Yes			Yes			Yes				
Cap, veh/h	423	195	195	378	3458	1077	32	3726	204		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Prop Arrive On Green	0.12	0.12	0.12	0.68	0.68	0.68	0.02	0.75	0.75		
Ln Grp Delay, s/veh	57.7	63.6	63.6	49.2	8.9	9.5	94.7	5.4	5.6		
Ln Grp LOS	E	E	E	D	A	A	F	A	A		

Approach Vol, veh/h	462				1840			1201			Timer:
Approach Delay, s/veh	59.7				16.4			7.3			Assigned Phs
Approach LOS	E				B			A			Case No
Phs Duration (G+Y+Rc), s			107.0		24.1	9.8	97.2				
Change Period (Y+Rc), s			8.0		8.0	7.5	8.0				
Max Green (Gmax), s			99.0		35.0	4.0	87.5				
Max Allow Headway (MAH), s			5.2		3.8	3.7	5.2				
Max Q Clear (g_c+I1), s			11.4		14.7	3.8	91.2				
Green Ext Time (g_e), s			54.9		1.5	0.0	0.0				
Prob of Phs Call (p_c)			1.00		1.00	0.58	1.00				
Prob of Max Out (p_x)			0.00		0.00	1.00	0.00				

Left-Turn Movement Data											
Assigned Mvmt					7	5	1				
Mvmt Sat Flow, veh/h					3442	1774	475				

Through Movement Data											
Assigned Mvmt			2		4		6				
Mvmt Sat Flow, veh/h			4936		0		5085				

Right-Turn Movement Data											
Assigned Mvmt			12		14		16				
Mvmt Sat Flow, veh/h			270		1583		1583				

Left Lane Group Data											
Assigned Mvmt		0	0	0	7	5	1	0	0		
Lane Assignment						(Prot)					
Lanes in Grp		0	0	0	2	1	1	0	0		
Grp Vol (v), veh/h		0	0	0	305	24	338	0	0		
Grp Sat Flow (s), veh/h/ln		0	0	0	1721	1774	475	0	0		

Q Serve Time (g_s), s	0.0	0.0	0.0	11.2	1.8	89.2	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	11.2	1.8	89.2	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1721	0	475	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	89.2	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	89.2	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	89.2	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	1.00	1.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	423	32	378	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.72	0.76	0.90	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	919	54	378	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	55.3	64.1	23.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	2.3	30.6	26.2	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	57.7	94.7	49.2	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	5.3	0.9	12.2	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.3	2.7	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.70	1.80	1.42	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	9.3	2.0	21.3	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.32	0.14	1.80	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	3	0	0
Grp Vol (v), veh/h	0	766	0	0	0	1144	0	0
Grp Sat Flow (s), veh/h/ln	0	1695	0	0	0	1695	0	0
Q Serve Time (g_s), s	0.0	9.4	0.0	0.0	0.0	12.2	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	9.4	0.0	0.0	0.0	12.2	0.0	0.0
Lane Grp Cap (c), veh/h	0	2559	0	0	0	3458	0	0
V/C Ratio (X)	0.00	0.30	0.00	0.00	0.00	0.33	0.00	0.00
Avail Cap (c_a), veh/h	0	2559	0	0	0	3458	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	5.1	0.0	0.0	0.0	8.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.0	0.0	0.3	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	5.4	0.0	0.0	0.0	8.9	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	4.4	0.0	0.0	0.0	5.6	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.78	0.00	1.00	0.00	1.69	0.00	0.00

%ile Back of Q (95%), veh/ln	0.0	7.9	0.0	0.0	0.0	9.6	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.03	0.00	0.00	0.00	0.61	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment		T+R		R		R		
Lanes in Grp	0	1	0	1	0	1	0	0
Grp Vol (v), veh/h	0	411	0	157	0	358	0	0
Grp Sat Flow (s), veh/h/ln	0	1815	0	1583	0	1583	0	0
Q Serve Time (g_s), s	0.0	9.4	0.0	12.7	0.0	12.3	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	9.4	0.0	12.7	0.0	12.3	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.15	0.00	1.00	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	1370	0	195	0	1077	0	0
V/C Ratio (X)	0.00	0.30	0.00	0.81	0.00	0.33	0.00	0.00
Avail Cap (c_a), veh/h	0	1370	0	423	0	1077	0	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	5.1	0.0	56.0	0.0	8.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.6	0.0	7.6	0.0	0.8	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	5.6	0.0	63.6	0.0	9.5	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	4.7	0.0	10.7	0.0	5.3	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.4	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.74	0.00	1.49	0.00	1.70	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	8.5	0.0	16.6	0.0	9.4	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.03	0.00	0.57	0.00	0.79	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	19.0
HCM 2010 LOS	B

NORTHLAKE BOULEVARD CORRIDOR

Arterial Level of Service: EB Northlake Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Keating Dr	II	45	17.3	23.5	40.8	0.16	14.0	E
West Ramps	II	45	12.7	40.0	52.7	0.12	7.9	F
East Ramps	II	45	11.1	0.2	11.3	0.10	32.5	B
Roan Ln	II	45	8.8	0.3	9.1	0.08	32.1	B
Sandtree Dr	II	45	13.5	25.4	38.9	0.12	11.5	F
Total	II		63.4	89.4	152.8	0.58	13.7	E

Arterial Level of Service: WB Northlake Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Sunrise Dr	II	45	15.3	62.9	78.2	0.14	6.5	F
Roan Ln	II	45	13.5	6.1	19.6	0.12	22.8	C
East Ramps	II	45	8.8	34.7	43.5	0.08	6.7	F
West Ramps	II	45	11.1	12.3	23.4	0.10	15.7	E
Keating Dr	II	45	12.7	11.1	23.8	0.12	17.6	D
Total	II		61.4	127.1	188.5	0.56	10.8	F

Build Alternative 2030 PM

3: Keating Dr & Northlake Blvd Corridor: Northlake Boulevard

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1648	54	169	2020	150	55	3	225	65	2	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0	4.0	5.0	5.0	6.0	6.0	6.0		6.0	
Lane Util. Factor		0.91	1.00	1.00	0.91	1.00	0.95	0.95	1.00		0.95	
Frt		1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85		1.00	
Flt Protected		1.00	1.00	0.95	1.00	1.00	0.95	0.96	1.00		0.95	
Satd. Flow (prot)		5085	1583	1770	5085	1583	1681	1693	1583		3375	
Flt Permitted		1.00	1.00	0.13	1.00	1.00	0.95	0.73	1.00		0.73	
Satd. Flow (perm)		5085	1583	248	5085	1583	1681	1290	1583		2593	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	1735	57	178	2126	158	58	3	237	68	2	0
RTOR Reduction (vph)	0	0	36	0	0	69	0	0	135	0	0	0
Lane Group Flow (vph)	0	1735	21	178	2126	89	30	31	102	0	70	0
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	Prot	NA	Perm	pm+pt	NA	
Protected Phases		6		5	2		7	4		3	8	
Permitted Phases	6		6	2		2			4	8		
Actuated Green, G (s)		26.0	26.0	39.6	39.6	39.6	1.6	19.4	19.4		11.8	
Effective Green, g (s)		26.0	26.0	39.6	39.6	39.6	1.6	19.4	19.4		11.8	
Actuated g/C Ratio		0.37	0.37	0.57	0.57	0.57	0.02	0.28	0.28		0.17	
Clearance Time (s)		5.0	5.0	4.0	5.0	5.0	6.0	6.0	6.0		6.0	
Vehicle Extension (s)		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)		1888	587	349	2876	895	38	366	438		437	
v/s Ratio Prot		c0.34		0.07	c0.42		c0.02	0.00				
v/s Ratio Perm			0.01	0.22		0.06		0.02	c0.06		0.03	
v/c Ratio		0.92	0.04	0.51	0.74	0.10	0.79	0.08	0.23		0.16	
Uniform Delay, d1		21.0	14.0	11.9	11.3	7.0	34.0	18.7	19.5		24.9	
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	
Incremental Delay, d2		8.7	0.1	1.3	1.7	0.2	67.6	0.1	0.3		0.2	
Delay (s)		29.7	14.1	13.1	13.1	7.2	101.6	18.8	19.8		25.0	
Level of Service		C	B	B	B	A	F	B	B		C	
Approach Delay (s)		29.2			12.7			28.0			25.0	
Approach LOS		C			B			C			C	

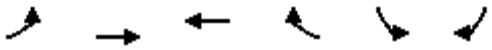
Intersection Summary			
HCM 2000 Control Delay	20.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	21.0
Intersection Capacity Utilization	66.0%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1310	565	1186	1567	0	0	0	0	565	0	785
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0	4.0	7.0	6.5					6.0		6.0
Lane Util. Factor		0.81	1.00	0.97	0.91					0.97		0.88
Frt		1.00	0.85	1.00	1.00					1.00		0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (prot)		7544	1583	3433	5085					3433		2787
Flt Permitted		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (perm)		7544	1583	3433	5085					3433		2787
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	1379	595	1248	1649	0	0	0	0	595	0	826
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	530
Lane Group Flow (vph)	0	1379	595	1248	1649	0	0	0	0	595	0	297
Turn Type		NA	Free	Prot	NA					Prot		Perm
Protected Phases		6		5	2					3		
Permitted Phases			Free									6
Actuated Green, G (s)		19.4	90.0	34.6	60.5					17.0		19.4
Effective Green, g (s)		19.4	90.0	34.6	60.5					17.0		19.4
Actuated g/C Ratio		0.22	1.00	0.38	0.67					0.19		0.22
Clearance Time (s)		6.0		7.0	6.5					6.0		6.0
Vehicle Extension (s)		3.0		3.0	3.0					3.0		3.0
Lane Grp Cap (vph)		1626	1583	1319	3418					648		600
v/s Ratio Prot		c0.18		c0.36	0.32					c0.17		
v/s Ratio Perm			0.38									0.11
v/c Ratio		0.85	0.38	0.95	0.48					0.92		0.49
Uniform Delay, d1		33.9	0.0	26.8	7.2					35.8		31.0
Progression Factor		1.00	1.00	1.37	1.66					1.00		1.00
Incremental Delay, d2		5.7	0.7	7.2	0.2					17.9		2.9
Delay (s)		39.6	0.7	43.8	12.1					53.8		33.9
Level of Service		D	A	D	B					D		C
Approach Delay (s)		27.9			25.8			0.0			42.2	
Approach LOS		C			C			A			D	

Intersection Summary			
HCM 2000 Control Delay	30.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	19.0
Intersection Capacity Utilization	81.0%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	666	1209	0	0	2027	882	726	0	1243	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	6.0			6.5	4.0	6.0		6.5			
Lane Util. Factor	0.97	0.91			0.81	1.00	0.97		0.88			
Frt	1.00	1.00			1.00	0.85	1.00		0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (prot)	3433	5085			7544	1583	3433		2787			
Flt Permitted	0.95	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (perm)	3433	5085			7544	1583	3433		2787			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	701	1273	0	0	2134	928	764	0	1308	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	724	0	0	0
Lane Group Flow (vph)	701	1273	0	0	2134	928	764	0	584	0	0	0
Turn Type	Prot	NA			NA	Free	Prot		Perm			
Protected Phases	1	6			2		7					
Permitted Phases						Free			2			
Actuated Green, G (s)	20.0	56.3			28.8	90.0	21.7		28.8			
Effective Green, g (s)	20.0	56.3			28.8	90.0	21.7		28.8			
Actuated g/C Ratio	0.22	0.63			0.32	1.00	0.24		0.32			
Clearance Time (s)	7.0	6.0			6.5		6.0		6.5			
Vehicle Extension (s)	3.0	3.0			3.0		3.0		3.0			
Lane Grp Cap (vph)	762	3180			2414	1583	827		891			
v/s Ratio Prot	c0.20	0.25			c0.28		c0.22					
v/s Ratio Perm						0.59			0.21			
v/c Ratio	0.92	0.40			0.88	0.59	0.92		0.66			
Uniform Delay, d1	34.2	8.4			29.0	0.0	33.3		26.3			
Progression Factor	0.60	0.00			1.00	1.00	1.00		1.00			
Incremental Delay, d2	8.7	0.2			5.2	1.6	15.8		3.7			
Delay (s)	29.2	0.2			34.2	1.6	49.1		30.1			
Level of Service	C	A			C	A	D		C			
Approach Delay (s)		10.5			24.3			37.1			0.0	
Approach LOS		B			C			D			A	

Intersection Summary			
HCM 2000 Control Delay	24.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	81.0%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	99	2140	2882	85	0	103
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	8.0	6.5	6.5	4.0		4.0
Lane Util. Factor	1.00	0.91	0.76	1.00		1.00
Frt	1.00	1.00	1.00	0.85		0.86
Flt Protected	0.95	1.00	1.00	1.00		1.00
Satd. Flow (prot)	1770	5085	8494	1583		1611
Flt Permitted	0.95	1.00	1.00	1.00		1.00
Satd. Flow (perm)	1770	5085	8494	1583		1611
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	104	2253	3034	89	0	108
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	104	2253	3034	89	0	108
Turn Type	Prot	NA	NA	Free		Free
Protected Phases	1	6	2			
Permitted Phases				Free		Free
Actuated Green, G (s)	3.6	40.0	21.9	40.0		40.0
Effective Green, g (s)	3.6	40.0	21.9	40.0		40.0
Actuated g/C Ratio	0.09	1.00	0.55	1.00		1.00
Clearance Time (s)	8.0	6.5	6.5			
Vehicle Extension (s)	3.0	3.0	3.0			
Lane Grp Cap (vph)	159	5085	4650	1583		1611
v/s Ratio Prot	0.06	c0.44	c0.36			
v/s Ratio Perm				0.06		0.07
v/c Ratio	0.65	0.44	0.65	0.06		0.07
Uniform Delay, d1	17.6	0.0	6.4	0.0		0.0
Progression Factor	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	9.3	0.3	0.7	0.1		0.1
Delay (s)	26.9	0.3	7.1	0.1		0.1
Level of Service	C	A	A	A		A
Approach Delay (s)		1.5	6.9		0.1	
Approach LOS		A	A		A	

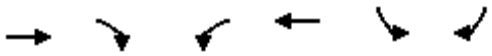
Intersection Summary			
HCM 2000 Control Delay	4.5	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	14.5
Intersection Capacity Utilization	46.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	144	1723	273	111	2446	134	377	1	108	42	1	144
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.5	7.5	7.0	7.5		6.0	6.5	6.5	6.0	6.5	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91		0.97	0.95	0.95	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.85	0.85	1.00	0.85	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1583	3433	5046		3433	1509	1504	1770	1585	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1583	3433	5046		3433	1509	1504	1770	1585	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	152	1814	287	117	2575	141	397	1	114	44	1	152
RTOR Reduction (vph)	0	0	132	0	4	0	0	47	47	0	137	0
Lane Group Flow (vph)	152	1814	155	117	2712	0	397	11	10	44	16	0
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6						4			
Actuated Green, G (s)	13.1	80.8	80.8	9.0	76.7		25.0	26.3	26.3	6.9	8.2	
Effective Green, g (s)	13.1	80.8	80.8	9.0	76.7		25.0	26.3	26.3	6.9	8.2	
Actuated g/C Ratio	0.09	0.54	0.54	0.06	0.51		0.17	0.18	0.18	0.05	0.05	
Clearance Time (s)	7.0	7.5	7.5	7.0	7.5		6.0	6.5	6.5	6.0	6.5	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	154	2739	852	205	2580		572	264	263	81	86	
v/s Ratio Prot	c0.09	0.36		0.03	c0.54		c0.12	0.01		c0.02	0.01	
v/s Ratio Perm			0.10						0.01			
v/c Ratio	0.99	0.66	0.18	0.57	1.05		0.69	0.04	0.04	0.54	0.19	
Uniform Delay, d1	68.4	24.8	17.7	68.6	36.6		58.9	51.4	51.3	70.0	67.7	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	68.0	1.3	0.5	3.8	33.0		3.6	0.1	0.1	7.2	1.0	
Delay (s)	136.4	26.1	18.2	72.4	69.7		62.5	51.4	51.4	77.3	68.8	
Level of Service	F	C	B	E	E		E	D	D	E	E	
Approach Delay (s)		32.5			69.8			60.0			70.7	
Approach LOS		C			E			E			E	

Intersection Summary			
HCM 2000 Control Delay	54.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	27.0
Intersection Capacity Utilization	100.4%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Build Alternative 2030 PM

6: West Ramps & Northlake Blvd Corridor: Northlake Boulevard



Lane Group	EBT	EBR	WBL	WBT	SBL	SBR
Lane Group Flow (vph)	1379	595	1248	1649	595	826
v/c Ratio	0.85	0.38	0.95	0.48	0.92	0.73
Control Delay	40.0	0.7	44.8	12.3	57.2	10.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.0	0.7	44.8	12.3	57.2	10.7
Queue Length 50th (ft)	188	0	334	165	172	40
Queue Length 95th (ft)	224	0	m#451	m199	#271	111
Internal Link Dist (ft)	533			458		
Turn Bay Length (ft)						
Base Capacity (vph)	1627	1583	1335	3418	648	1130
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.85	0.38	0.93	0.48	0.92	0.73

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Build Alternative 2030 PM

9: East Ramps & Northlake Blvd Corridor: Northlake Boulevard

Lane Group	EBL	EBT	WBT	WBR	NBL	NBR
Lane Group Flow (vph)	701	1273	2134	928	764	1308
v/c Ratio	0.92	0.40	0.88	0.59	0.92	0.81
Control Delay	32.3	0.2	34.7	1.6	51.5	9.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	32.3	0.2	34.7	1.6	51.5	9.8
Queue Length 50th (ft)	215	0	282	0	218	58
Queue Length 95th (ft)	m#275	m0	325	0	#324	162
Internal Link Dist (ft)		458	348			
Turn Bay Length (ft)				400		
Base Capacity (vph)	762	3180	2412	1583	839	1615
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.92	0.40	0.88	0.59	0.91	0.81

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

PGA BOULEVARD CORRIDOR

Arterial Level of Service: EB PGA Blvd

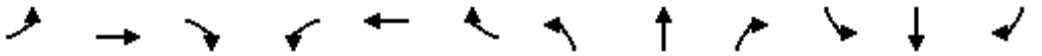
Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
FL Turnpike	II	45	16.8	54.9	71.7	0.15	7.7	F
Central Blvd	II	45	36.7	22.6	59.3	0.39	23.7	C
N Military Trail	II	45	81.7	84.7	166.4	1.02	22.1	C
West Ramps	II	45	20.5	5.7	26.2	0.19	25.8	C
East Ramps	II	45	6.3	13.6	19.9	0.06	10.5	F
RCA	II	45	25.6	0.2	25.8	0.25	34.3	B
Lake Victoria Garden	II	45	41.9	4.2	46.1	0.46	36.0	A
Total	II		229.5	185.9	415.4	2.52	21.8	D

Arterial Level of Service: WB PGA Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Lake Victoria Garden	II	45	13.7	46.4	60.1	0.13	7.6	F
RCA	II	45	41.9	0.2	42.1	0.46	39.4	A
East Ramps	II	45	25.6	0.1	25.7	0.25	34.5	B
West Ramps	II	45	6.3	7.9	14.2	0.06	14.7	E
N Military Trail	II	45	20.5	42.8	63.3	0.19	10.7	F
Central Blvd	II	45	25.0	74.3	99.3	0.24	8.7	F
FL Turnpike	II	45	36.7	57.5	94.2	0.39	14.9	E
Total	II		169.7	229.2	398.9	1.71	15.4	E

Build Alternative 2030 PM

3: FL Turnpike & PGA Blvd Corridor: PGA Boulevard



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	100	813	48	276	1394	795	65	230	805	911	55	105
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.5		7.5	8.0	7.5	7.5	7.5	7.5	7.5	7.5	4.0
Lane Util. Factor	0.97	0.91		0.97	0.91	0.88	1.00	0.95	0.95	0.91	0.91	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	0.91	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.96	1.00
Satd. Flow (prot)	3433	5042		3433	5085	2787	1770	1618	1504	3221	1628	1583
Flt Permitted	0.11	1.00		0.95	1.00	1.00	0.11	1.00	1.00	0.95	0.96	1.00
Satd. Flow (perm)	415	5042		3433	5085	2787	210	1618	1504	3221	1628	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	105	856	51	291	1467	837	68	242	847	959	58	111
RTOR Reduction (vph)	0	5	0	0	0	238	0	33	153	0	0	0
Lane Group Flow (vph)	105	902	0	291	1467	599	68	531	372	681	336	111
Turn Type	pm+pt	NA		Prot	NA	pm+ov	Perm	NA	Prot	Split	NA	Free
Protected Phases	7	4		3	8	6		2	2	6	6	
Permitted Phases	4					8	2					Free
Actuated Green, G (s)	38.8	34.8		14.7	45.5	75.0	35.5	35.5	35.5	29.5	29.5	144.5
Effective Green, g (s)	38.8	34.8		14.7	45.5	75.0	35.5	35.5	35.5	29.5	29.5	144.5
Actuated g/C Ratio	0.27	0.24		0.10	0.31	0.52	0.25	0.25	0.25	0.20	0.20	1.00
Clearance Time (s)	7.0	7.5		7.5	8.0	7.5	7.5	7.5	7.5	7.5	7.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	194	1214		349	1601	1446	51	397	369	657	332	1583
v/s Ratio Prot	0.01	0.18		c0.08	c0.29	0.08		c0.33	0.25	c0.21	0.21	
v/s Ratio Perm	0.13					0.13	0.32					0.07
v/c Ratio	0.54	0.74		0.83	0.92	0.41	1.33	1.34	1.01	1.04	1.01	0.07
Uniform Delay, d1	41.9	50.7		63.7	47.7	21.3	54.5	54.5	54.5	57.5	57.5	0.0
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.1	2.5		15.6	8.6	0.2	238.7	167.9	48.8	44.9	52.5	0.1
Delay (s)	44.9	53.2		79.3	56.2	21.5	293.2	222.4	103.3	102.4	110.0	0.1
Level of Service	D	D		E	E	C	F	F	F	F	F	A
Approach Delay (s)		52.4			47.6			172.5			94.6	
Approach LOS		D			D			F			F	

Intersection Summary			
HCM 2000 Control Delay	82.0	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.11		
Actuated Cycle Length (s)	144.5	Sum of lost time (s)	30.0
Intersection Capacity Utilization	101.6%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Build Alternative 2030 PM

10: Central Blvd & PGA Blvd Corridor: PGA Boulevard

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1071	1253	21	173	1704	339	45	37	175	204	36	883
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.5	8.5		7.0	8.0	8.0		8.5	8.5	8.5	8.5	8.5
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00		1.00	1.00	0.95	0.95	1.00
Frt	1.00	1.00		1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.97	1.00	0.95	0.97	1.00
Satd. Flow (prot)	3433	5073		1770	5085	1583		1813	1583	1681	1710	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.73	1.00	0.70	0.74	1.00
Satd. Flow (perm)	3433	5073		1770	5085	1583		1355	1583	1241	1304	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1127	1319	22	182	1794	357	47	39	184	215	38	929
RTOR Reduction (vph)	0	1	0	0	0	196	0	0	153	0	0	20
Lane Group Flow (vph)	1127	1340	0	182	1794	161	0	86	31	125	128	909
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA	Perm	Perm	NA	pt+ov
Protected Phases	1	6		5	2			4			8	8 1
Permitted Phases						2	4		4	8		
Actuated Green, G (s)	44.5	73.6		18.9	48.0	48.0		23.5	23.5	23.5	23.5	76.5
Effective Green, g (s)	44.5	73.6		18.9	48.0	48.0		23.5	23.5	23.5	23.5	76.5
Actuated g/C Ratio	0.32	0.53		0.13	0.34	0.34		0.17	0.17	0.17	0.17	0.55
Clearance Time (s)	7.5	8.5		7.0	8.0	8.0		8.5	8.5	8.5	8.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	1091	2666		238	1743	542		227	265	208	218	864
v/s Ratio Prot	0.33	0.26		0.10	c0.35							c0.57
v/s Ratio Perm						0.10		0.06	0.02	0.10	0.10	
v/c Ratio	1.03	0.50		0.76	1.03	0.30		0.38	0.12	0.60	0.59	1.05
Uniform Delay, d1	47.8	21.4		58.4	46.0	33.6		51.8	49.4	53.9	53.8	31.8
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	36.1	0.7		13.6	29.4	1.4		1.1	0.2	4.8	4.0	45.4
Delay (s)	83.8	22.1		72.0	75.4	35.0		52.8	49.6	58.7	57.8	77.2
Level of Service	F	C		E	E	D		D	D	E	E	E
Approach Delay (s)		50.3			69.0			50.7			73.1	
Approach LOS		D			E			D			E	

Intersection Summary			
HCM 2000 Control Delay	61.6	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.12		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	112.9%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Build Alternative 2030 PM

24: PGA Blvd & West Ramps Corridor: PGA Boulevard

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (vph)	0	0	0	157	0	97	0	755	1566	0	2045	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0		6.0		6.0	4.0		6.0	
Lane Util. Factor				0.97		0.88		0.91	1.00		0.86	
Frt				1.00		0.85		1.00	0.85		1.00	
Flt Protected				0.95		1.00		1.00	1.00		1.00	
Satd. Flow (prot)				3433		2787		5085	1583		6408	
Flt Permitted				0.95		1.00		1.00	1.00		1.00	
Satd. Flow (perm)				3433		2787		5085	1583		6408	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	165	0	102	0	795	1648	0	2153	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	165	0	102	0	795	1648	0	2153	0
Turn Type				Prot		Prot		NA	Free		NA	
Protected Phases				3		3		6			2	
Permitted Phases									Free			
Actuated Green, G (s)				7.0		7.0		21.0	40.0		21.0	
Effective Green, g (s)				7.0		7.0		21.0	40.0		21.0	
Actuated g/C Ratio				0.18		0.18		0.52	1.00		0.52	
Clearance Time (s)				6.0		6.0		6.0			6.0	
Vehicle Extension (s)				3.0		3.0		3.0			3.0	
Lane Grp Cap (vph)				600		487		2669	1583		3364	
v/s Ratio Prot				0.05		0.04		0.16			0.34	
v/s Ratio Perm									c1.04			
v/c Ratio				0.28		0.21		0.30	1.04		0.64	
Uniform Delay, d1				14.3		14.1		5.3	20.0		6.8	
Progression Factor				1.00		1.00		1.00	1.00		1.00	
Incremental Delay, d2				1.1		1.0		0.1	34.1		0.4	
Delay (s)				15.4		15.1		5.4	54.1		7.2	
Level of Service				B		B		A	D		A	
Approach Delay (s)		0.0			15.3			38.3			7.2	
Approach LOS		A			B			D			A	

Intersection Summary			
HCM 2000 Control Delay	23.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	1.49		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	53.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	NBL	NBR	NET	NER	SWL	SWT
Lane Configurations						
Volume (vph)	0	1126	912	0	0	1212
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0	6.0			6.0
Lane Util. Factor		0.76	0.91			0.86
Frt		0.85	1.00			1.00
Flt Protected		1.00	1.00			1.00
Satd. Flow (prot)		3610	5085			6408
Flt Permitted		1.00	1.00			1.00
Satd. Flow (perm)		3610	5085			6408
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	1185	960	0	0	1276
RTOR Reduction (vph)	0	87	0	0	0	0
Lane Group Flow (vph)	0	1098	960	0	0	1276
Turn Type		Prot	NA			NA
Protected Phases		2	3 4			Free
Permitted Phases						2 8
Actuated Green, G (s)		23.8	24.2			60.0
Effective Green, g (s)		23.8	24.2			60.0
Actuated g/C Ratio		0.40	0.40			1.00
Clearance Time (s)		6.0				
Vehicle Extension (s)		3.0				
Lane Grp Cap (vph)		1431	2050			6408
v/s Ratio Prot		c0.30	c0.19			0.20
v/s Ratio Perm						
v/c Ratio		0.77	0.47			0.20
Uniform Delay, d1		15.7	13.2			0.0
Progression Factor		1.00	1.00			1.00
Incremental Delay, d2		4.0	0.2			0.0
Delay (s)		19.7	13.3			0.0
Level of Service		B	B			A
Approach Delay (s)	19.7		13.3			0.0
Approach LOS	B		B			A

Intersection Summary			
HCM 2000 Control Delay	10.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	53.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	569	1364	423	0	2574	0	300	0	129	0	0	47
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0		6.0		6.0	4.0	6.0			6.0
Lane Util. Factor	0.97	0.91	1.00		0.91		0.91	0.86	0.95			1.00
Frt	1.00	1.00	0.85		1.00		1.00	0.96	0.85			0.86
Flt Protected	0.95	1.00	1.00		1.00		0.95	0.96	1.00			1.00
Satd. Flow (prot)	3433	5085	1583		5085		3221	1482	1504			1611
Flt Permitted	0.95	1.00	1.00		1.00		0.95	0.96	1.00			1.00
Satd. Flow (perm)	3433	5085	1583		5085		3221	1482	1504			1611
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	599	1436	445	0	2709	0	316	0	136	0	0	49
RTOR Reduction (vph)	0	0	100	0	0	0	0	77	80	0	0	43
Lane Group Flow (vph)	599	1436	345	0	2709	0	234	36	25	0	0	6
Turn Type	Prot	NA	Perm		NA		Prot	NA	custom			Perm
Protected Phases	7	4			8		5	2	5			
Permitted Phases			4									5
Actuated Green, G (s)	21.4	85.4	85.4		58.0		12.6	14.6	12.6			12.6
Effective Green, g (s)	21.4	85.4	85.4		58.0		12.6	14.6	12.6			12.6
Actuated g/C Ratio	0.19	0.78	0.78		0.53		0.11	0.13	0.11			0.11
Clearance Time (s)	6.0	6.0	6.0		6.0		6.0	4.0	6.0			6.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0	3.0			3.0
Lane Grp Cap (vph)	667	3947	1228		2681		368	196	172			184
v/s Ratio Prot	c0.17	c0.28			c0.53		c0.07	0.02	0.02			
v/s Ratio Perm			0.22					0.00				0.00
v/c Ratio	0.90	0.36	0.28		1.01		0.64	0.18	0.15			0.03
Uniform Delay, d1	43.2	3.8	3.5		26.0		46.5	42.4	43.9			43.3
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00	1.00			1.00
Incremental Delay, d2	17.3	0.3	0.6		20.0		3.6	0.5	0.4			0.1
Delay (s)	60.5	4.1	4.1		46.0		50.1	42.8	44.3			43.3
Level of Service	E	A	A		D		D	D	D			D
Approach Delay (s)		17.7			46.0			46.9			43.3	
Approach LOS		B			D			D			D	

Intersection Summary			
HCM 2000 Control Delay	33.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	85.7%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	17	236	0	359	0	0	47	230
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					6.0	6.0		6.0			6.0	6.0
Lane Util. Factor					1.00	1.00		0.95			1.00	1.00
Frt					1.00	0.85		1.00			1.00	0.85
Flt Protected					1.00	1.00		1.00			1.00	1.00
Satd. Flow (prot)					1863	1583		3539			1863	1583
Flt Permitted					1.00	1.00		1.00			1.00	1.00
Satd. Flow (perm)					1863	1583		3539			1863	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	0	18	248	0	378	0	0	49	242
RTOR Reduction (vph)	0	0	0	0	0	122	0	0	0	0	0	214
Lane Group Flow (vph)	0	0	0	0	18	126	0	378	0	0	49	28
Turn Type					NA	Perm		NA			NA	Perm
Protected Phases					16			15			5	
Permitted Phases						16						5
Actuated Green, G (s)					56.0	56.0		23.4			12.6	12.6
Effective Green, g (s)					56.0	56.0		23.4			12.6	12.6
Actuated g/C Ratio					0.51	0.51		0.21			0.11	0.11
Clearance Time (s)					6.0	6.0		6.0			6.0	6.0
Vehicle Extension (s)					3.0	3.0		3.0			3.0	3.0
Lane Grp Cap (vph)					948	805		752			213	181
v/s Ratio Prot					0.01			c0.11			c0.03	
v/s Ratio Perm						c0.08						0.02
v/c Ratio					0.02	0.16		0.50			0.23	0.15
Uniform Delay, d1					13.4	14.4		38.2			44.3	43.9
Progression Factor					1.00	1.00		0.00			1.00	1.00
Incremental Delay, d2					0.0	0.4		1.0			0.6	0.4
Delay (s)					13.4	14.8		1.1			44.8	44.3
Level of Service					B	B		A			D	D
Approach Delay (s)		0.0			14.7			1.1			44.4	
Approach LOS		A			B			A			D	

Intersection Summary			
HCM 2000 Control Delay	18.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.25		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	34.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Volume (vph)	0	528	1593	504	64	1677
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		1.00	0.86		1.00	0.91
Frt		0.86	0.96		1.00	1.00
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		1611	6177		1770	5085
Flt Permitted		1.00	1.00		0.12	1.00
Satd. Flow (perm)		1611	6177		218	5085
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	556	1677	531	67	1765
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	556	2208	0	67	1765
Turn Type		Perm	NA		Perm	NA
Protected Phases			4			8
Permitted Phases		8			8	
Actuated Green, G (s)		34.2	34.2		34.2	34.2
Effective Green, g (s)		34.2	34.2		34.2	34.2
Actuated g/C Ratio		1.00	1.00		1.00	1.00
Clearance Time (s)		4.0	4.0		4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Lane Grp Cap (vph)		1611	6177		218	5085
v/s Ratio Prot			c0.36			0.35
v/s Ratio Perm		0.35			0.31	
v/c Ratio		0.35	0.36		0.31	0.35
Uniform Delay, d1		0.0	0.0		0.0	0.0
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.1	0.0		0.8	0.0
Delay (s)		0.1	0.0		0.8	0.0
Level of Service		A	A		A	A
Approach Delay (s)	0.1		0.0			0.1
Approach LOS	A		A			A

Intersection Summary			
HCM 2000 Control Delay	0.1	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	34.2	Sum of lost time (s)	4.0
Intersection Capacity Utilization	70.9%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	189	1148	691	601	844	529	739	1071	83	859	614	194
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	199	1208	0	633	888	0	778	1127	0	904	646	204
Adj No. of Lanes	3	3	1	3	3	1	3	3	1	3	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	271	1181	368	643	1595	497	869	1144	356	911	1205	375
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.05	0.23	0.00	0.13	0.31	0.00	0.17	0.22	0.00	0.18	0.24	0.24
Ln Grp Delay, s/veh	72.2	86.0	0.0	92.2	41.4	0.0	67.1	76.9	0.0	84.9	47.2	48.4
Ln Grp LOS	E	F		F	D		E	E		F	D	D
Approach Vol, veh/h		1407			1521			1905			1754	
Approach Delay, s/veh		84.0			62.5			72.9			66.8	
Approach LOS		F			E			E			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	15.6	51.4	34.0	39.0	27.0	40.0	32.3	40.7
Change Period (Y+Rc), s	8.0	7.5	8.5	7.5	9.0	7.5	8.0	7.5
Max Green (Gmax), s	9.0	42.5	25.5	31.5	18.0	32.5	26.4	31.1
Max Allow Headway (MAH), s	3.7	4.9	3.7	4.8	3.7	4.9	3.7	4.8
Max Q Clear (g_c+I1), s	7.5	22.3	27.3	32.9	19.7	34.5	23.3	17.8
Green Ext Time (g_e), s	0.1	13.6	0.0	0.0	0.0	0.0	1.0	9.2
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	1.00	1.00	0.00	1.00	0.68

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	5003		5003		5003		5003	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		5085		5085		5085		5085

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		1583		1583		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	
Lanes in Grp	3	0	3	0	3	0	3	0

Grp Vol (v), veh/h	199	0	904	0	633	0	778	0
Grp Sat Flow (s), veh/h/ln	1668	0	1668	0	1668	0	1668	0
Q Serve Time (g_s), s	5.5	0.0	25.3	0.0	17.7	0.0	21.3	0.0
Cycle Q Clear Time (g_c), s	5.5	0.0	25.3	0.0	17.7	0.0	21.3	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	271	0	911	0	643	0	869	0
V/C Ratio (X)	0.73	0.00	0.99	0.00	0.98	0.00	0.89	0.00
Avail Cap (c_a), veh/h	322	0	911	0	643	0	943	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	65.2	0.0	57.1	0.0	60.9	0.0	56.6	0.0
Incr Delay (d2), s/veh	7.0	0.0	27.8	0.0	31.4	0.0	10.5	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	72.2	0.0	84.9	0.0	92.2	0.0	67.1	0.0
1st-Term Q (Q1), veh/ln	2.5	0.0	11.6	0.0	8.1	0.0	9.8	0.0
2nd-Term Q (Q2), veh/ln	0.2	0.0	2.3	0.0	1.9	0.0	0.8	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	1.44	0.00	1.52	0.00	1.50	0.00
%ile Back of Q (95%), veh/ln	4.9	0.0	20.1	0.0	15.2	0.0	16.0	0.0
%ile Storage Ratio (RQ%)	0.27	0.00	1.13	0.00	0.77	0.00	0.93	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	3	0	3	0	3
Grp Vol (v), veh/h	0	888	0	1127	0	1208	0	646
Grp Sat Flow (s), veh/h/ln	0	1695	0	1695	0	1695	0	1695
Q Serve Time (g_s), s	0.0	20.3	0.0	30.9	0.0	32.5	0.0	15.5
Cycle Q Clear Time (g_c), s	0.0	20.3	0.0	30.9	0.0	32.5	0.0	15.5
Lane Grp Cap (c), veh/h	0	1595	0	1144	0	1181	0	1205
V/C Ratio (X)	0.00	0.56	0.00	0.98	0.00	1.02	0.00	0.54
Avail Cap (c_a), veh/h	0	1595	0	1144	0	1181	0	1205
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	39.9	0.0	54.0	0.0	53.7	0.0	46.7
Incr Delay (d2), s/veh	0.0	1.4	0.0	22.9	0.0	32.2	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	41.4	0.0	76.9	0.0	86.0	0.0	47.2
1st-Term Q (Q1), veh/ln	0.0	9.5	0.0	14.5	0.0	15.2	0.0	7.3
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	2.4	0.0	3.5	0.0	0.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.53	0.00	1.40	0.00	1.80	0.00	1.60
%ile Back of Q (95%), veh/ln	0.0	14.9	0.0	23.7	0.0	33.7	0.0	11.8
%ile Storage Ratio (RQ%)	0.00	0.94	0.00	0.81	0.00	0.81	0.00	0.35
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	6.9	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	0	0	0	0	204
Grp Sat Flow (s), veh/h/ln	0	1583	0	1583	0	1583	0	1583
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.8
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.8
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	497	0	356	0	368	0	375
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.54
Avail Cap (c_a), veh/h	0	497	0	356	0	368	0	375
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	46.8
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	48.4
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.9
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.62
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.4
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.65
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	71.3
HCM 2010 LOS	E

Build Alternative 2030 PM

24: PGA Blvd & West Ramps Corridor: PGA Boulevard

Lane Group	SBL	SBR	NET	NER	SWT
Lane Group Flow (vph)	165	102	795	1648	2153
v/c Ratio	0.28	0.21	0.30	1.04	0.64
Control Delay	15.7	15.4	5.7	40.3	7.9
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	15.7	15.4	5.7	40.3	7.9
Queue Length 50th (ft)	16	11	31	~33	85
Queue Length 95th (ft)	35	27	47	#236	114
Internal Link Dist (ft)			215		227
Turn Bay Length (ft)					
Base Capacity (vph)	600	487	2669	1583	3364
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.28	0.21	0.30	1.04	0.64

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	NBR	NET	SWT
Lane Group Flow (vph)	1185	960	1276
v/c Ratio	0.78	0.47	0.20
Control Delay	19.7	13.6	0.1
Queue Delay	0.0	0.0	0.0
Total Delay	19.7	13.6	0.1
Queue Length 50th (ft)	141	87	0
Queue Length 95th (ft)	#251	110	0
Internal Link Dist (ft)		227	250
Turn Bay Length (ft)			
Base Capacity (vph)	1517	2288	6408
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.78	0.42	0.20

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Build Alternative 2030 PM

34: PGA Blvd & EB On Ramp Corridor: PGA Boulevard

Lane Group	SBL	SBR	NEL	NET	SWT	SWR
Lane Configurations						
Volume (vph)	0	0	150	1888	1212	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	500			0
Storage Lanes	0	0	1			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.86	0.91	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	6408	5085	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	6408	5085	0
Link Speed (mph)	45			45	45	
Link Distance (ft)	247			189	328	
Travel Time (s)	3.7			2.9	5.0	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	158	1987	1276	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	158	1987	1276	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	81.7%	ICU Level of Service	D
Analysis Period (min)	15		

APPENDIX T

SYNCHRO REPORTS

BUILD 2040 AM

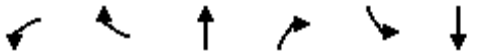
CENTRAL BOULEVARD CORRIDOR

Arterial Level of Service: NB Central Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
PGA Blvd	II	45	11.9	52.5	64.4	0.11	6.1	F
117th Ct	II	45	61.9	14.7	76.6	0.77	36.4	A
SB On Ramp	II	45	52.1	22.0	74.1	0.65	31.6	B
NB Off Ramp	II	45	9.8	52.9	62.7	0.09	5.2	F
Victoria Falls Blvd	II	45	29.9	48.0	77.9	0.30	14.0	E
Hood Rd	II	45	23.7	56.0	79.7	0.23	10.3	F
Donald Ross	II	45	100.8	62.0	162.8	1.26	27.9	C
Total	II		290.1	308.1	598.2	3.41	20.5	D

Arterial Level of Service: SB Central Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Donald Ross	II	45	22.2	42.0	64.2	0.20	11.4	F
Hood Rd	II	45	100.8	43.4	144.2	1.26	31.5	B
	II	45	23.7	16.5	40.2	0.23	20.4	D
NB On Ramp	II	45	29.9	24.1	54.0	0.30	20.2	D
SB Off Ramp	II	45	9.8	3.3	13.1	0.09	24.7	C
117th Ct	II	45	52.1	8.2	60.3	0.65	38.8	A
PGA Blvd	II	45	61.9	108.3	170.2	0.77	16.4	E
Total	II		300.4	245.8	546.2	3.51	23.1	C

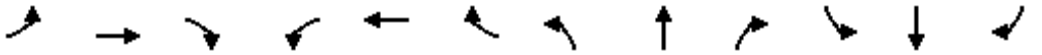


Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	280	190	1139	234	87	940
Number	3	18	2	12	1	6
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	295	200	1199	246	92	989
Adj No. of Lanes	1	1	2	1	1	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	359	320	2063	923	300	2389
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.20	0.20	0.58	0.58	0.04	0.67
Ln Grp Delay, s/veh	35.8	31.7	11.9	9.1	8.9	6.5
Ln Grp LOS	D	C	B	A	A	A
Approach Vol, veh/h	495		1445			1081
Approach Delay, s/veh	34.1		11.4			6.7
Approach LOS	C		B			A

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	8			6		
Case No	1.2	7.0	9.0			4.0		
Phs Duration (G+Y+Rc), s	7.5	52.5	21.5			60.0		
Change Period (Y+Rc), s	4.0	5.0	5.0			5.0		
Max Green (Gmax), s	4.0	47.0	60.0			55.0		
Max Allow Headway (MAH), s	3.7	4.8	3.8			4.8		
Max Q Clear (g_c+I1), s	3.6	19.4	15.0			12.3		
Green Ext Time (g_e), s	0.0	18.9	1.5			24.8		
Prob of Phs Call (p_c)	0.88	1.00	1.00			1.00		
Prob of Max Out (p_x)	1.00	0.00	0.00			0.00		
Left-Turn Movement Data								
Assigned Mvmt	1	5	3					
Mvmt Sat Flow, veh/h	1774	0	1774					
Through Movement Data								
Assigned Mvmt		2	8			6		
Mvmt Sat Flow, veh/h		3632	0			3632		
Right-Turn Movement Data								
Assigned Mvmt		12	18			16		
Mvmt Sat Flow, veh/h		1583	1583			0		
Left Lane Group Data								
Assigned Mvmt	1	5	3	0	0	0	0	0
Lane Assignment	(Pr/Pm)							
Lanes in Grp	1	0	1	0	0	0	0	0

Grp Vol (v), veh/h	92	0	295	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1774	0	1774	0	0	0	0	0
Q Serve Time (g_s), s	1.6	0.0	13.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	1.6	0.0	13.0	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	367	0	1774	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	49.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	30.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	6.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	47.5	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	300	0	359	0	0	0	0	0
V/C Ratio (X)	0.31	0.00	0.82	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	311	0	1306	0	0	0	0	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	8.3	0.0	31.1	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.6	0.0	4.7	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	8.9	0.0	35.8	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.7	0.0	6.3	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	1.00	1.63	0.00	0.00	0.00	0.00	0.00
%ile Back of Q (95%), veh/ln	1.4	0.0	11.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.10	0.00	0.59	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	0	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	1199	0	0	0	989	0	0
Grp Sat Flow (s), veh/h/ln	0	1770	0	0	0	1770	0	0
Q Serve Time (g_s), s	0.0	17.4	0.0	0.0	0.0	10.3	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	17.4	0.0	0.0	0.0	10.3	0.0	0.0
Lane Grp Cap (c), veh/h	0	2063	0	0	0	2389	0	0
V/C Ratio (X)	0.00	0.58	0.00	0.00	0.00	0.41	0.00	0.00
Avail Cap (c_a), veh/h	0	2063	0	0	0	2389	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	10.7	0.0	0.0	0.0	6.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.2	0.0	0.0	0.0	0.5	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	11.9	0.0	0.0	0.0	6.5	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	8.3	0.0	0.0	0.0	4.9	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.0	0.0	0.2	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.56	1.00	0.00	0.00	1.72	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	13.5	0.0	0.0	0.0	8.8	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.60	0.00	0.00	0.00	0.44	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	18	0	0	16	0	0
Lane Assignment		R	R					
Lanes in Grp	0	1	1	0	0	0	0	0
Grp Vol (v), veh/h	0	246	200	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1583	1583	0	0	0	0	0
Q Serve Time (g_s), s	0.0	6.3	9.4	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	6.3	9.4	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	923	320	0	0	0	0	0
V/C Ratio (X)	0.00	0.27	0.62	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	923	1166	0	0	0	0	0
Upstream Filter (I)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	8.4	29.7	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.7	2.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	9.1	31.7	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	2.7	4.1	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.2	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	1.79	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	5.2	7.7	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.35	0.69	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		13.5						
HCM 2010 LOS		B						



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	121	13	10	101	11	81	21	1955	167	137	1831	38
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	127	14	11	115	0	85	22	2058	176	144	1927	40
Adj No. of Lanes	1	1	0	2	0	1	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	245	118	93	168	0	344	155	2099	939	174	2435	1089
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.12	0.12	0.12	0.05	0.00	0.22	0.59	0.59	0.59	0.05	0.69	0.69
Ln Grp Delay, s/veh	37.7	0.0	33.2	50.3	0.0	27.7	22.4	31.9	7.9	47.8	10.9	4.2
Ln Grp LOS	D		C	D		C	C	C	A	D	B	A
Approach Vol, veh/h		152			200			2256			2111	
Approach Delay, s/veh		36.9			40.7			29.9			13.2	
Approach LOS		D			D			C			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4		6		8
Case No	1.2	5.0	2.0	6.0		3.0		3.0
Phs Duration (G+Y+Rc), s	8.0	54.0	8.0	14.3		62.0		22.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0		4.0		4.0
Max Green (Gmax), s	4.0	50.0	4.0	16.0		58.0		24.0
Max Allow Headway (MAH), s	3.7	4.9	3.7	4.0		4.9		4.0
Max Q Clear (g_c+I1), s	4.5	49.6	4.7	10.0		33.4		5.7
Green Ext Time (g_e), s	0.0	0.4	0.0	0.4		24.0		0.7
Prob of Phs Call (p_c)	0.97	1.00	0.93	1.00		1.00		1.00
Prob of Max Out (p_x)	1.00	1.00	1.00	0.26		0.97		0.00

Left-Turn Movement Data								
Assigned Mvmt	1	5	3	7				
Mvmt Sat Flow, veh/h	1774	221	3548	1307				

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3539		968		3539		0

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		761		1583		1583

Left Lane Group Data								
Assigned Mvmt	1	5	3	7	0	0	0	0
Lane Assignment	(Pr/Pm)		(Prot)					
Lanes in Grp	1	1	2	1	0	0	0	0

Grp Vol (v), veh/h	144	22	115	127	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1774	221	1774	1307	0	0	0	0
Q Serve Time (g_s), s	2.5	6.4	2.7	8.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	2.5	29.8	2.7	8.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	170	221	0	1307	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	52.0	50.0	0.0	10.3	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	2.4	26.6	0.0	10.3	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	2.4	6.4	0.0	8.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	174	155	168	245	0	0	0	0
V/C Ratio (X)	0.83	0.14	0.68	0.52	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	174	155	168	334	0	0	0	0
Upstream Filter (I)	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	21.2	21.9	39.5	36.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	26.6	0.4	10.8	1.7	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	47.8	22.4	50.3	37.7	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	2.1	0.4	1.3	2.9	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	1.3	0.0	0.3	0.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	1.80	1.80	1.80	0.00	0.00	0.00	0.00
%ile Back of Q (95%), veh/ln	6.1	0.7	2.8	5.4	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.44	0.07	0.11	0.91	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	2058	0	0	0	1927	0	0
Grp Sat Flow (s), veh/h/ln	0	1770	0	0	0	1770	0	0
Q Serve Time (g_s), s	0.0	47.6	0.0	0.0	0.0	31.4	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	47.6	0.0	0.0	0.0	31.4	0.0	0.0
Lane Grp Cap (c), veh/h	0	2099	0	0	0	2435	0	0
V/C Ratio (X)	0.00	0.98	0.00	0.00	0.00	0.79	0.00	0.00
Avail Cap (c_a), veh/h	0	2099	0	0	0	2435	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	16.7	0.0	0.0	0.0	9.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	15.2	0.0	0.0	0.0	1.8	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	31.9	0.0	0.0	0.0	10.9	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	22.9	0.0	0.0	0.0	15.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	4.4	0.0	0.0	0.0	0.6	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.31	0.00	1.00	0.00	1.42	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	35.9	0.0	0.0	0.0	22.1	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	1.50	0.00	0.00	0.00	1.05	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	176	0	25	0	40	0	85
Grp Sat Flow (s), veh/h/ln	0	1583	0	1729	0	1583	0	1583
Q Serve Time (g_s), s	0.0	4.3	0.0	1.1	0.0	0.7	0.0	3.7
Cycle Q Clear Time (g_c), s	0.0	4.3	0.0	1.1	0.0	0.7	0.0	3.7
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.44	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	939	0	211	0	1089	0	344
V/C Ratio (X)	0.00	0.19	0.00	0.12	0.00	0.04	0.00	0.25
Avail Cap (c_a), veh/h	0	939	0	328	0	1089	0	451
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	7.8	0.0	33.0	0.0	4.2	0.0	27.3
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.2	0.0	0.0	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	7.9	0.0	33.2	0.0	4.2	0.0	27.7
1st-Term Q (Q1), veh/ln	0.0	1.9	0.0	0.5	0.0	0.3	0.0	1.6
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	3.4	0.0	1.0	0.0	0.5	0.0	3.0
%ile Storage Ratio (RQ%)	0.00	0.31	0.00	0.07	0.00	0.04	0.00	0.23
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	23.1
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Build Alternative 2040 AM

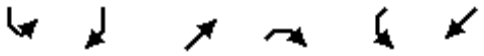
29: Central Blvd & SB On Ramp & SB Off Ramp Corridor: Central Boulevard

Movement	SBL2	SBL	SBR	NWL	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations											
Volume (vph)	83	0	157	0	0	0	1202	61	1287	856	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0				4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00		1.00				0.86	1.00	0.97	0.95	
Frt	1.00		0.85				1.00	0.85	1.00	1.00	
Flt Protected	0.95		1.00				1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770		1583				6408	1583	3433	3539	
Flt Permitted	0.95		1.00				1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770		1583				6408	1583	3433	3539	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	87	0	165	0	0	0	1265	64	1355	901	0
RTOR Reduction (vph)	0	0	50	0	0	0	0	44	0	0	0
Lane Group Flow (vph)	87	0	115	0	0	0	1265	20	1355	901	0
Turn Type	Prot		custom				NA	Prot	Prot	NA	
Protected Phases	1		1				2 4	2 4	3	3 4	
Permitted Phases			3 4								
Actuated Green, G (s)	9.4		69.4				30.6	30.6	44.0	60.0	
Effective Green, g (s)	9.4		69.4				30.6	30.6	44.0	60.0	
Actuated g/C Ratio	0.09		0.69				0.31	0.31	0.44	0.60	
Clearance Time (s)	4.0		4.0						4.0		
Vehicle Extension (s)	3.0		3.0						3.0		
Lane Grp Cap (vph)	166		1161				1960	484	1510	2123	
v/s Ratio Prot	c0.05		0.01				c0.20	0.01	c0.39	0.25	
v/s Ratio Perm			0.06								
v/c Ratio	0.52		0.10				0.65	0.04	0.90	0.42	
Uniform Delay, d1	43.2		5.0				30.0	24.4	25.9	10.7	
Progression Factor	1.00		1.00				1.00	1.00	0.89	0.26	
Incremental Delay, d2	3.0		0.0				0.7	0.0	6.0	0.1	
Delay (s)	46.1		5.1				30.7	24.4	29.2	2.9	
Level of Service	D		A				C	C	C	A	
Approach Delay (s)		19.2		0.0			30.4			18.7	
Approach LOS		B		A			C			B	

Intersection Summary			
HCM 2000 Control Delay	22.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	74.9%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Build Alternative 2040 AM

29: Central Blvd & SB On Ramp & SB Off Ramp Corridor: Central Boulevard



Lane Group	SBL2	SBR	NET	NER	SWL	SWT
Lane Group Flow (vph)	87	165	1265	64	1355	901
v/c Ratio	0.52	0.11	0.65	0.10	0.90	0.42
Control Delay	54.2	0.2	22.0	0.3	29.9	3.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.1
Total Delay	54.2	0.2	22.0	0.3	29.9	3.3
Queue Length 50th (ft)	53	0	146	0	198	26
Queue Length 95th (ft)	102	0	174	0	#299	32
Internal Link Dist (ft)			967			394
Turn Bay Length (ft)		800		450	190	
Base Capacity (vph)	194	1460	1959	612	1510	2123
Starvation Cap Reductn	0	0	0	0	0	269
Spillback Cap Reductn	0	0	20	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.45	0.11	0.65	0.10	0.90	0.49

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Build Alternative 2040 AM

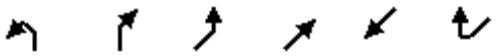
24: Central Blvd & NB Off Ramp/NB On Ramp Corridor: Central Boulevard

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (vph)	25	0	1201	0	0	0	336	949	0	0	2118	39
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0				4.0	4.0			4.0	4.0
Lane Util. Factor	1.00		0.88				0.97	0.95			0.86	1.00
Frt	1.00		0.85				1.00	1.00			1.00	0.85
Flt Protected	0.95		1.00				0.95	1.00			1.00	1.00
Satd. Flow (prot)	1770		2787				3433	3539			6408	1583
Flt Permitted	0.95		1.00				0.95	1.00			1.00	1.00
Satd. Flow (perm)	1770		2787				3433	3539			6408	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	26	0	1264	0	0	0	354	999	0	0	2229	41
RTOR Reduction (vph)	0	0	196	0	0	0	0	0	0	0	0	22
Lane Group Flow (vph)	26	0	1068	0	0	0	354	999	0	0	2229	19
Turn Type	Prot		custom				Prot	NA			NA	Prot
Protected Phases	6		6 11				5 7	13			8	8
Permitted Phases												
Actuated Green, G (s)	22.0		45.6				15.4	36.4			46.6	46.6
Effective Green, g (s)	22.0		45.6				15.4	36.4			46.6	46.6
Actuated g/C Ratio	0.22		0.46				0.15	0.36			0.47	0.47
Clearance Time (s)	4.0							4.0			4.0	4.0
Vehicle Extension (s)	3.0							3.0			3.0	3.0
Lane Grp Cap (vph)	389		1270				528	1288			2986	737
v/s Ratio Prot	0.01		c0.38				c0.10	c0.28			c0.35	0.01
v/s Ratio Perm												
v/c Ratio	0.07		0.84				0.67	0.78			0.75	0.03
Uniform Delay, d1	30.9		24.0				39.9	28.2			21.9	14.4
Progression Factor	1.00		1.00				0.43	1.68			1.00	1.00
Incremental Delay, d2	0.1		5.2				2.6	2.3			1.7	0.1
Delay (s)	30.9		29.2				19.7	49.6			23.6	14.5
Level of Service	C		C				B	D			C	B
Approach Delay (s)		29.2			0.0			41.7			23.4	
Approach LOS		C			A			D			C	

Intersection Summary			
HCM 2000 Control Delay	30.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	74.9%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Build Alternative 2040 AM

24: Central Blvd & NB Off Ramp/NB On Ramp Corridor: Central Boulevard



Lane Group	NBL	NBR	NEL	NET	SWT	SWR
Lane Group Flow (vph)	26	1264	354	999	2229	41
v/c Ratio	0.07	0.86	0.67	0.78	0.75	0.05
Control Delay	31.6	23.6	15.5	52.9	24.1	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	31.6	23.6	15.5	52.9	24.1	0.1
Queue Length 50th (ft)	13	284	48	303	328	0
Queue Length 95th (ft)	35	378	97	#368	386	0
Internal Link Dist (ft)				394	829	
Turn Bay Length (ft)		550	160			450
Base Capacity (vph)	389	1574	583	1287	2983	813
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	14	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.07	0.80	0.61	0.78	0.75	0.05

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

DONALD ROSS CORRIDOR

Arterial Level of Service: EB Donald Ross

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
West Ramp	II	45	46.0	25.9	71.9	0.52	26.1	C
East Ramp	II	45	15.7	56.6	72.3	0.14	7.2	F
Parkside Dr	II	45	42.7	47.3	90.0	0.53	21.4	D
Central Blvd	II	45	52.1	58.8	110.9	0.65	21.1	D
Military Trail	II	45	32.9	66.8	99.7	0.34	12.4	F
Total	II		189.4	255.4	444.8	2.19	17.8	D

Arterial Level of Service: WB Donald Ross

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Military Trail	II	45	21.4	48.0	69.4	0.20	10.2	F
Central Blvd	II	45	32.9	33.3	66.2	0.34	18.6	D
Parkside Dr	II	45	52.1	40.6	92.7	0.65	25.3	C
East Ramp	II	45	42.7	10.1	52.8	0.53	36.4	A
West Ramp	II	45	15.7	43.2	58.9	0.14	8.8	F
Total	II		164.8	175.2	340.0	1.87	19.8	D

HCM 2010 methodology does not support clustered intersections.

HCM 2010 methodology does not support clustered intersections.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	583	1204	638	535	448	102	416	133	575	139	225	609
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	614	1267	672	563	472	107	438	140	605	146	237	641
Adj No. of Lanes	2	3	1	2	3	1	2	1	1	1	1	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	696	1470	671	628	1198	600	494	270	550	354	324	994
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.20	0.29	0.29	0.18	0.24	0.24	0.14	0.14	0.14	0.13	0.17	0.17
Ln Grp Delay, s/veh	54.9	46.8	69.2	60.9	38.4	24.7	66.0	48.6	107.6	37.4	59.9	35.1
Ln Grp LOS	D	D	F	E	D	C	E	D	F	D	E	D
Approach Vol, veh/h		2553			1142			1183			1024	
Approach Delay, s/veh		54.7			48.2			85.2			41.2	
Approach LOS		D			D			F			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	1.1	3.0
Phs Duration (G+Y+Rc), s	32.0	36.5	21.0	29.2	25.7	42.8	24.5	25.7
Change Period (Y+Rc), s	8.0	* 8.5	4.0	8.5	4.0	8.5	8.5	* 8.5
Max Green (Gmax), s	30.0	* 25	18.0	18.7	24.0	34.3	16.0	* 17
Max Allow Headway (MAH), s	3.7	4.6	3.7	4.2	3.7	4.6	3.7	4.2
Max Q Clear (g_c+I1), s	22.6	11.3	16.8	22.7	21.0	36.3	9.7	19.2
Green Ext Time (g_e), s	1.4	10.9	0.2	0.0	0.7	0.0	0.2	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	0.20	0.78	1.00	0.00	1.00	0.00	0.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3442		3442		3442		1774	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		5085		1863		5085		1863

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		2787		1583		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Pr/Pm)	
Lanes in Grp	2	0	2	0	2	0	1	0

Grp Vol (v), veh/h	614	0	438	0	563	0	146	0
Grp Sat Flow (s), veh/h/ln	1721	0	1721	0	1721	0	1774	0
Q Serve Time (g_s), s	20.6	0.0	14.8	0.0	19.0	0.0	7.7	0.0
Cycle Q Clear Time (g_c), s	20.6	0.0	14.8	0.0	19.0	0.0	7.7	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	713	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	17.2	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	9.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	2.1	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	696	0	494	0	628	0	354	0
V/C Ratio (X)	0.88	0.00	0.89	0.00	0.90	0.00	0.41	0.00
Avail Cap (c_a), veh/h	870	0	522	0	696	0	354	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	46.0	0.0	49.9	0.0	47.4	0.0	33.9	0.0
Incr Delay (d2), s/veh	8.9	0.0	16.1	0.0	13.5	0.0	3.5	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	54.9	0.0	66.0	0.0	60.9	0.0	37.4	0.0
1st-Term Q (Q1), veh/ln	9.8	0.0	7.1	0.0	9.0	0.0	3.7	0.0
2nd-Term Q (Q2), veh/ln	0.9	0.0	1.1	0.0	1.2	0.0	0.3	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.50	0.00	1.57	0.00	1.51	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	16.0	0.0	12.9	0.0	15.4	0.0	7.3	0.0
%ile Storage Ratio (RQ%)	0.75	0.00	0.93	0.00	1.27	0.00	1.24	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	1	0	3	0	1
Grp Vol (v), veh/h	0	472	0	237	0	1267	0	140
Grp Sat Flow (s), veh/h/ln	0	1695	0	1863	0	1695	0	1863
Q Serve Time (g_s), s	0.0	9.3	0.0	14.3	0.0	28.0	0.0	8.2
Cycle Q Clear Time (g_c), s	0.0	9.3	0.0	14.3	0.0	28.0	0.0	8.2
Lane Grp Cap (c), veh/h	0	1198	0	324	0	1470	0	270
V/C Ratio (X)	0.00	0.39	0.00	0.73	0.00	0.86	0.00	0.52
Avail Cap (c_a), veh/h	0	1198	0	324	0	1470	0	270
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	38.2	0.0	46.4	0.0	39.9	0.0	46.9
Incr Delay (d2), s/veh	0.0	0.2	0.0	13.5	0.0	6.9	0.0	1.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	38.4	0.0	59.9	0.0	46.8	0.0	48.6
1st-Term Q (Q1), veh/ln	0.0	4.3	0.0	7.4	0.0	13.1	0.0	4.2
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	1.2	0.0	0.9	0.0	0.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.79	0.00	1.56	0.00	1.44	0.00	1.78
%ile Back of Q (95%), veh/ln	0.0	7.8	0.0	13.4	0.0	20.2	0.0	7.8
%ile Storage Ratio (RQ%)	0.00	0.06	0.00	0.59	0.00	0.19	0.00	0.29
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	2	0	1	0	1
Grp Vol (v), veh/h	0	107	0	641	0	672	0	605
Grp Sat Flow (s), veh/h/ln	0	1583	0	1393	0	1583	0	1583
Q Serve Time (g_s), s	0.0	5.3	0.0	20.7	0.0	34.3	0.0	17.2
Cycle Q Clear Time (g_c), s	0.0	5.3	0.0	20.7	0.0	34.3	0.0	17.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	1583.3	0.0	1393.3	0.0	1583.3	0.0	1583.3
Prot RT Eff Green (g_R), s	0.0	17.0	0.0	21.7	0.0	16.0	0.0	24.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	600	0	994	0	671	0	550
V/C Ratio (X)	0.00	0.18	0.00	0.64	0.00	1.00	0.00	1.10
Avail Cap (c_a), veh/h	0	600	0	994	0	671	0	550
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	24.5	0.0	31.9	0.0	34.2	0.0	38.7
Incr Delay (d2), s/veh	0.0	0.1	0.0	3.2	0.0	35.0	0.0	68.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	24.7	0.0	35.1	0.0	69.2	0.0	107.6
1st-Term Q (Q1), veh/ln	0.0	2.3	0.0	8.8	0.0	21.9	0.0	17.9
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.4	0.0	6.5	0.0	10.5
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.54	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	4.3	0.0	14.2	0.0	51.1	0.0	51.2
%ile Storage Ratio (RQ%)	0.00	0.23	0.00	1.20	0.00	2.60	0.00	2.89
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.2	0.0	13.8
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.3

Intersection Summary	
HCM 2010 Ctrl Delay	57.2
HCM 2010 LOS	E

Notes

User approved ignoring U-Turning movement.

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	171	1458	493	311	621	228	271	1120	95	306	846	114
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	180	1535	519	327	654	240	285	1179	100	322	891	120
Adj No. of Lanes	3	3	1	3	3	1	3	3	1	3	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	268	1609	501	352	1693	527	393	1184	369	431	1245	388
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.05	0.32	0.32	0.07	0.33	0.33	0.08	0.23	0.23	0.09	0.24	0.24
Ln Grp Delay, s/veh	56.0	51.3	88.8	83.3	29.7	32.7	53.8	68.6	36.1	53.4	41.3	35.6
Ln Grp LOS	E	D	F	F	C	C	D	E	D	D	D	D
Approach Vol, veh/h		2234			1221			1564			1333	
Approach Delay, s/veh		60.4			44.6			63.9			43.7	
Approach LOS		E			D			E			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	15.1	45.9	18.8	34.0	17.0	44.0	17.4	35.4
Change Period (Y+Rc), s	9.0	8.0	9.0	7.5	9.0	8.0	8.5	7.5
Max Green (Gmax), s	8.0	36.0	16.0	26.5	8.0	36.0	16.0	27.0
Max Allow Headway (MAH), s	3.7	4.6	3.7	4.8	3.7	4.6	3.7	4.8
Max Q Clear (g_c+I1), s	6.0	15.6	9.2	28.3	9.4	38.0	8.3	20.3
Green Ext Time (g_e), s	0.1	16.5	0.6	0.0	0.0	0.0	0.6	5.7
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	0.11	1.00	1.00	1.00	0.05	0.94

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	5003		5003		5003		5003	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		5085		5085		5085		5085

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		1583		1583		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	
Lanes in Grp	3	0	3	0	3	0	3	0

Grp Vol (v), veh/h	180	0	322	0	327	0	285	0
Grp Sat Flow (s), veh/h/ln	1668	0	1668	0	1668	0	1668	0
Q Serve Time (g_s), s	4.0	0.0	7.2	0.0	7.4	0.0	6.3	0.0
Cycle Q Clear Time (g_c), s	4.0	0.0	7.2	0.0	7.4	0.0	6.3	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	268	0	431	0	352	0	393	0
V/C Ratio (X)	0.67	0.00	0.75	0.00	0.93	0.00	0.73	0.00
Avail Cap (c_a), veh/h	352	0	703	0	352	0	703	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	52.9	0.0	50.8	0.0	52.6	0.0	51.2	0.0
Incr Delay (d2), s/veh	3.1	0.0	2.6	0.0	30.6	0.0	2.6	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	56.0	0.0	53.4	0.0	83.3	0.0	53.8	0.0
1st-Term Q (Q1), veh/ln	1.8	0.0	3.3	0.0	3.4	0.0	2.9	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.1	0.0	1.0	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	1.80	0.00	1.78	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	3.5	0.0	6.1	0.0	7.8	0.0	5.4	0.0
%ile Storage Ratio (RQ%)	0.17	0.00	0.31	0.00	0.39	0.00	0.26	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	3	0	3	0	3
Grp Vol (v), veh/h	0	654	0	1179	0	1535	0	891
Grp Sat Flow (s), veh/h/ln	0	1695	0	1695	0	1695	0	1695
Q Serve Time (g_s), s	0.0	11.2	0.0	26.3	0.0	33.6	0.0	18.3
Cycle Q Clear Time (g_c), s	0.0	11.2	0.0	26.3	0.0	33.6	0.0	18.3
Lane Grp Cap (c), veh/h	0	1693	0	1184	0	1609	0	1245
V/C Ratio (X)	0.00	0.39	0.00	1.00	0.00	0.95	0.00	0.72
Avail Cap (c_a), veh/h	0	1693	0	1184	0	1609	0	1245
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	29.1	0.0	43.6	0.0	38.1	0.0	39.3
Incr Delay (d2), s/veh	0.0	0.7	0.0	25.0	0.0	13.2	0.0	2.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	29.7	0.0	68.6	0.0	51.3	0.0	41.3
1st-Term Q (Q1), veh/ln	0.0	5.3	0.0	12.2	0.0	15.8	0.0	8.6
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	2.7	0.0	2.0	0.0	0.2

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.71	0.00	1.42	0.00	1.39	0.00	1.55
%ile Back of Q (95%), veh/ln	0.0	9.2	0.0	21.3	0.0	24.6	0.0	13.7
%ile Storage Ratio (RQ%)	0.00	0.14	0.00	0.94	0.00	0.19	0.00	0.50
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	240	0	100	0	519	0	120
Grp Sat Flow (s), veh/h/ln	0	1583	0	1583	0	1583	0	1583
Q Serve Time (g_s), s	0.0	13.6	0.0	5.9	0.0	36.0	0.0	7.0
Cycle Q Clear Time (g_c), s	0.0	13.6	0.0	5.9	0.0	36.0	0.0	7.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	527	0	369	0	501	0	388
V/C Ratio (X)	0.00	0.46	0.00	0.27	0.00	1.04	0.00	0.31
Avail Cap (c_a), veh/h	0	527	0	369	0	501	0	388
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	29.8	0.0	35.7	0.0	38.9	0.0	35.1
Incr Delay (d2), s/veh	0.0	2.8	0.0	0.4	0.0	49.9	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	32.7	0.0	36.1	0.0	88.8	0.0	35.6
1st-Term Q (Q1), veh/ln	0.0	5.9	0.0	2.6	0.0	15.7	0.0	3.1
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.0	0.0	6.9	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.65	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	10.5	0.0	4.7	0.0	40.7	0.0	5.6
%ile Storage Ratio (RQ%)	0.00	0.86	0.00	0.46	0.00	3.50	0.00	0.28
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	4.5	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	54.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	432	1344	37	162	792	125	42	1040	21	145	1260	399
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	455	1415	39	171	834	132	44	1095	22	153	1326	420
Adj No. of Lanes	3	3	1	2	3	1	2	3	1	2	3	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	542	1444	449	192	1177	366	118	1236	385	474	1760	1267
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.11	0.28	0.28	0.06	0.23	0.23	0.03	0.24	0.24	0.14	0.35	0.35
Ln Grp Delay, s/veh	60.9	60.7	30.9	90.4	44.7	40.2	56.8	49.1	33.8	47.0	36.6	21.1
Ln Grp LOS	E	E	C	F	D	D	E	D	C	D	D	C
Approach Vol, veh/h		1909			1137			1161			1899	
Approach Delay, s/veh		60.1			51.0			49.1			34.0	
Approach LOS		E			D			D			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	21.1	34.9	24.5	35.7	15.0	41.0	12.5	47.7
Change Period (Y+Rc), s	8.5	8.0	8.5	7.5	8.5	8.0	8.5	7.5
Max Green (Gmax), s	13.5	26.0	16.0	32.0	6.5	33.0	16.5	31.5
Max Allow Headway (MAH), s	3.7	4.8	3.7	4.8	3.7	4.8	3.7	4.8
Max Q Clear (g_c+I1), s	12.4	19.5	6.7	26.1	7.7	34.1	3.5	28.8
Green Ext Time (g_e), s	0.2	5.6	0.3	2.1	0.0	0.0	0.1	2.5
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	0.00	0.98	1.00	0.00	0.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	5003		3442		3442		3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		5085		5085		5085		5085

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		1583		1583		2787

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	
Lanes in Grp	3	0	2	0	2	0	2	0

Grp Vol (v), veh/h	455	0	153	0	171	0	44	0
Grp Sat Flow (s), veh/h/ln	1668	0	1721	0	1721	0	1721	0
Q Serve Time (g_s), s	10.4	0.0	4.7	0.0	5.7	0.0	1.5	0.0
Cycle Q Clear Time (g_c), s	10.4	0.0	4.7	0.0	5.7	0.0	1.5	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	542	0	474	0	192	0	118	0
V/C Ratio (X)	0.84	0.00	0.32	0.00	0.89	0.00	0.37	0.00
Avail Cap (c_a), veh/h	581	0	474	0	192	0	489	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	50.8	0.0	45.2	0.0	54.5	0.0	54.9	0.0
Incr Delay (d2), s/veh	10.0	0.0	1.8	0.0	35.9	0.0	1.9	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	60.9	0.0	47.0	0.0	90.4	0.0	56.8	0.0
1st-Term Q (Q1), veh/ln	4.8	0.0	2.2	0.0	2.7	0.0	0.7	0.0
2nd-Term Q (Q2), veh/ln	0.5	0.0	0.1	0.0	1.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.71	0.00	1.80	0.00	1.80	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	9.0	0.0	4.2	0.0	6.6	0.0	1.3	0.0
%ile Storage Ratio (RQ%)	0.38	0.00	0.22	0.00	0.30	0.00	0.06	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	3	0	3	0	3
Grp Vol (v), veh/h	0	834	0	1095	0	1415	0	1326
Grp Sat Flow (s), veh/h/ln	0	1695	0	1695	0	1695	0	1695
Q Serve Time (g_s), s	0.0	17.5	0.0	24.1	0.0	32.1	0.0	26.8
Cycle Q Clear Time (g_c), s	0.0	17.5	0.0	24.1	0.0	32.1	0.0	26.8
Lane Grp Cap (c), veh/h	0	1177	0	1236	0	1444	0	1760
V/C Ratio (X)	0.00	0.71	0.00	0.89	0.00	0.98	0.00	0.75
Avail Cap (c_a), veh/h	0	1177	0	1400	0	1444	0	1760
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	41.1	0.0	42.5	0.0	41.3	0.0	33.6
Incr Delay (d2), s/veh	0.0	3.6	0.0	6.6	0.0	19.4	0.0	3.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	44.7	0.0	49.1	0.0	60.7	0.0	36.6
1st-Term Q (Q1), veh/ln	0.0	8.2	0.0	11.3	0.0	15.1	0.0	12.5
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.8	0.0	2.6	0.0	0.5

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.56	0.00	1.47	0.00	1.39	0.00	1.45
%ile Back of Q (95%), veh/ln	0.0	13.4	0.0	17.7	0.0	24.6	0.0	18.9
%ile Storage Ratio (RQ%)	0.00	0.35	0.00	0.67	0.00	0.38	0.00	0.62
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	2
Grp Vol (v), veh/h	0	132	0	22	0	39	0	420
Grp Sat Flow (s), veh/h/ln	0	1583	0	1583	0	1583	0	1393
Q Serve Time (g_s), s	0.0	8.1	0.0	1.2	0.0	2.1	0.0	11.3
Cycle Q Clear Time (g_c), s	0.0	8.1	0.0	1.2	0.0	2.1	0.0	11.3
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1393.3
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.6
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	366	0	385	0	449	0	1267
V/C Ratio (X)	0.00	0.36	0.00	0.06	0.00	0.09	0.00	0.33
Avail Cap (c_a), veh/h	0	366	0	436	0	449	0	1267
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	37.5	0.0	33.8	0.0	30.6	0.0	20.4
Incr Delay (d2), s/veh	0.0	2.7	0.0	0.1	0.0	0.4	0.0	0.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	40.2	0.0	33.8	0.0	30.9	0.0	21.1
1st-Term Q (Q1), veh/ln	0.0	3.6	0.0	0.5	0.0	0.9	0.0	4.3
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.80	0.00	1.78
%ile Back of Q (95%), veh/ln	0.0	6.9	0.0	1.0	0.0	1.7	0.0	7.9
%ile Storage Ratio (RQ%)	0.00	0.57	0.00	0.05	0.00	0.06	0.00	0.58
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	48.2
HCM 2010 LOS	D

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	3	961	4	11	344	15	1	0	16	60	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	325	-	-	289	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	1012	4	12	362	16	1	0	17	63	0	5

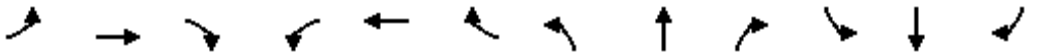
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	378	0	0	1016	0	0	1224	1421	508	905	1415	189
Stage 1	-	-	-	-	-	-	1020	1020	-	393	393	-
Stage 2	-	-	-	-	-	-	204	401	-	512	1022	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1177	-	-	678	-	-	135	135	510	232	136	821
Stage 1	-	-	-	-	-	-	253	312	-	603	604	-
Stage 2	-	-	-	-	-	-	779	599	-	513	312	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1177	-	-	678	-	-	132	132	510	221	133	821
Mov Cap-2 Maneuver	-	-	-	-	-	-	132	132	-	221	133	-
Stage 1	-	-	-	-	-	-	252	311	-	601	593	-
Stage 2	-	-	-	-	-	-	760	588	-	495	311	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.3	13.6	26.6
HCM LOS			B	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	436	1177	-	-	678	-	-	234
HCM Lane V/C Ratio	0.041	0.003	-	-	0.017	-	-	0.292
HCM Control Delay (s)	13.6	8.1	-	-	10.4	-	-	26.6
HCM Lane LOS	B	A	-	-	B	-	-	D
HCM 95th %tile Q(veh)	0.1	0	-	-	0.1	-	-	1.2

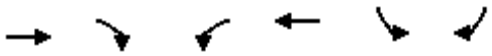
Build Alternative 2040 AM

6: West Ramps & Northlake Blvd Corridor: Northlake Boulevard



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1783	727	1041	1086	0	0	0	0	655	0	627
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0	4.0	7.0	6.5					6.0		6.0
Lane Util. Factor		0.81	1.00	0.97	0.91					0.94		0.88
Frt		1.00	0.85	1.00	1.00					1.00		0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (prot)		7544	1583	3433	5085					4990		2787
Flt Permitted		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (perm)		7544	1583	3433	5085					4990		2787
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	1877	765	1096	1143	0	0	0	0	689	0	660
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	474
Lane Group Flow (vph)	0	1877	765	1096	1143	0	0	0	0	689	0	186
Turn Type		NA	Free	Prot	NA					Prot		Perm
Protected Phases		6		5	2					3		
Permitted Phases			Free									6
Actuated Green, G (s)		25.4	90.0	30.0	61.9					15.6		25.4
Effective Green, g (s)		25.4	90.0	30.0	61.9					15.6		25.4
Actuated g/C Ratio		0.28	1.00	0.33	0.69					0.17		0.28
Clearance Time (s)		6.0		7.0	6.5					6.0		6.0
Vehicle Extension (s)		3.0		3.0	3.0					3.0		3.0
Lane Grp Cap (vph)		2129	1583	1144	3497					864		786
v/s Ratio Prot		c0.25		c0.32	0.22					c0.14		
v/s Ratio Perm			0.48									0.07
v/c Ratio		0.88	0.48	0.96	0.33					0.80		0.24
Uniform Delay, d1		30.9	0.0	29.4	5.7					35.7		24.8
Progression Factor		1.00	1.00	1.34	0.33					1.00		1.00
Incremental Delay, d2		5.7	1.1	10.3	0.1					5.2		0.7
Delay (s)		36.6	1.1	49.8	2.0					40.9		25.6
Level of Service		D	A	D	A					D		C
Approach Delay (s)		26.3			25.4			0.0			33.4	
Approach LOS		C			C			A			C	

Intersection Summary			
HCM 2000 Control Delay	27.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	19.0
Intersection Capacity Utilization	80.9%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Lane Group	EBT	EBR	WBL	WBT	SBL	SBR
Lane Group Flow (vph)	785	247	929	832	813	58
v/c Ratio	0.41	0.16	1.01	0.91dl	0.87	0.04
Control Delay	25.9	0.2	69.3	43.2	47.2	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	25.9	0.2	69.3	43.2	47.2	0.0
Queue Length 50th (ft)	102	0	~268	222	160	0
Queue Length 95th (ft)	131	0	#428	#306	#223	0
Internal Link Dist (ft)	2056			679		
Turn Bay Length (ft)		433				
Base Capacity (vph)	1922	1583	919	975	942	1583
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.41	0.16	1.01	0.85	0.86	0.04

Intersection Summary

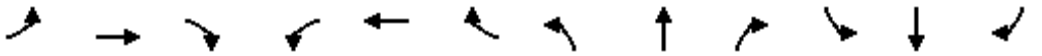
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Build Alternative 2040 AM

9: East Ramps & Northlake Blvd Corridor: Northlake Boulevard



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	945	1493	0	0	1360	624	767	0	1154	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	6.0			6.5	4.0	6.0		6.5			
Lane Util. Factor	0.97	0.91			0.81	1.00	0.97		0.88			
Frt	1.00	1.00			1.00	0.85	1.00		0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (prot)	3433	5085			7544	1583	3433		2787			
Flt Permitted	0.95	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (perm)	3433	5085			7544	1583	3433		2787			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	995	1572	0	0	1432	657	807	0	1215	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	687	0	0	0
Lane Group Flow (vph)	995	1572	0	0	1432	657	807	0	528	0	0	0
Turn Type	Prot	NA			NA	Free	Prot		Perm			
Protected Phases	1	6			2		7					
Permitted Phases						Free			2			
Actuated Green, G (s)	27.1	55.8			21.2	90.0	22.2		21.2			
Effective Green, g (s)	27.1	55.8			21.2	90.0	22.2		21.2			
Actuated g/C Ratio	0.30	0.62			0.24	1.00	0.25		0.24			
Clearance Time (s)	7.0	6.0			6.5		6.0		6.5			
Vehicle Extension (s)	3.0	3.0			3.0		3.0		3.0			
Lane Grp Cap (vph)	1033	3152			1777	1583	846		656			
v/s Ratio Prot	c0.29	0.31			c0.19		c0.24					
v/s Ratio Perm						0.41			0.19			
v/c Ratio	0.96	0.50			0.81	0.42	0.95		0.80			
Uniform Delay, d1	31.0	9.4			32.5	0.0	33.4		32.4			
Progression Factor	0.46	0.00			1.00	1.00	1.00		1.00			
Incremental Delay, d2	12.1	0.3			4.0	0.8	20.4		10.1			
Delay (s)	26.5	0.3			36.5	0.8	53.8		42.6			
Level of Service	C	A			D	A	D		D			
Approach Delay (s)		10.4			25.3			47.1			0.0	
Approach LOS		B			C			D			A	

Intersection Summary			
HCM 2000 Control Delay	26.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	80.9%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	WBT	WBR	NBL	NBR
Lane Group Flow (vph)	38	1560	1641	466	120	1093
v/c Ratio	0.24	1.02	0.42	0.29	0.19	0.70
Control Delay	26.2	56.6	10.1	0.5	31.6	5.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	26.2	56.6	10.1	0.5	31.6	5.0
Queue Length 50th (ft)	8	~357	146	0	29	0
Queue Length 95th (ft)	m15	#451	174	0	54	44
Internal Link Dist (ft)		679	2740			
Turn Bay Length (ft)				400		
Base Capacity (vph)	159	1525	3929	1583	648	1565
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.24	1.02	0.42	0.29	0.19	0.70

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

HOOD ROAD CORRIDOR

Arterial Level of Service: EB Hood Road

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Central Blvd	II	45	133.7	68.7	202.4	1.67	29.7	B
Military Trail	II	45	31.0	53.1	84.1	0.31	13.4	E
Total	II		164.7	121.8	286.5	1.98	24.9	C

Arterial Level of Service: WB Hood Road

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Military Trail	II	45	14.9	29.2	44.1	0.14	11.1	F
Central Blvd	II	45	31.0	39.5	70.5	0.31	16.0	E
Total	II		45.9	68.7	114.6	0.45	14.1	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	168	372	183	617	113	6	150	1020	772	404	1189	157
Future Volume (veh/h)	168	372	183	617	113	6	150	1020	772	404	1189	157
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	177	392	193	649	119	6	158	1074	813	425	1252	165
Adj No. of Lanes	2	2	1	2	2	1	2	2	1	2	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	230	475	308	674	931	417	207	1279	572	441	1519	680
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.07	0.13	0.13	0.20	0.26	0.26	0.06	0.36	0.36	0.13	0.43	0.43
Ln Grp Delay, s/veh	68.9	65.4	52.4	78.7	37.4	17.9	76.9	45.6	212.4	91.4	38.7	25.0
Ln Grp LOS	E	E	D	E	D	B	E	D	F	F	D	C
Approach Vol, veh/h		762			774			2045			1842	
Approach Delay, s/veh		62.9			71.9			114.3			49.6	
Approach LOS		E			E			F			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	2	1	3	4	5	6	7	8
Case No	3.0	2.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	54.0	23.0	32.0	23.8	14.0	63.0	14.9	40.9
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green (Gmax), s	48.0	17.0	26.0	20.0	8.0	57.0	12.0	34.0
Max Allow Headway (MAH), s	4.5	4.6	3.7	4.6	3.7	4.6	3.7	4.6
Max Q Clear (g_c+I1), s	39.0	18.3	26.8	16.9	8.0	43.5	8.7	5.4
Green Ext Time (g_e), s	6.3	0.0	0.0	1.0	0.0	8.4	0.2	3.9
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt		1	3		5		7	
Mvmt Sat Flow, veh/h		3442	3442		3442		3442	

Through Movement Data								
Assigned Mvmt	2			4		6		8
Mvmt Sat Flow, veh/h	3539			3539		3539		3539

Right-Turn Movement Data								
Assigned Mvmt	12			14		16		18
Mvmt Sat Flow, veh/h	1583			1583		1583		1583

Left Lane Group Data								
Assigned Mvmt	0	1	3	0	5	0	7	0
Lane Assignment		(Prot)	(Prot)		(Prot)		(Prot)	

Lanes in Grp	0	2	2	0	2	0	2	0
Grp Vol (v), veh/h	0	425	649	0	158	0	177	0
Grp Sat Flow (s), veh/h/ln	0	1721	1721	0	1721	0	1721	0
Q Serve Time (g_s), s	0.0	16.3	24.8	0.0	6.0	0.0	6.7	0.0
Cycle Q Clear Time (g_c), s	0.0	16.3	24.8	0.0	6.0	0.0	6.7	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	441	674	0	207	0	230	0
V/C Ratio (X)	0.00	0.96	0.96	0.00	0.76	0.00	0.77	0.00
Avail Cap (c_a), veh/h	0	441	674	0	207	0	311	0
Upstream Filter (I)	0.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	0.0	57.6	52.9	0.0	61.5	0.0	61.0	0.0
Incr Delay (d2), s/veh	0.0	33.8	25.8	0.0	15.4	0.0	7.9	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	91.4	78.7	0.0	76.9	0.0	68.9	0.0
1st-Term Q (Q1), veh/ln	0.0	7.7	11.8	0.0	2.9	0.0	3.2	0.0
2nd-Term Q (Q2), veh/ln	0.0	2.1	2.4	0.0	0.4	0.0	0.3	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.52	1.43	0.00	1.80	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	0.0	14.9	20.4	0.0	5.9	0.0	6.2	0.0
%ile Storage Ratio (RQ%)	0.00	1.26	0.94	0.00	0.43	0.00	0.29	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	2	0	0	4	0	6	0	8
Lane Assignment	T			T		T		T
Lanes in Grp	2	0	0	2	0	2	0	2
Grp Vol (v), veh/h	1074	0	0	392	0	1252	0	119
Grp Sat Flow (s), veh/h/ln	1770	0	0	1770	0	1770	0	1770
Q Serve Time (g_s), s	37.0	0.0	0.0	14.3	0.0	41.5	0.0	3.4
Cycle Q Clear Time (g_c), s	37.0	0.0	0.0	14.3	0.0	41.5	0.0	3.4
Lane Grp Cap (c), veh/h	1279	0	0	475	0	1519	0	931
V/C Ratio (X)	0.84	0.00	0.00	0.83	0.00	0.82	0.00	0.13
Avail Cap (c_a), veh/h	1279	0	0	533	0	1519	0	931
Upstream Filter (I)	1.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	38.9	0.0	0.0	56.0	0.0	33.5	0.0	37.3
Incr Delay (d2), s/veh	6.7	0.0	0.0	9.4	0.0	5.2	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	45.6	0.0	0.0	65.4	0.0	38.7	0.0	37.4
1st-Term Q (Q1), veh/ln	18.0	0.0	0.0	7.0	0.0	20.2	0.0	1.7

2nd-Term Q (Q2), veh/ln	1.2	0.0	0.0	0.6	0.0	1.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.37	0.00	0.00	1.59	0.00	1.36	0.00	1.80
%ile Back of Q (95%), veh/ln	26.4	0.0	0.0	12.2	0.0	28.8	0.0	3.0
%ile Storage Ratio (RQ%)	1.53	0.00	0.00	0.41	0.00	0.77	0.00	0.05
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	12	0	0	14	0	16	0	18
Lane Assignment	R			R		R		R
Lanes in Grp	1	0	0	1	0	1	0	1
Grp Vol (v), veh/h	813	0	0	193	0	165	0	6
Grp Sat Flow (s), veh/h/ln	1583	0	0	1583	0	1583	0	1583
Q Serve Time (g_s), s	26.5	0.0	0.0	14.9	0.0	8.8	0.0	0.3
Cycle Q Clear Time (g_c), s	26.5	0.0	0.0	14.9	0.0	8.8	0.0	0.3
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	1583.3	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	8.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	1.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	572	0	0	308	0	680	0	417
V/C Ratio (X)	1.42	0.00	0.00	0.63	0.00	0.24	0.00	0.01
Avail Cap (c_a), veh/h	572	0	0	334	0	680	0	417
Upstream Filter (I)	1.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	12.9	0.0	0.0	49.1	0.0	24.1	0.0	17.9
Incr Delay (d2), s/veh	199.4	0.0	0.0	3.3	0.0	0.8	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	212.4	0.0	0.0	52.4	0.0	25.0	0.0	17.9
1st-Term Q (Q1), veh/ln	13.4	0.0	0.0	6.5	0.0	3.8	0.0	0.2
2nd-Term Q (Q2), veh/ln	31.7	0.0	0.0	0.3	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	0.00	1.63	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	81.1	0.0	0.0	11.0	0.0	7.2	0.0	0.3
%ile Storage Ratio (RQ%)	7.36	0.00	0.00	0.37	0.00	0.55	0.00	0.02
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	60.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	79.1
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	410	806	231	294	243	57	13	646	371	180	673	569
Future Volume (veh/h)	410	806	231	294	243	57	13	646	371	180	673	569
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	432	848	243	309	256	60	14	680	391	189	708	599
Adj No. of Lanes	3	2	1	3	2	1	2	3	2	2	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	559	885	396	375	755	338	46	1030	773	228	1299	581
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.11	0.25	0.25	0.08	0.21	0.21	0.01	0.20	0.20	0.07	0.26	0.26
Ln Grp Delay, s/veh	40.0	50.4	29.4	50.3	27.0	26.0	42.8	32.7	26.6	58.7	27.4	70.7
Ln Grp LOS	D	D	C	D	C	C	D	C	C	E	C	F
Approach Vol, veh/h		1523			625			1085			1496	
Approach Delay, s/veh		44.1			38.4			30.6			48.7	
Approach LOS		D			D			C			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	9.6	27.9	17.4	25.1	13.8	23.7	14.5	28.0
Change Period (Y+Rc), s	8.5	7.5	8.5	8.0	8.5	7.5	8.5	8.0
Max Green (Gmax), s	4.0	17.5	9.9	16.1	5.3	16.2	6.0	20.0
Max Allow Headway (MAH), s	3.7	4.5	3.7	4.7	3.7	4.5	3.7	4.7
Max Q Clear (g_c+I1), s	2.3	22.4	8.7	6.9	6.3	11.8	6.9	20.9
Green Ext Time (g_e), s	0.0	0.0	0.2	5.1	0.0	3.7	0.0	0.0
Prob of Phs Call (p_c)	0.27	1.00	1.00	1.00	0.99	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.66	1.00	0.00	1.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3442		5003		3442		5003	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		5085		3539		5085		3539

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		1583		2787		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	3	0	2	0	3	0
Grp Vol (v), veh/h	14	0	432	0	189	0	309	0
Grp Sat Flow (s), veh/h/ln	1721	0	1668	0	1721	0	1668	0
Q Serve Time (g_s), s	0.3	0.0	6.7	0.0	4.3	0.0	4.9	0.0
Cycle Q Clear Time (g_c), s	0.3	0.0	6.7	0.0	4.3	0.0	4.9	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	46	0	559	0	228	0	375	0
V/C Ratio (X)	0.30	0.00	0.77	0.00	0.83	0.00	0.82	0.00
Avail Cap (c_a), veh/h	172	0	619	0	228	0	375	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	39.1	0.0	34.5	0.0	36.9	0.0	36.5	0.0
Incr Delay (d2), s/veh	3.7	0.0	5.5	0.0	21.8	0.0	13.8	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	42.8	0.0	40.0	0.0	58.7	0.0	50.3	0.0
1st-Term Q (Q1), veh/ln	0.2	0.0	3.1	0.0	2.0	0.0	2.2	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.3	0.0	0.7	0.0	0.5	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	1.80	0.00	1.80	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	0.3	0.0	6.1	0.0	4.9	0.0	4.9	0.0
%ile Storage Ratio (RQ%)	0.02	0.00	0.29	0.00	0.21	0.00	0.23	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	2	0	3	0	2
Grp Vol (v), veh/h	0	708	0	256	0	680	0	848
Grp Sat Flow (s), veh/h/ln	0	1695	0	1770	0	1695	0	1770
Q Serve Time (g_s), s	0.0	9.6	0.0	4.9	0.0	9.8	0.0	18.9
Cycle Q Clear Time (g_c), s	0.0	9.6	0.0	4.9	0.0	9.8	0.0	18.9
Lane Grp Cap (c), veh/h	0	1299	0	755	0	1030	0	885
V/C Ratio (X)	0.00	0.55	0.00	0.34	0.00	0.66	0.00	0.96
Avail Cap (c_a), veh/h	0	1299	0	755	0	1030	0	885
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	25.8	0.0	26.7	0.0	29.4	0.0	29.6
Incr Delay (d2), s/veh	0.0	1.6	0.0	0.3	0.0	3.3	0.0	20.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	27.4	0.0	27.0	0.0	32.7	0.0	50.4
1st-Term Q (Q1), veh/ln	0.0	4.5	0.0	2.4	0.0	4.6	0.0	9.2

2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.0	0.0	0.3	0.0	2.6
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.75	0.00	1.80	0.00	1.74	0.00	1.48
%ile Back of Q (95%), veh/ln	0.0	8.3	0.0	4.3	0.0	8.5	0.0	17.4
%ile Storage Ratio (RQ%)	0.00	0.22	0.00	0.17	0.00	0.29	0.00	0.29
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	2	0	1
Grp Vol (v), veh/h	0	599	0	60	0	391	0	243
Grp Sat Flow (s), veh/h/ln	0	1583	0	1583	0	1393	0	1583
Q Serve Time (g_s), s	0.0	20.4	0.0	2.5	0.0	9.4	0.0	10.9
Cycle Q Clear Time (g_c), s	0.0	20.4	0.0	2.5	0.0	9.4	0.0	10.9
Prot RT Sat Flow (s_R), veh/h/ln	0.0	1583.3	0.0	0.0	0.0	1393.3	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	8.9	0.0	0.0	0.0	6.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	581	0	338	0	773	0	396
V/C Ratio (X)	0.00	1.03	0.00	0.18	0.00	0.51	0.00	0.61
Avail Cap (c_a), veh/h	0	581	0	338	0	773	0	396
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	25.3	0.0	25.7	0.0	24.3	0.0	26.6
Incr Delay (d2), s/veh	0.0	45.4	0.0	0.2	0.0	2.4	0.0	2.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	70.7	0.0	26.0	0.0	26.6	0.0	29.4
1st-Term Q (Q1), veh/ln	0.0	12.7	0.0	1.1	0.0	3.6	0.0	4.7
2nd-Term Q (Q2), veh/ln	0.0	7.3	0.0	0.0	0.0	0.3	0.0	0.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.80	0.00	1.73
%ile Back of Q (95%), veh/ln	0.0	36.0	0.0	2.0	0.0	7.0	0.0	8.7
%ile Storage Ratio (RQ%)	0.00	1.53	0.00	0.16	0.00	0.58	0.00	0.66
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	4.4	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	41.7
HCM 2010 LOS	D

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Traffic Vol, veh/h	22	630	399	61	26	13
Future Vol, veh/h	22	630	399	61	26	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	150	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	23	663	420	64	27	14

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	420	0	-	0	1129	420
Stage 1	-	-	-	-	420	-
Stage 2	-	-	-	-	709	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1139	-	-	-	226	633
Stage 1	-	-	-	-	663	-
Stage 2	-	-	-	-	488	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1139	-	-	-	219	633
Mov Cap-2 Maneuver	-	-	-	-	219	-
Stage 1	-	-	-	-	663	-
Stage 2	-	-	-	-	472	-

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	20.1
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1139	-	-	-	280
HCM Lane V/C Ratio	0.02	-	-	-	0.147
HCM Control Delay (s)	8.2	0	-	-	20.1
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.5

MILITARY TRAIL CORRIDOR

Arterial Level of Service: NB N Military Trail

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
PGA Blvd	II	45	18.9	57.0	75.9	0.17	8.2	F
Kyoto Gardens Dr	II	45	43.4	20.2	63.6	0.49	27.9	C
Hood Road	II	45	104.9	29.0	133.9	1.31	35.2	A
Donald Ross	II	45	102.8	62.2	165.0	1.29	28.0	B
Total	II		270.0	168.4	438.4	3.26	26.8	C

Arterial Level of Service: SB N Military Trail

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Donald Ross	II	45	22.3	48.2	70.5	0.20	10.4	F
Hood Road	II	45	102.8	20.1	122.9	1.29	37.7	A
Kyoto Gardens Dr	II	45	104.9	19.3	124.2	1.31	38.0	A
PGA Blvd	II	45	43.4	43.2	86.6	0.49	20.5	D
Total	II		273.4	130.8	404.2	3.29	29.3	B

Movement	WBL	WBR	WBR2	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SER
Lane Configurations											
Volume (veh/h)	249	127	68	49	931	248	84	1107	2	0	0
Number	7	14	14	1	6	16	5	2	12		
Initial Q, veh	0	0	0	0	0	0	0	0	0		
Ped-Bike Adj (A_pbT)	1.00	1.00	1.00	1.00		1.00	1.00		1.00		
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900		
Adj Flow Rate, veh/h	262	72	72	52	980	261	88	1165	2		
Adj No. of Lanes	2	1	1	1	3	1	1	3	0		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2		
Opposing Right Turn Influence	Yes			Yes			Yes				
Cap, veh/h	446	205	205	290	1631	508	111	1738	3		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Prop Arrive On Green	0.13	0.13	0.13	0.04	0.32	0.32	0.06	0.33	0.33		
Ln Grp Delay, s/veh	21.0	20.2	20.2	11.3	15.4	17.0	34.0	17.1	19.6		
Ln Grp LOS	C	C	C	B	B	B	C	B	B		

Approach Vol, veh/h	334				1293			1255			Timer:
Approach Delay, s/veh	20.8				15.6			19.1			Assigned Phs
Approach LOS	C				B			B			Case No
Phs Duration (G+Y+Rc), s		10.0	24.0		14.3	10.5	23.5				
Change Period (Y+Rc), s		8.0	8.0		8.0	7.5	8.0				
Max Green (Gmax), s		4.0	16.0		16.0	5.2	15.3				
Max Allow Headway (MAH), s		3.7	4.8		3.8	3.7	4.8				
Max Q Clear (g_c+I1), s		2.9	11.2		5.5	4.4	9.8				
Green Ext Time (g_e), s		0.0	4.2		0.8	0.0	4.7				
Prob of Phs Call (p_c)		0.50	1.00		1.00	0.69	1.00				
Prob of Max Out (p_x)		1.00	0.00		0.01	1.00	0.00				

Left-Turn Movement Data											
Assigned Mvmt		1			7	5					
Mvmt Sat Flow, veh/h		1774			3442	1774					

Through Movement Data											
Assigned Mvmt			2		4		6				
Mvmt Sat Flow, veh/h			5242		0		5085				

Right-Turn Movement Data											
Assigned Mvmt			12		14		16				
Mvmt Sat Flow, veh/h			9		1583		1583				

Left Lane Group Data											
Assigned Mvmt		1	0	0	7	5	0	0	0		
Lane Assignment		(Pr/Pm)				(Prot)					
Lanes in Grp		1	0	0	2	1	0	0	0		
Grp Vol (v), veh/h		52	0	0	262	88	0	0	0		
Grp Sat Flow (s), veh/h/ln		1774	0	0	1721	1774	0	0	0		
Q Serve Time (g_s), s		0.9	0.0	0.0	3.5	2.4	0.0	0.0	0.0		

Cycle Q Clear Time (g_c), s	0.9	0.0	0.0	3.5	2.4	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	479	0	0	1721	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	15.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	6.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	290	0	0	446	111	0	0	0
V/C Ratio (X)	0.18	0.00	0.00	0.59	0.79	0.00	0.00	0.00
Avail Cap (c_a), veh/h	363	0	0	1141	191	0	0	0
Upstream Filter (I)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	11.0	0.0	0.0	19.8	22.3	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.0	0.0	1.2	11.7	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	11.3	0.0	0.0	21.0	34.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.4	0.0	0.0	1.6	1.1	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.4	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	0.00	1.80	1.80	0.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.8	0.0	0.0	3.1	2.7	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.07	0.00	0.00	0.11	0.18	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	3	0	0
Grp Vol (v), veh/h	0	753	0	0	0	980	0	0
Grp Sat Flow (s), veh/h/ln	0	1695	0	0	0	1695	0	0
Q Serve Time (g_s), s	0.0	9.2	0.0	0.0	0.0	7.8	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	9.2	0.0	0.0	0.0	7.8	0.0	0.0
Lane Grp Cap (c), veh/h	0	1124	0	0	0	1631	0	0
V/C Ratio (X)	0.00	0.67	0.00	0.00	0.00	0.60	0.00	0.00
Avail Cap (c_a), veh/h	0	1124	0	0	0	1631	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	13.9	0.0	0.0	0.0	13.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	3.2	0.0	0.0	0.0	1.6	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	17.1	0.0	0.0	0.0	15.4	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	4.3	0.0	0.0	0.0	3.6	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	0.0	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.75	0.00	1.00	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	8.4	0.0	0.0	0.0	7.0	0.0	0.0

%ile Storage Ratio (RQ%)	0.00	0.03	0.00	0.00	0.00	0.45	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment		T+R		R		R		
Lanes in Grp	0	1	0	1	0	1	0	0
Grp Vol (v), veh/h	0	414	0	72	0	261	0	0
Grp Sat Flow (s), veh/h/ln	0	1861	0	1583	0	1583	0	0
Q Serve Time (g_s), s	0.0	9.2	0.0	2.0	0.0	6.5	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	9.2	0.0	2.0	0.0	6.5	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	617	0	205	0	508	0	0
V/C Ratio (X)	0.00	0.67	0.00	0.35	0.00	0.51	0.00	0.00
Avail Cap (c_a), veh/h	0	617	0	525	0	508	0	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	13.9	0.0	19.2	0.0	13.3	0.0	0.0
Incr Delay (d2), s/veh	0.0	5.7	0.0	1.0	0.0	3.7	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	19.6	0.0	20.2	0.0	17.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	4.7	0.0	1.8	0.0	2.8	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	1.0	0.0	0.1	0.0	0.5	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.69	0.00	1.80	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	9.6	0.0	3.3	0.0	6.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.04	0.00	0.12	0.00	0.51	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	17.7
HCM 2010 LOS	B

NORTHLAKE BOULEVARD CORRIDOR

Arterial Level of Service: EB Northlake Blvd

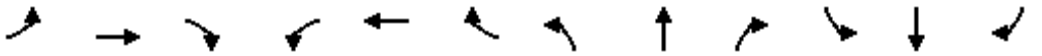
Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Keating Dr	II	45	17.3	40.9	58.2	0.16	9.8	F
West Ramps	II	45	12.7	37.1	49.8	0.12	8.4	F
East Ramps	II	45	11.1	0.3	11.4	0.10	32.2	B
Roan Ln	II	45	8.8	0.3	9.1	0.08	32.1	B
Sandtree Dr	II	45	13.5	43.0	56.5	0.12	7.9	F
Total	II		63.4	121.6	185.0	0.58	11.3	F

Arterial Level of Service: WB Northlake Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Sunrise Dr	II	45	15.3	44.1	59.4	0.14	8.5	F
Roan Ln	II	45	13.5	5.0	18.5	0.12	24.1	C
East Ramps	II	45	8.8	36.7	45.5	0.08	6.4	F
West Ramps	II	45	11.1	2.0	13.1	0.10	28.0	B
Keating Dr	II	45	12.7	8.9	21.6	0.12	19.3	D
Total	II		61.4	96.7	158.1	0.56	12.8	F

Build Alternative 2040 AM

3: Keating Dr & Northlake Blvd Corridor: Northlake Boulevard

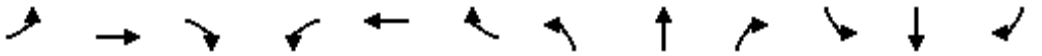


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	2334	128	281	1540	82	79	0	154	178	3	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0	4.0	5.0	5.0	6.0	6.0	6.0		6.0	
Lane Util. Factor		0.91	1.00	1.00	0.91	1.00	0.95	0.95	1.00		0.95	
Frt		1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85		1.00	
Flt Protected		1.00	1.00	0.95	1.00	1.00	0.95	0.95	1.00		0.95	
Satd. Flow (prot)		5085	1583	1770	5085	1583	1681	1681	1583		3373	
Flt Permitted		1.00	1.00	0.08	1.00	1.00	0.95	0.44	1.00		0.72	
Satd. Flow (perm)		5085	1583	144	5085	1583	1681	783	1583		2556	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	2457	135	296	1621	86	83	0	162	187	3	0
RTOR Reduction (vph)	0	0	70	0	0	29	0	0	124	0	0	0
Lane Group Flow (vph)	0	2457	65	296	1621	57	41	42	38	0	190	0
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	Prot	NA	Perm	pm+pt	NA	
Protected Phases		6		5	2		7	4		3	8	
Permitted Phases	6		6	2		2			4	8		
Actuated Green, G (s)		47.8	47.8	65.8	65.8	65.8	3.2	23.2	23.2		14.0	
Effective Green, g (s)		47.8	47.8	65.8	65.8	65.8	3.2	23.2	23.2		14.0	
Actuated g/C Ratio		0.48	0.48	0.66	0.66	0.66	0.03	0.23	0.23		0.14	
Clearance Time (s)		5.0	5.0	4.0	5.0	5.0	6.0	6.0	6.0		6.0	
Vehicle Extension (s)		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)		2430	756	322	3345	1041	53	210	367		357	
v/s Ratio Prot		c0.48		c0.13	0.32		c0.02	0.01				
v/s Ratio Perm			0.04	0.48		0.04		0.04	0.02		c0.07	
v/c Ratio		1.01	0.09	0.92	0.48	0.05	0.77	0.20	0.10		0.99dl	
Uniform Delay, d1		26.1	14.2	31.6	8.6	6.1	48.0	30.9	30.2		40.0	
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	
Incremental Delay, d2		21.0	0.2	29.9	0.5	0.1	49.7	0.5	0.1		1.5	
Delay (s)		47.1	14.4	61.5	9.1	6.2	97.8	31.4	30.3		41.5	
Level of Service		D	B	E	A	A	F	C	C		D	
Approach Delay (s)		45.4			16.7			41.8			41.5	
Approach LOS		D			B			D			D	

Intersection Summary			
HCM 2000 Control Delay	33.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	21.0
Intersection Capacity Utilization	89.7%	ICU Level of Service	E
Analysis Period (min)	15		

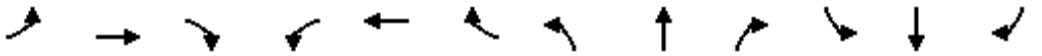
dl Defacto Left Lane. Recode with 1 though lane as a left lane.

c Critical Lane Group



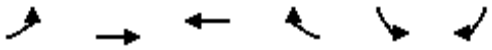
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1783	727	1041	1086	0	0	0	0	655	0	627
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0	4.0	7.0	6.5					6.0		6.0
Lane Util. Factor		0.81	1.00	0.97	0.91					0.97		0.88
Frt		1.00	0.85	1.00	1.00					1.00		0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (prot)		7544	1583	3433	5085					3433		2787
Flt Permitted		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (perm)		7544	1583	3433	5085					3433		2787
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	1877	765	1096	1143	0	0	0	0	689	0	660
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	484
Lane Group Flow (vph)	0	1877	765	1096	1143	0	0	0	0	689	0	176
Turn Type		NA	Free	Prot	NA					Prot		Perm
Protected Phases		6		5	2					3		
Permitted Phases			Free									6
Actuated Green, G (s)		24.0	90.0	29.0	59.5					18.0		24.0
Effective Green, g (s)		24.0	90.0	29.0	59.5					18.0		24.0
Actuated g/C Ratio		0.27	1.00	0.32	0.66					0.20		0.27
Clearance Time (s)		6.0		7.0	6.5					6.0		6.0
Vehicle Extension (s)		3.0		3.0	3.0					3.0		3.0
Lane Grp Cap (vph)		2011	1583	1106	3361					686		743
v/s Ratio Prot		c0.25		c0.32	0.22					c0.20		
v/s Ratio Perm			0.48									0.06
v/c Ratio		0.93	0.48	0.99	0.34					1.00		0.24
Uniform Delay, d1		32.2	0.0	30.4	6.7					36.0		25.8
Progression Factor		1.00	1.00	1.32	0.41					1.00		1.00
Incremental Delay, d2		9.5	1.1	16.7	0.1					35.4		0.8
Delay (s)		41.7	1.1	56.8	2.9					71.4		26.6
Level of Service		D	A	E	A					E		C
Approach Delay (s)		30.0			29.3			0.0			49.5	
Approach LOS		C			C			A			D	

Intersection Summary			
HCM 2000 Control Delay	33.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	19.0
Intersection Capacity Utilization	84.9%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



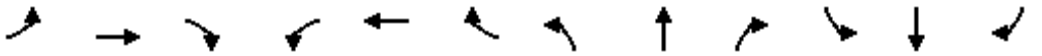
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	945	1493	0	0	1360	624	767	0	1154	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	6.0			6.5	4.0	6.0		6.5			
Lane Util. Factor	0.97	0.91			0.81	1.00	0.97		0.88			
Frt	1.00	1.00			1.00	0.85	1.00		0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (prot)	3433	5085			7544	1583	3433		2787			
Flt Permitted	0.95	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (perm)	3433	5085			7544	1583	3433		2787			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	995	1572	0	0	1432	657	807	0	1215	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	687	0	0	0
Lane Group Flow (vph)	995	1572	0	0	1432	657	807	0	528	0	0	0
Turn Type	Prot	NA			NA	Free	Prot		Perm			
Protected Phases	1	6			2		7					
Permitted Phases						Free			2			
Actuated Green, G (s)	27.1	55.8			21.2	90.0	22.2		21.2			
Effective Green, g (s)	27.1	55.8			21.2	90.0	22.2		21.2			
Actuated g/C Ratio	0.30	0.62			0.24	1.00	0.25		0.24			
Clearance Time (s)	7.0	6.0			6.5		6.0		6.5			
Vehicle Extension (s)	3.0	3.0			3.0		3.0		3.0			
Lane Grp Cap (vph)	1033	3152			1777	1583	846		656			
v/s Ratio Prot	c0.29	0.31			c0.19		c0.24					
v/s Ratio Perm						0.41			0.19			
v/c Ratio	0.96	0.50			0.81	0.42	0.95		0.80			
Uniform Delay, d1	31.0	9.4			32.5	0.0	33.4		32.4			
Progression Factor	0.49	0.02			1.00	1.00	1.00		1.00			
Incremental Delay, d2	8.9	0.2			4.0	0.8	20.4		10.1			
Delay (s)	24.1	0.4			36.5	0.8	53.8		42.6			
Level of Service	C	A			D	A	D		D			
Approach Delay (s)		9.6			25.3			47.1			0.0	
Approach LOS		A			C			D			A	

Intersection Summary			
HCM 2000 Control Delay	25.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	84.9%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



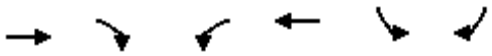
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	81	2323	1893	82	0	176
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	8.0	6.5	6.5	4.0		4.0
Lane Util. Factor	1.00	0.91	0.76	1.00		1.00
Frt	1.00	1.00	1.00	0.85		0.86
Flt Protected	0.95	1.00	1.00	1.00		1.00
Satd. Flow (prot)	1770	5085	8494	1583		1611
Flt Permitted	0.95	1.00	1.00	1.00		1.00
Satd. Flow (perm)	1770	5085	8494	1583		1611
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	85	2445	1993	86	0	185
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	85	2445	1993	86	0	185
Turn Type	Prot	NA	NA	Free		Free
Protected Phases	1	6	2			
Permitted Phases				Free		Free
Actuated Green, G (s)	3.6	40.0	21.9	40.0		40.0
Effective Green, g (s)	3.6	40.0	21.9	40.0		40.0
Actuated g/C Ratio	0.09	1.00	0.55	1.00		1.00
Clearance Time (s)	8.0	6.5	6.5			
Vehicle Extension (s)	3.0	3.0	3.0			
Lane Grp Cap (vph)	159	5085	4650	1583		1611
v/s Ratio Prot	0.05	c0.48	0.23			
v/s Ratio Perm				0.05		0.11
v/c Ratio	0.53	0.48	0.43	0.05		0.11
Uniform Delay, d1	17.4	0.0	5.4	0.0		0.0
Progression Factor	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	3.4	0.3	0.3	0.1		0.1
Delay (s)	20.8	0.3	5.6	0.1		0.1
Level of Service	C	A	A	A		A
Approach Delay (s)		1.0	5.4		0.1	
Approach LOS		A	A		A	

Intersection Summary			
HCM 2000 Control Delay	2.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	14.5
Intersection Capacity Utilization	50.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	99	1969	255	139	1656	82	295	1	109	96	1	132
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.5	7.5	7.0	7.5		6.0	6.5	6.5	6.0	6.5	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91		0.97	0.95	0.95	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.85	0.85	1.00	0.85	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1583	3433	5049		3433	1509	1504	1770	1585	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1583	3433	5049		3433	1509	1504	1770	1585	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	104	2073	268	146	1743	86	311	1	115	101	1	139
RTOR Reduction (vph)	0	0	161	0	6	0	0	50	49	0	128	0
Lane Group Flow (vph)	104	2073	107	146	1823	0	311	9	8	101	12	0
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6						4			
Actuated Green, G (s)	8.0	36.1	36.1	4.0	32.1		15.8	12.1	12.1	10.8	7.1	
Effective Green, g (s)	8.0	36.1	36.1	4.0	32.1		15.8	12.1	12.1	10.8	7.1	
Actuated g/C Ratio	0.09	0.40	0.40	0.04	0.36		0.18	0.13	0.13	0.12	0.08	
Clearance Time (s)	7.0	7.5	7.5	7.0	7.5		6.0	6.5	6.5	6.0	6.5	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	157	2039	634	152	1800		602	202	202	212	125	
v/s Ratio Prot	0.06	c0.41		0.04	c0.36		c0.09	0.01		c0.06	0.01	
v/s Ratio Perm			0.07						0.01			
v/c Ratio	0.66	1.02	0.17	0.96	1.01		0.52	0.04	0.04	0.48	0.10	
Uniform Delay, d1	39.7	26.9	17.3	42.9	28.9		33.6	33.9	33.9	37.0	38.5	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	10.0	24.2	0.6	60.9	24.4		0.8	0.1	0.1	1.7	0.3	
Delay (s)	49.7	51.1	17.9	103.8	53.4		34.4	34.0	34.0	38.6	38.8	
Level of Service	D	D	B	F	D		C	C	C	D	D	
Approach Delay (s)		47.4			57.1			34.3			38.7	
Approach LOS		D			E			C			D	

Intersection Summary			
HCM 2000 Control Delay	49.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	27.0
Intersection Capacity Utilization	81.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Lane Group	EBT	EBR	WBL	WBT	SBL	SBR
Lane Group Flow (vph)	1877	765	1096	1143	689	660
v/c Ratio	0.93	0.48	0.99	0.34	1.00	0.54
Control Delay	42.3	1.1	57.3	2.9	72.9	4.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	42.3	1.1	57.3	2.9	72.9	4.0
Queue Length 50th (ft)	257	0	279	17	~204	0
Queue Length 95th (ft)	#321	0	m#419	m49	#322	43
Internal Link Dist (ft)	533			458		
Turn Bay Length (ft)						
Base Capacity (vph)	2011	1583	1106	3361	686	1227
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.93	0.48	0.99	0.34	1.00	0.54

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Build Alternative 2040 AM

9: East Ramps & Northlake Blvd Corridor: Northlake Boulevard

Lane Group	EBL	EBT	WBT	WBR	NBL	NBR
Lane Group Flow (vph)	995	1572	1432	657	807	1215
v/c Ratio	0.96	0.50	0.81	0.42	0.95	0.90
Control Delay	26.9	0.4	36.7	0.8	56.2	19.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	26.9	0.4	36.7	0.8	56.2	19.5
Queue Length 50th (ft)	265	2	190	0	233	101
Queue Length 95th (ft)	m#295	m2	226	0	#351	#265
Internal Link Dist (ft)		458	348			
Turn Bay Length (ft)				400		
Base Capacity (vph)	1033	3152	1777	1583	846	1343
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.96	0.50	0.81	0.42	0.95	0.90

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

PGA BOULEVARD CORRIDOR

Arterial Level of Service: EB PGA Blvd

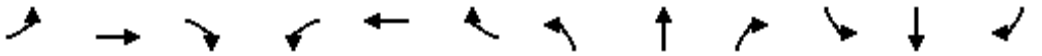
Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
FL Turnpike	II	45	16.8	85.9	102.7	0.15	5.4	F
Central Blvd	II	45	36.7	23.1	59.8	0.39	23.5	C
N Military Trail	II	45	81.7	58.5	140.2	1.02	26.2	C
West Ramps	II	45	20.5	9.6	30.1	0.19	22.5	C
East Ramps	II	45	6.3	124.1	130.4	0.06	1.6	F
RCA	II	45	25.6	1.0	26.6	0.25	33.3	B
Lake Victoria Garden	II	45	41.9	13.4	55.3	0.46	30.0	B
Total	II		229.5	315.6	545.1	2.52	16.6	E

Arterial Level of Service: WB PGA Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Lake Victoria Garden	II	45	13.7	28.5	42.2	0.13	10.8	F
RCA	II	45	41.9	0.1	42.0	0.46	39.5	A
East Ramps	II	45	25.6	0.0	25.6	0.25	34.6	B
West Ramps	II	45	6.3	11.9	18.2	0.06	11.5	F
N Military Trail	II	45	20.5	40.2	60.7	0.19	11.2	F
Central Blvd	II	45	25.0	62.4	87.4	0.24	9.9	F
FL Turnpike	II	45	36.7	61.5	98.2	0.39	14.3	E
Total	II		169.7	204.6	374.3	1.71	16.4	E

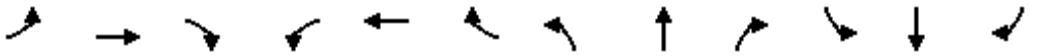
Build Alternative 2040 AM

3: FL Turnpike & PGA Blvd Corridor: PGA Boulevard



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	53	1099	37	251	1181	430	45	77	501	1395	167	131
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.5		4.0	8.0	7.5	7.5	7.5	7.5	7.5	7.5	4.0
Lane Util. Factor	0.97	0.91		0.97	0.91	0.88	1.00	0.95	0.95	0.91	0.91	1.00
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.89	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.97	1.00
Satd. Flow (prot)	3433	5060		3433	5085	2787	1770	1574	1504	3221	1639	1583
Flt Permitted	0.11	1.00		0.95	1.00	1.00	0.16	1.00	1.00	0.95	0.97	1.00
Satd. Flow (perm)	414	5060		3433	5085	2787	304	1574	1504	3221	1639	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	56	1157	39	264	1243	453	47	81	527	1468	176	138
RTOR Reduction (vph)	0	2	0	0	0	179	0	43	122	0	0	0
Lane Group Flow (vph)	56	1194	0	264	1243	274	47	265	178	1086	558	138
Turn Type	pm+pt	NA		Prot	NA	pm+ov	Perm	NA	Prot	Split	NA	Free
Protected Phases	7	4		3	8	6		2	2	6	6	
Permitted Phases	4					8	2					Free
Actuated Green, G (s)	38.1	34.9		11.0	39.2	88.7	24.5	24.5	24.5	49.5	49.5	146.4
Effective Green, g (s)	38.1	34.9		11.0	39.2	88.7	24.5	24.5	24.5	49.5	49.5	146.4
Actuated g/C Ratio	0.26	0.24		0.08	0.27	0.61	0.17	0.17	0.17	0.34	0.34	1.00
Clearance Time (s)	7.0	7.5		4.0	8.0	7.5	7.5	7.5	7.5	7.5	7.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	173	1206		257	1361	1688	50	263	251	1089	554	1583
v/s Ratio Prot	0.01	c0.24		c0.08	0.24	0.05		c0.17	0.12	0.34	c0.34	
v/s Ratio Perm	0.08					0.04	0.15					0.09
v/c Ratio	0.32	0.99		1.03	0.91	0.16	0.94	1.01	0.71	1.00	1.01	0.09
Uniform Delay, d1	42.7	55.6		67.7	52.0	12.6	60.2	61.0	57.6	48.4	48.5	0.0
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.1	23.2		63.4	9.6	0.0	103.6	57.2	8.8	26.4	40.0	0.1
Delay (s)	43.8	78.8		131.1	61.5	12.7	163.8	118.1	66.4	74.8	88.5	0.1
Level of Service	D	E		F	E	B	F	F	E	E	F	A
Approach Delay (s)		77.2			59.6			97.7			73.3	
Approach LOS		E			E			F			E	

Intersection Summary			
HCM 2000 Control Delay	72.2	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.03		
Actuated Cycle Length (s)	146.4	Sum of lost time (s)	30.0
Intersection Capacity Utilization	94.3%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1177	1700	38	152	1228	258	40	46	182	288	41	798
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.5	8.5		7.0	8.0	8.0		8.5	7.0	8.5	8.5	7.5
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00		1.00	1.00	0.95	0.95	0.88
Frt	1.00	1.00		1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.98	1.00	0.95	0.96	1.00
Satd. Flow (prot)	3433	5069		1770	5085	1583		1820	1583	1681	1705	2787
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.71	1.00	0.70	0.72	1.00
Satd. Flow (perm)	3433	5069		1770	5085	1583		1317	1583	1236	1275	2787
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1239	1789	40	160	1293	272	42	48	192	303	43	840
RTOR Reduction (vph)	0	2	0	0	0	203	0	0	103	0	0	30
Lane Group Flow (vph)	1239	1827	0	160	1293	69	0	90	89	170	176	810
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA	pm+ov	Perm	NA	pm+ov
Protected Phases	1	6		5	2			4	5		8	1
Permitted Phases						2	4		4	8		8
Actuated Green, G (s)	34.5	48.5		11.5	25.5	25.5		16.0	27.5	16.0	16.0	50.5
Effective Green, g (s)	34.5	48.5		11.5	25.5	25.5		16.0	27.5	16.0	16.0	50.5
Actuated g/C Ratio	0.34	0.48		0.12	0.26	0.26		0.16	0.28	0.16	0.16	0.50
Clearance Time (s)	7.5	8.5		7.0	8.0	8.0		8.5	7.0	8.5	8.5	7.5
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	1184	2458		203	1296	403		210	435	197	204	1407
v/s Ratio Prot	c0.36	0.36		0.09	c0.25				0.02			0.20
v/s Ratio Perm						0.04		0.07	0.03	0.14	c0.14	0.09
v/c Ratio	1.05	0.74		0.79	1.00	0.17		0.43	0.20	0.86	0.86	0.58
Uniform Delay, d1	32.8	20.7		43.1	37.2	29.0		37.9	27.8	40.9	40.9	17.3
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	39.2	2.1		18.1	24.5	0.9		1.4	0.2	36.2	35.3	0.6
Delay (s)	71.9	22.8		61.1	61.7	30.0		39.3	28.1	77.2	76.2	17.9
Level of Service	E	C		E	E	C		D	C	E	E	B
Approach Delay (s)		42.7			56.6			31.7			35.0	
Approach LOS		D			E			C			D	

Intersection Summary			
HCM 2000 Control Delay	44.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	93.0%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (vph)	0	0	0	698	0	331	0	858	1406	0	1722	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0		6.0		6.0	4.0		6.0	
Lane Util. Factor				0.97		0.88		0.91	1.00		0.86	
Frt				1.00		0.85		1.00	0.85		1.00	
Flt Protected				0.95		1.00		1.00	1.00		1.00	
Satd. Flow (prot)				3433		2787		5085	1583		6408	
Flt Permitted				0.95		1.00		1.00	1.00		1.00	
Satd. Flow (perm)				3433		2787		5085	1583		6408	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	735	0	348	0	903	1480	0	1813	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	735	0	348	0	903	1480	0	1813	0
Turn Type				Prot		Prot		NA	Free		NA	
Protected Phases				3		3		6			2	
Permitted Phases									Free			
Actuated Green, G (s)				12.0		12.0		16.0	40.0		16.0	
Effective Green, g (s)				12.0		12.0		16.0	40.0		16.0	
Actuated g/C Ratio				0.30		0.30		0.40	1.00		0.40	
Clearance Time (s)				6.0		6.0		6.0			6.0	
Vehicle Extension (s)				3.0		3.0		3.0			3.0	
Lane Grp Cap (vph)				1029		836		2034	1583		2563	
v/s Ratio Prot				0.21		0.12		0.18			0.28	
v/s Ratio Perm									c0.93			
v/c Ratio				0.71		0.42		0.44	0.93		0.71	
Uniform Delay, d1				12.5		11.2		8.8	0.0		10.0	
Progression Factor				1.00		1.00		1.00	1.00		1.00	
Incremental Delay, d2				4.2		1.5		0.2	11.7		0.9	
Delay (s)				16.7		12.7		8.9	11.7		11.0	
Level of Service				B		B		A	B		B	
Approach Delay (s)		0.0			15.4			10.6			11.0	
Approach LOS		A			B			B			B	

Intersection Summary			
HCM 2000 Control Delay	11.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	1.34		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	122.2%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	NBL	NBR	NET	NER	SWL	SWT
Lane Configurations						
Volume (vph)	0	2674	1556	0	0	771
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0	6.0			6.0
Lane Util. Factor		0.76	0.91			0.86
Frt		0.85	1.00			1.00
Flt Protected		1.00	1.00			1.00
Satd. Flow (prot)		3610	5085			6408
Flt Permitted		1.00	1.00			1.00
Satd. Flow (perm)		3610	5085			6408
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	2815	1638	0	0	812
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	2815	1638	0	0	812
Turn Type		Prot	NA			NA
Protected Phases		2	3 4			Free
Permitted Phases						2 8
Actuated Green, G (s)		96.0	42.0			150.0
Effective Green, g (s)		96.0	42.0			150.0
Actuated g/C Ratio		0.64	0.28			1.00
Clearance Time (s)		6.0				
Vehicle Extension (s)		3.0				
Lane Grp Cap (vph)		2310	1423			6408
v/s Ratio Prot		c0.78	c0.32			0.13
v/s Ratio Perm						
v/c Ratio		1.22	1.15			0.13
Uniform Delay, d1		27.0	54.0			0.0
Progression Factor		1.00	1.00			1.00
Incremental Delay, d2		102.5	76.5			0.0
Delay (s)		129.5	130.5			0.0
Level of Service		F	F			A
Approach Delay (s)	129.5		130.5			0.0
Approach LOS	F		F			A

Intersection Summary			
HCM 2000 Control Delay	109.8	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.25		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	122.2%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	629	2654	546	0	1439	0	215	1	86	0	0	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0		6.0		6.0	4.0	6.0			6.0
Lane Util. Factor	0.97	0.91	1.00		0.91		0.91	0.86	0.95			1.00
Frt	1.00	1.00	0.85		1.00		1.00	0.97	0.85			0.86
Flt Protected	0.95	1.00	1.00		1.00		0.95	0.96	1.00			1.00
Satd. Flow (prot)	3433	5085	1583		5085		3221	1493	1504			1611
Flt Permitted	0.95	1.00	1.00		1.00		0.95	0.96	1.00			1.00
Satd. Flow (perm)	3433	5085	1583		5085		3221	1493	1504			1611
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	662	2794	575	0	1515	0	226	1	91	0	0	12
RTOR Reduction (vph)	0	0	201	0	0	0	0	2	61	0	0	10
Lane Group Flow (vph)	662	2794	374	0	1515	0	163	79	13	0	0	2
Turn Type	Prot	NA	Perm		NA		Prot	NA	custom			Perm
Protected Phases	7	4			8		5	2	5			
Permitted Phases			4									5
Actuated Green, G (s)	15.5	45.5	45.5		24.0		12.5	14.5	12.5			12.5
Effective Green, g (s)	15.5	45.5	45.5		24.0		12.5	14.5	12.5			12.5
Actuated g/C Ratio	0.22	0.65	0.65		0.34		0.18	0.21	0.18			0.18
Clearance Time (s)	6.0	6.0	6.0		6.0		6.0	4.0	6.0			6.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0	3.0			3.0
Lane Grp Cap (vph)	760	3305	1028		1743		575	309	268			287
v/s Ratio Prot	0.19	c0.55			0.30		0.05	c0.05	0.01			
v/s Ratio Perm			0.24					0.01				0.00
v/c Ratio	0.87	0.85	0.36		0.87		0.28	0.26	0.05			0.01
Uniform Delay, d1	26.3	9.5	5.6		21.5		24.9	23.2	23.8			23.6
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00	1.00			1.00
Incremental Delay, d2	13.1	2.9	1.0		4.9		0.3	0.4	0.1			0.0
Delay (s)	39.3	12.4	6.6		26.4		25.1	23.7	23.9			23.7
Level of Service	D	B	A		C		C	C	C			C
Approach Delay (s)		16.0			26.4			24.5			23.7	
Approach LOS		B			C			C			C	

Intersection Summary			
HCM 2000 Control Delay	19.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	64.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	38	93	0	349	0	0	11	61
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					6.0	6.0		6.0			6.0	6.0
Lane Util. Factor					1.00	1.00		0.95			1.00	1.00
Frt					1.00	0.85		1.00			1.00	0.85
Flt Protected					1.00	1.00		1.00			1.00	1.00
Satd. Flow (prot)					1863	1583		3539			1863	1583
Flt Permitted					1.00	1.00		1.00			1.00	1.00
Satd. Flow (perm)					1863	1583		3539			1863	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	0	40	98	0	367	0	0	12	64
RTOR Reduction (vph)	0	0	0	0	0	62	0	0	0	0	0	53
Lane Group Flow (vph)	0	0	0	0	40	36	0	367	0	0	12	11
Turn Type					NA	Perm		NA			NA	Perm
Protected Phases					16			15			5	
Permitted Phases						16						5
Actuated Green, G (s)					26.0	26.0		13.5			12.5	12.5
Effective Green, g (s)					26.0	26.0		13.5			12.5	12.5
Actuated g/C Ratio					0.37	0.37		0.19			0.18	0.18
Clearance Time (s)					6.0	6.0		6.0			6.0	6.0
Vehicle Extension (s)					3.0	3.0		3.0			3.0	3.0
Lane Grp Cap (vph)					691	587		682			332	282
v/s Ratio Prot					0.02			c0.10			0.01	
v/s Ratio Perm						c0.02						c0.01
v/c Ratio					0.06	0.06		0.54			0.04	0.04
Uniform Delay, d1					14.1	14.2		25.4			23.8	23.8
Progression Factor					1.00	1.00		0.52			1.00	1.00
Incremental Delay, d2					0.2	0.2		1.4			0.0	0.1
Delay (s)					14.3	14.4		14.6			23.8	23.8
Level of Service					B	B		B			C	C
Approach Delay (s)		0.0			14.3			14.6			23.8	
Approach LOS		A			B			B			C	

Intersection Summary			
HCM 2000 Control Delay	15.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.18		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	25.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Volume (vph)	0	105	3342	1171	137	899
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		1.00	0.86		1.00	0.91
Frt		0.86	0.96		1.00	1.00
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		1611	6158		1770	5085
Flt Permitted		1.00	1.00		0.10	1.00
Satd. Flow (perm)		1611	6158		186	5085
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	111	3518	1233	144	946
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	111	4751	0	144	946
Turn Type		Perm	NA		Perm	NA
Protected Phases			4			8
Permitted Phases		4			8	
Actuated Green, G (s)		40.0	40.0		40.0	40.0
Effective Green, g (s)		40.0	40.0		40.0	40.0
Actuated g/C Ratio		1.00	1.00		1.00	1.00
Clearance Time (s)		4.0	4.0		4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Lane Grp Cap (vph)		1611	6158		186	5085
v/s Ratio Prot			0.77			0.19
v/s Ratio Perm		0.07			c0.77	
v/c Ratio		0.07	0.77		0.77	0.19
Uniform Delay, d1		0.0	0.0		0.0	0.0
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.0	0.6		18.0	0.0
Delay (s)		0.0	0.6		18.0	0.0
Level of Service		A	A		B	A
Approach Delay (s)	0.0		0.6			2.4
Approach LOS	A		A			A

Intersection Summary			
HCM 2000 Control Delay	0.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	4.0
Intersection Capacity Utilization	82.3%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	289	1155	936	400	526	500	675	934	44	851	608	274
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	304	1216	0	421	554	0	711	983	0	896	640	288
Adj No. of Lanes	3	3	1	3	3	1	3	3	1	3	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	394	1317	410	375	1340	417	798	1099	342	896	1220	380
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.08	0.26	0.00	0.08	0.26	0.00	0.16	0.22	0.00	0.18	0.24	0.24
Ln Grp Delay, s/veh	59.8	55.5	0.0	139.3	37.5	0.0	60.9	55.1	0.0	79.2	40.1	50.9
Ln Grp LOS	E	E		F	D		E	E		E	D	D
Approach Vol, veh/h		1520			975			1694			1824	
Approach Delay, s/veh		56.3			81.4			57.5			61.0	
Approach LOS		E			F			E			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	17.5	39.1	30.0	33.4	18.0	38.6	27.1	36.3
Change Period (Y+Rc), s	8.0	7.5	8.5	7.5	9.0	7.5	8.0	7.5
Max Green (Gmax), s	12.0	28.5	21.5	26.5	9.0	30.5	20.0	28.5
Max Allow Headway (MAH), s	3.7	4.9	3.7	4.8	3.7	4.9	3.7	4.8
Max Q Clear (g_c+I1), s	9.2	12.8	23.5	24.5	11.0	29.9	18.7	22.3
Green Ext Time (g_e), s	0.3	9.9	0.0	1.4	0.0	0.5	0.4	4.8
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	1.00	1.00	0.00	1.00	0.93

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	5003		5003		5003		5003	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		5085		5085		5085		5085

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		1583		1583		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	
Lanes in Grp	3	0	3	0	3	0	3	0

Grp Vol (v), veh/h	304	0	896	0	421	0	711	0
Grp Sat Flow (s), veh/h/ln	1668	0	1668	0	1668	0	1668	0
Q Serve Time (g_s), s	7.2	0.0	21.5	0.0	9.0	0.0	16.7	0.0
Cycle Q Clear Time (g_c), s	7.2	0.0	21.5	0.0	9.0	0.0	16.7	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	394	0	896	0	375	0	798	0
V/C Ratio (X)	0.77	0.00	1.00	0.00	1.12	0.00	0.89	0.00
Avail Cap (c_a), veh/h	500	0	896	0	375	0	834	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	54.2	0.0	49.2	0.0	55.5	0.0	49.4	0.0
Incr Delay (d2), s/veh	5.6	0.0	30.0	0.0	83.8	0.0	11.5	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	59.8	0.0	79.2	0.0	139.3	0.0	60.9	0.0
1st-Term Q (Q1), veh/ln	3.3	0.0	9.9	0.0	4.1	0.0	7.7	0.0
2nd-Term Q (Q2), veh/ln	0.2	0.0	2.5	0.0	2.9	0.0	0.8	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	1.47	0.00	1.80	0.00	1.56	0.00
%ile Back of Q (95%), veh/ln	6.3	0.0	18.1	0.0	12.7	0.0	13.3	0.0
%ile Storage Ratio (RQ%)	0.35	0.00	1.02	0.00	0.64	0.00	0.77	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	11.4	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	3	0	3	0	3
Grp Vol (v), veh/h	0	554	0	983	0	1216	0	640
Grp Sat Flow (s), veh/h/ln	0	1695	0	1695	0	1695	0	1695
Q Serve Time (g_s), s	0.0	10.8	0.0	22.5	0.0	27.9	0.0	13.1
Cycle Q Clear Time (g_c), s	0.0	10.8	0.0	22.5	0.0	27.9	0.0	13.1
Lane Grp Cap (c), veh/h	0	1340	0	1099	0	1317	0	1220
V/C Ratio (X)	0.00	0.41	0.00	0.89	0.00	0.92	0.00	0.52
Avail Cap (c_a), veh/h	0	1340	0	1123	0	1317	0	1220
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	36.5	0.0	45.7	0.0	43.3	0.0	39.7
Incr Delay (d2), s/veh	0.0	0.9	0.0	9.4	0.0	12.2	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	37.5	0.0	55.1	0.0	55.5	0.0	40.1
1st-Term Q (Q1), veh/ln	0.0	5.1	0.0	10.6	0.0	13.1	0.0	6.2
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	1.0	0.0	1.5	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.72	0.00	1.48	0.00	1.43	0.00	1.66
%ile Back of Q (95%), veh/ln	0.0	8.9	0.0	17.1	0.0	20.8	0.0	10.3
%ile Storage Ratio (RQ%)	0.00	0.56	0.00	0.59	0.00	0.50	0.00	0.30
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	0	0	0	0	288
Grp Sat Flow (s), veh/h/ln	0	1583	0	1583	0	1583	0	1583
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.3
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.3
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	417	0	342	0	410	0	380
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.76
Avail Cap (c_a), veh/h	0	417	0	350	0	410	0	380
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.4
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.9
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.9
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.52
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.9
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.84
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	62.2
HCM 2010 LOS	E

Lane Group	SBL	SBR	NET	NER	SWT
Lane Group Flow (vph)	735	348	903	1480	1813
v/c Ratio	0.71	0.42	0.44	0.93	0.71
Control Delay	17.5	13.1	9.6	15.4	11.9
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	17.5	13.1	9.6	15.4	11.9
Queue Length 50th (ft)	73	34	50	0	92
Queue Length 95th (ft)	#120	63	74	#145	124
Internal Link Dist (ft)			215		227
Turn Bay Length (ft)					
Base Capacity (vph)	1029	836	2034	1583	2563
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.71	0.42	0.44	0.93	0.71

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	NBR	NET	SWT
Lane Group Flow (vph)	2815	1638	812
v/c Ratio	1.22	1.15	0.13
Control Delay	129.5	124.1	0.0
Queue Delay	0.0	1.9	0.0
Total Delay	129.5	126.0	0.0
Queue Length 50th (ft)	~1482	~688	0
Queue Length 95th (ft)	#1576	#784	0
Internal Link Dist (ft)		227	250
Turn Bay Length (ft)			
Base Capacity (vph)	2310	1423	6408
Starvation Cap Reductn	0	513	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	1.22	1.80	0.13

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	SBL	SBR	NEL	NET	SWT	SWR
Lane Configurations						
Volume (vph)	0	0	114	4116	771	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	500			0
Storage Lanes	0	0	1			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.86	0.91	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	6408	5085	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	6408	5085	0
Link Speed (mph)	45			45	45	
Link Distance (ft)	247			189	328	
Travel Time (s)	3.7			2.9	5.0	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	120	4333	812	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	120	4333	812	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	80.4%	ICU Level of Service	D
Analysis Period (min)	15		

APPENDIX U

SYNCHRO REPORTS

BUILD 2040 PM

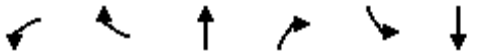
CENTRAL BOULEVARD CORRIDOR

Arterial Level of Service: NB Central Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
PGA Blvd	II	45	11.9	94.9	106.8	0.11	3.7	F
117th Ct	II	45	61.9	14.8	76.7	0.77	36.3	A
SB On Ramp	II	45	52.1	28.2	80.3	0.65	29.1	B
NB Off Ramp	II	45	9.8	37.9	47.7	0.09	6.8	F
Victoria Falls Blvd	II	45	29.9	55.6	85.5	0.30	12.7	F
Hood Rd	II	45	23.7	45.9	69.6	0.23	11.8	F
Donald Ross	II	45	100.8	77.6	178.4	1.26	25.4	C
Total	II		290.1	354.9	645.0	3.41	19.0	D

Arterial Level of Service: SB Central Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Donald Ross	II	45	22.2	54.4	76.6	0.20	9.6	F
Hood Rd	II	45	100.8	41.2	142.0	1.26	31.9	B
Victoria Falls Blvd	II	45	23.7	23.1	46.8	0.23	17.5	D
NB On Ramp	II	45	29.9	24.7	54.6	0.30	19.9	D
SB Off Ramp	II	45	9.8	4.5	14.3	0.09	22.6	C
117th Ct	II	45	52.1	8.1	60.2	0.65	38.8	A
PGA Blvd	II	45	61.9	123.7	185.6	0.77	15.0	E
Total	II		300.4	279.7	580.1	3.51	21.8	D



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	246	169	873	145	150	1059
Number	3	18	2	12	1	6
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	259	178	919	153	158	1115
Adj No. of Lanes	1	1	2	1	1	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	334	298	1919	858	418	2351
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.19	0.19	0.54	0.54	0.06	0.66
Ln Grp Delay, s/veh	30.0	27.1	10.4	8.3	7.3	6.3
Ln Grp LOS	C	C	B	A	A	A
Approach Vol, veh/h	437		1072			1273
Approach Delay, s/veh	28.8		10.1			6.4
Approach LOS	C		B			A

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	8			6		
Case No	1.2	7.0	9.0			4.0		
Phs Duration (G+Y+Rc), s	8.3	41.7	17.7			50.0		
Change Period (Y+Rc), s	4.0	5.0	5.0			5.0		
Max Green (Gmax), s	7.0	34.0	60.0			45.0		
Max Allow Headway (MAH), s	3.7	4.8	3.8			4.8		
Max Q Clear (g_c+I1), s	4.4	12.9	11.4			12.5		
Green Ext Time (g_e), s	0.1	14.3	1.3			18.9		
Prob of Phs Call (p_c)	0.95	1.00	1.00			1.00		
Prob of Max Out (p_x)	1.00	0.00	0.00			0.00		
Left-Turn Movement Data								
Assigned Mvmt	1	5	3					
Mvmt Sat Flow, veh/h	1774	0	1774					
Through Movement Data								
Assigned Mvmt		2	8			6		
Mvmt Sat Flow, veh/h		3632	0			3632		
Right-Turn Movement Data								
Assigned Mvmt		12	18			16		
Mvmt Sat Flow, veh/h		1583	1583			0		
Left Lane Group Data								
Assigned Mvmt	1	5	3	0	0	0	0	0
Lane Assignment	(Pr/Pm)							
Lanes in Grp	1	0	1	0	0	0	0	0

Grp Vol (v), veh/h	158	0	259	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1774	0	1774	0	0	0	0	0
Q Serve Time (g_s), s	2.4	0.0	9.4	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	2.4	0.0	9.4	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	524	0	1774	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	38.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	25.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	5.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	36.7	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	418	0	334	0	0	0	0	0
V/C Ratio (X)	0.38	0.00	0.78	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	490	0	1571	0	0	0	0	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	6.7	0.0	26.1	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.6	0.0	3.9	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	7.3	0.0	30.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	1.1	0.0	4.6	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.4	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	1.00	1.74	0.00	0.00	0.00	0.00	0.00
%ile Back of Q (95%), veh/ln	2.2	0.0	8.6	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.16	0.00	0.46	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	0	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	919	0	0	0	1115	0	0
Grp Sat Flow (s), veh/h/ln	0	1770	0	0	0	1770	0	0
Q Serve Time (g_s), s	0.0	10.9	0.0	0.0	0.0	10.5	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	10.9	0.0	0.0	0.0	10.5	0.0	0.0
Lane Grp Cap (c), veh/h	0	1919	0	0	0	2351	0	0
V/C Ratio (X)	0.00	0.48	0.00	0.00	0.00	0.47	0.00	0.00
Avail Cap (c_a), veh/h	0	1919	0	0	0	2351	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	9.6	0.0	0.0	0.0	5.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.9	0.0	0.0	0.0	0.7	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	10.4	0.0	0.0	0.0	6.3	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	5.2	0.0	0.0	0.0	5.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.0	0.0	0.2	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.70	1.00	0.00	0.00	1.72	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	9.3	0.0	0.0	0.0	8.9	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.41	0.00	0.00	0.00	0.45	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	18	0	0	16	0	0
Lane Assignment		R	R					
Lanes in Grp	0	1	1	0	0	0	0	0
Grp Vol (v), veh/h	0	153	178	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1583	1583	0	0	0	0	0
Q Serve Time (g_s), s	0.0	3.3	7.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	3.3	7.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	858	298	0	0	0	0	0
V/C Ratio (X)	0.00	0.18	0.60	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	858	1403	0	0	0	0	0
Upstream Filter (I)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	7.9	25.2	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.5	1.9	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	8.3	27.1	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	1.4	3.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.2	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	1.80	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	2.8	5.7	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.19	0.52	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		11.4						
HCM 2010 LOS		B						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	272	29	23	208	27	241	42	1966	176	51	1712	98
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	286	31	24	239	0	254	44	2069	185	54	1802	103
Adj No. of Lanes	1	1	0	2	0	1	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	298	211	163	247	0	502	109	1996	893	103	2199	984
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.22	0.22	0.22	0.07	0.00	0.32	0.56	0.56	0.56	0.03	0.62	0.62
Ln Grp Delay, s/veh	93.9	0.0	41.2	108.5	0.0	36.8	49.7	58.5	14.0	36.2	21.4	10.0
Ln Grp LOS	F		D	F		D	D	F	B	D	C	A
Approach Vol, veh/h		341			493			2298			1959	
Approach Delay, s/veh		85.4			71.5			54.8			21.2	
Approach LOS		F			E			D			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4		6		8
Case No	1.2	5.0	2.0	6.0		3.0		3.0
Phs Duration (G+Y+Rc), s	7.4	77.0	13.0	32.0		84.4		45.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0		4.0		4.0
Max Green (Gmax), s	4.0	73.0	9.0	28.0		81.0		41.0
Max Allow Headway (MAH), s	3.7	4.9	3.7	4.2		4.9		4.2
Max Q Clear (g_c+I1), s	3.6	75.0	10.7	30.0		52.8		18.9
Green Ext Time (g_e), s	0.0	0.0	0.0	0.0		27.4		2.3
Prob of Phs Call (p_c)	0.86	1.00	1.00	1.00		1.00		1.00
Prob of Max Out (p_x)	1.00	1.00	1.00	1.00		0.96		0.00

Left-Turn Movement Data								
Assigned Mvmt	1	5	3	7				
Mvmt Sat Flow, veh/h	1774	235	3548	1121				

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3539		975		3539		0

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		755		1583		1583

Left Lane Group Data								
Assigned Mvmt	1	5	3	7	0	0	0	0
Lane Assignment	(Pr/Pm)		(Prot)					
Lanes in Grp	1	1	2	1	0	0	0	0

Grp Vol (v), veh/h	54	44	239	286	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1774	235	1774	1121	0	0	0	0
Q Serve Time (g_s), s	1.6	23.0	8.7	28.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	1.6	66.4	8.7	28.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	167	235	0	1121	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	75.0	73.0	0.0	28.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	29.6	0.0	28.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	23.0	0.0	28.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	103	109	247	298	0	0	0	0
V/C Ratio (X)	0.53	0.40	0.97	0.96	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	110	109	247	298	0	0	0	0
Upstream Filter (I)	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	32.1	47.4	60.1	52.8	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	4.1	2.4	48.4	41.1	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	36.2	49.7	108.5	93.9	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	1.1	1.5	4.2	10.2	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.1	1.7	3.4	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	1.80	1.67	1.45	0.00	0.00	0.00	0.00
%ile Back of Q (95%), veh/ln	2.2	2.8	9.9	19.6	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.16	0.26	0.38	3.32	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	2069	0	0	0	1802	0	0
Grp Sat Flow (s), veh/h/ln	0	1770	0	0	0	1770	0	0
Q Serve Time (g_s), s	0.0	73.0	0.0	0.0	0.0	50.8	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	73.0	0.0	0.0	0.0	50.8	0.0	0.0
Lane Grp Cap (c), veh/h	0	1996	0	0	0	2199	0	0
V/C Ratio (X)	0.00	1.04	0.00	0.00	0.00	0.82	0.00	0.00
Avail Cap (c_a), veh/h	0	1996	0	0	0	2215	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	28.2	0.0	0.0	0.0	18.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	30.3	0.0	0.0	0.0	2.5	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	58.5	0.0	0.0	0.0	21.4	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	35.5	0.0	0.0	0.0	24.5	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	8.4	0.0	0.0	0.0	0.8	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.00	0.00	1.33	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	79.0	0.0	0.0	0.0	33.6	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	3.15	0.00	0.00	0.00	1.60	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	18.2	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	185	0	55	0	103	0	254
Grp Sat Flow (s), veh/h/ln	0	1583	0	1730	0	1583	0	1583
Q Serve Time (g_s), s	0.0	7.5	0.0	3.3	0.0	3.4	0.0	16.9
Cycle Q Clear Time (g_c), s	0.0	7.5	0.0	3.3	0.0	3.4	0.0	16.9
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.44	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	893	0	374	0	984	0	502
V/C Ratio (X)	0.00	0.21	0.00	0.15	0.00	0.10	0.00	0.51
Avail Cap (c_a), veh/h	0	893	0	374	0	991	0	502
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	13.9	0.0	41.0	0.0	9.9	0.0	36.0
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.2	0.0	0.0	0.0	0.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	14.0	0.0	41.2	0.0	10.0	0.0	36.8
1st-Term Q (Q1), veh/ln	0.0	3.3	0.0	1.6	0.0	1.5	0.0	7.4
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.80	0.00	1.60
%ile Back of Q (95%), veh/ln	0.0	5.9	0.0	2.9	0.0	2.7	0.0	12.0
%ile Storage Ratio (RQ%)	0.00	0.54	0.00	0.25	0.00	0.20	0.00	0.90
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	45.5
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

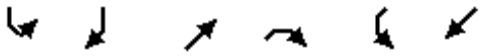
Build Alternative 2040 PM

29: Central Blvd & SB On Ramp & SB Off Ramp Corridor: Central Boulevard

Movement	SBL2	SBL	SBR	NWL	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations											
Volume (vph)	134	0	377	0	0	0	1122	26	1206	946	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0				4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00		1.00				0.86	1.00	0.97	0.95	
Frt	1.00		0.85				1.00	0.85	1.00	1.00	
Flt Protected	0.95		1.00				1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770		1583				6408	1583	3433	3539	
Flt Permitted	0.95		1.00				1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770		1583				6408	1583	3433	3539	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	141	0	397	0	0	0	1181	27	1269	996	0
RTOR Reduction (vph)	0	0	270	0	0	0	0	19	0	0	0
Lane Group Flow (vph)	141	0	127	0	0	0	1181	8	1269	996	0
Turn Type	Prot		Perm				NA	Prot	Prot	NA	
Protected Phases	1						2 4	2 4	3	3 4	
Permitted Phases			1								
Actuated Green, G (s)	12.9		12.9				28.1	28.1	37.0	49.0	
Effective Green, g (s)	12.9		12.9				28.1	28.1	37.0	49.0	
Actuated g/C Ratio	0.14		0.14				0.31	0.31	0.41	0.54	
Clearance Time (s)	4.0		4.0						4.0		
Vehicle Extension (s)	3.0		3.0						3.0		
Lane Grp Cap (vph)	253		226				2000	494	1411	1926	
v/s Ratio Prot	0.08						c0.18	0.01	c0.37	c0.28	
v/s Ratio Perm			c0.08								
v/c Ratio	0.56		0.56				0.59	0.02	0.90	0.52	
Uniform Delay, d1	35.9		35.9				26.1	21.4	24.8	13.0	
Progression Factor	1.00		1.00				1.00	1.00	0.24	0.29	
Incremental Delay, d2	2.7		3.2				0.5	0.0	6.1	0.1	
Delay (s)	38.5		39.1				26.6	21.4	12.0	4.0	
Level of Service	D		D				C	C	B	A	
Approach Delay (s)		39.0		0.0			26.5			8.4	
Approach LOS		D		A			C			A	

Intersection Summary			
HCM 2000 Control Delay	18.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	76.6%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Lane Group	SBL2	SBR	NET	NER	SWL	SWT
Lane Group Flow (vph)	141	397	1181	27	1269	996
v/c Ratio	0.56	0.80	0.59	0.04	0.90	0.52
Control Delay	43.7	21.5	28.2	0.2	13.2	4.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.1
Total Delay	43.7	21.5	28.2	0.2	13.2	4.6
Queue Length 50th (ft)	76	43	161	0	42	33
Queue Length 95th (ft)	127	140	217	0	#90	56
Internal Link Dist (ft)			967			394
Turn Bay Length (ft)		800		450	190	
Base Capacity (vph)	354	568	2003	603	1411	1926
Starvation Cap Reductn	0	0	0	0	0	134
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.40	0.70	0.59	0.04	0.90	0.56

Intersection Summary

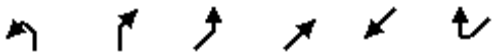
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Build Alternative 2040 PM

24: Central Blvd & NB Off Ramp/NB On Ramp Corridor: Central Boulevard

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (vph)	53	0	1295	0	0	0	366	890	0	0	2099	59
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0				4.0	4.0			4.0	4.0
Lane Util. Factor	1.00		0.88				0.97	0.95			0.86	1.00
Frt	1.00		0.85				1.00	1.00			1.00	0.85
Flt Protected	0.95		1.00				0.95	1.00			1.00	1.00
Satd. Flow (prot)	1770		2787				3433	3539			6408	1583
Flt Permitted	0.95		1.00				0.95	1.00			1.00	1.00
Satd. Flow (perm)	1770		2787				3433	3539			6408	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	56	0	1363	0	0	0	385	937	0	0	2209	62
RTOR Reduction (vph)	0	0	194	0	0	0	0	0	0	0	0	35
Lane Group Flow (vph)	56	0	1169	0	0	0	385	937	0	0	2209	27
Turn Type	Prot		custom				Prot	NA			NA	Prot
Protected Phases	6		6 11				5 7	13			8	8
Permitted Phases												
Actuated Green, G (s)	23.0		40.0				12.0	32.0			39.0	39.0
Effective Green, g (s)	23.0		40.0				12.0	32.0			39.0	39.0
Actuated g/C Ratio	0.26		0.44				0.13	0.36			0.43	0.43
Clearance Time (s)	4.0							4.0			4.0	4.0
Vehicle Extension (s)	3.0							3.0			3.0	3.0
Lane Grp Cap (vph)	452		1238				457	1258			2776	685
v/s Ratio Prot	0.03		c0.42				c0.11	0.26			c0.34	0.02
v/s Ratio Perm												
v/c Ratio	0.12		0.94				0.84	0.74			0.80	0.04
Uniform Delay, d1	25.8		23.9				38.1	25.4			22.1	14.7
Progression Factor	1.00		1.00				1.34	1.34			1.00	1.00
Incremental Delay, d2	0.1		14.2				11.2	2.0			2.5	0.1
Delay (s)	25.9		38.2				62.1	36.0			24.5	14.8
Level of Service	C		D				E	D			C	B
Approach Delay (s)		37.7			0.0			43.6			24.3	
Approach LOS		D			A			D			C	

Intersection Summary			
HCM 2000 Control Delay	33.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.95		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	76.6%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Lane Group	NBL	NBR	NEL	NET	SWT	SWR
Lane Group Flow (vph)	56	1363	385	937	2209	62
v/c Ratio	0.12	0.95	0.84	0.74	0.80	0.08
Control Delay	26.8	33.7	44.5	37.9	24.7	0.2
Queue Delay	0.0	0.0	0.0	0.3	0.1	0.0
Total Delay	26.8	33.7	44.5	38.2	24.8	0.2
Queue Length 50th (ft)	25	328	108	308	306	0
Queue Length 95th (ft)	55	#514	#140	371	355	0
Internal Link Dist (ft)				394	809	
Turn Bay Length (ft)		550	160			450
Base Capacity (vph)	452	1432	457	1258	2776	775
Starvation Cap Reductn	0	0	0	58	0	0
Spillback Cap Reductn	0	0	0	0	36	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.12	0.95	0.84	0.78	0.81	0.08

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

DONALD ROSS CORRIDOR

Arterial Level of Service: EB Donald Ross

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
West Ramp	II	45	46.0	27.9	73.9	0.52	25.4	C
East Ramp	II	45	15.7	29.2	44.9	0.14	11.5	F
Parkside Dr	II	45	42.7	69.6	112.3	0.53	17.1	D
Central Blvd	II	45	52.1	45.8	97.9	0.65	23.9	C
Military Trail	II	45	32.9	49.7	82.6	0.34	14.9	E
Total	II		189.4	222.2	411.6	2.19	19.2	D

Arterial Level of Service: WB Donald Ross

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Military Trail	II	45	21.4	63.7	85.1	0.20	8.3	F
Central Blvd	II	45	32.9	79.1	112.0	0.34	11.0	F
Parkside Dr	II	45	52.1	70.8	122.9	0.65	19.1	D
East Ramp	II	45	42.7	10.1	52.8	0.53	36.4	A
West Ramp	II	45	15.7	22.7	38.4	0.14	13.5	E
Total	II		164.8	246.4	411.2	1.87	16.4	E

HCM 2010 methodology does not support clustered intersections.

HCM 2010 methodology does not support clustered intersections.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	536	952	342	708	1278	195	798	141	818	111	143	690
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	564	1002	360	745	1345	205	840	148	861	117	151	726
Adj No. of Lanes	2	3	1	2	3	1	2	1	1	1	1	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	553	1075	448	807	1287	769	802	472	656	257	239	1011
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.16	0.21	0.21	0.23	0.25	0.25	0.23	0.25	0.25	0.07	0.13	0.13
Ln Grp Delay, s/veh	95.7	63.5	55.5	61.5	84.3	19.1	92.8	38.1	187.9	43.9	56.7	36.6
Ln Grp LOS	F	E	E	E	F	B	F	D	F	D	E	D
Approach Vol, veh/h		1926			2295			1849			994	
Approach Delay, s/veh		71.5			71.1			132.7			40.5	
Approach LOS		E			E			F			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	1.1	3.0
Phs Duration (G+Y+Rc), s	28.0	40.0	33.0	23.5	33.2	34.8	17.4	39.1
Change Period (Y+Rc), s	8.0	* 8.5	4.0	* 7.5	4.0	8.5	8.5	7.5
Max Green (Gmax), s	20.0	* 32	29.0	* 16	31.0	23.5	11.6	25.4
Max Allow Headway (MAH), s	3.7	4.7	3.7	4.1	3.7	4.7	3.7	4.1
Max Q Clear (g_c+I1), s	22.0	33.5	31.0	18.0	28.3	28.3	9.0	33.6
Green Ext Time (g_e), s	0.0	0.0	0.0	0.0	0.9	0.0	0.1	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	0.98	1.00
Prob of Max Out (p_x)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3442		3442		3442		1774	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		5085		1863		5085		1863

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		2787		1583		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Pr/Pm)	
Lanes in Grp	2	0	2	0	2	0	1	0

Grp Vol (v), veh/h	564	0	840	0	745	0	117	0
Grp Sat Flow (s), veh/h/ln	1721	0	1721	0	1721	0	1774	0
Q Serve Time (g_s), s	20.0	0.0	29.0	0.0	26.3	0.0	7.0	0.0
Cycle Q Clear Time (g_c), s	20.0	0.0	29.0	0.0	26.3	0.0	7.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	556	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	16.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	16.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	553	0	802	0	807	0	257	0
V/C Ratio (X)	1.02	0.00	1.05	0.00	0.92	0.00	0.46	0.00
Avail Cap (c_a), veh/h	553	0	802	0	857	0	295	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	52.3	0.0	47.8	0.0	46.6	0.0	42.6	0.0
Incr Delay (d2), s/veh	43.5	0.0	45.0	0.0	14.9	0.0	1.3	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	95.7	0.0	92.8	0.0	61.5	0.0	43.9	0.0
1st-Term Q (Q1), veh/ln	9.4	0.0	13.7	0.0	12.5	0.0	3.4	0.0
2nd-Term Q (Q2), veh/ln	3.3	0.0	5.0	0.0	1.7	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	1.80	0.00	1.44	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	23.0	0.0	33.7	0.0	20.4	0.0	6.3	0.0
%ile Storage Ratio (RQ%)	1.08	0.00	2.44	0.00	1.67	0.00	1.07	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	2.8	0.0	9.6	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	1	0	3	0	1
Grp Vol (v), veh/h	0	1345	0	151	0	1002	0	148
Grp Sat Flow (s), veh/h/ln	0	1695	0	1863	0	1695	0	1863
Q Serve Time (g_s), s	0.0	31.5	0.0	9.6	0.0	24.1	0.0	8.0
Cycle Q Clear Time (g_c), s	0.0	31.5	0.0	9.6	0.0	24.1	0.0	8.0
Lane Grp Cap (c), veh/h	0	1287	0	239	0	1075	0	472
V/C Ratio (X)	0.00	1.05	0.00	0.63	0.00	0.93	0.00	0.31
Avail Cap (c_a), veh/h	0	1287	0	239	0	1075	0	472
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	46.5	0.0	51.4	0.0	48.2	0.0	37.7
Incr Delay (d2), s/veh	0.0	37.8	0.0	5.2	0.0	15.3	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	84.3	0.0	56.7	0.0	63.5	0.0	38.1
1st-Term Q (Q1), veh/ln	0.0	14.7	0.0	4.9	0.0	11.3	0.0	4.1
2nd-Term Q (Q2), veh/ln	0.0	4.5	0.0	0.3	0.0	1.5	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.72	0.00	1.46	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	34.5	0.0	9.0	0.0	18.7	0.0	7.5
%ile Storage Ratio (RQ%)	0.00	0.27	0.00	0.40	0.00	0.18	0.00	0.34
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	14.6	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	2	0	1	0	1
Grp Vol (v), veh/h	0	205	0	726	0	360	0	861
Grp Sat Flow (s), veh/h/ln	0	1583	0	1393	0	1583	0	1583
Q Serve Time (g_s), s	0.0	9.5	0.0	16.0	0.0	26.3	0.0	31.6
Cycle Q Clear Time (g_c), s	0.0	9.5	0.0	16.0	0.0	26.3	0.0	31.6
Prot RT Sat Flow (s_R), veh/h/ln	0.0	1583.3	0.0	1393.3	0.0	1583.3	0.0	1583.3
Prot RT Eff Green (g_R), s	0.0	29.0	0.0	29.2	0.0	8.9	0.0	20.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	769	0	1011	0	448	0	656
V/C Ratio (X)	0.00	0.27	0.00	0.72	0.00	0.80	0.00	1.31
Avail Cap (c_a), veh/h	0	769	0	1011	0	448	0	656
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	18.9	0.0	34.2	0.0	41.4	0.0	36.5
Incr Delay (d2), s/veh	0.0	0.2	0.0	2.5	0.0	14.1	0.0	151.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	19.1	0.0	36.6	0.0	55.5	0.0	187.9
1st-Term Q (Q1), veh/ln	0.0	4.2	0.0	10.7	0.0	11.4	0.0	22.4
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.3	0.0	1.8	0.0	27.6
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.49	0.00	1.45	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	7.6	0.0	16.5	0.0	19.1	0.0	90.0
%ile Storage Ratio (RQ%)	0.00	0.40	0.00	1.40	0.00	0.97	0.00	5.08
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	51.3
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3

Intersection Summary	
HCM 2010 Ctrl Delay	83.0
HCM 2010 LOS	F

Notes

User approved ignoring U-Turning movement.

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	429	936	377	339	1426	363	302	1233	72	520	1077	235
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	452	985	397	357	1501	382	318	1298	76	547	1134	247
Adj No. of Lanes	3	3	1	3	3	1	3	3	1	3	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	462	1467	587	442	1447	451	411	1232	384	616	1460	454
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.09	0.29	0.29	0.09	0.28	0.28	0.08	0.24	0.24	0.12	0.29	0.29
Ln Grp Delay, s/veh	95.1	42.0	37.4	65.6	80.3	61.5	61.9	90.2	39.4	71.0	45.2	40.5
Ln Grp LOS	F	D	D	E	F	E	E	F	D	E	D	D
Approach Vol, veh/h		1834			2240			1692			1928	
Approach Delay, s/veh		54.1			74.8			82.6			51.9	
Approach LOS		D			E			F			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	21.0	45.0	25.0	39.0	20.5	45.5	19.2	44.8
Change Period (Y+Rc), s	9.0	8.0	9.0	7.5	9.0	8.0	8.5	7.5
Max Green (Gmax), s	12.0	37.0	16.0	31.5	14.0	35.0	16.1	31.9
Max Allow Headway (MAH), s	3.7	4.7	3.7	4.8	3.7	4.7	3.7	4.8
Max Q Clear (g_c+I1), s	13.7	39.0	16.0	33.5	11.1	29.4	10.1	28.6
Green Ext Time (g_e), s	0.0	0.0	0.0	0.0	0.4	5.3	0.6	3.1
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	1.00	1.00	0.99	0.20	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	5003		5003		5003		5003	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		5085		5085		5085		5085

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		1583		1583		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	
Lanes in Grp	3	0	3	0	3	0	3	0

Grp Vol (v), veh/h	452	0	547	0	357	0	318	0
Grp Sat Flow (s), veh/h/ln	1668	0	1668	0	1668	0	1668	0
Q Serve Time (g_s), s	11.7	0.0	14.0	0.0	9.1	0.0	8.1	0.0
Cycle Q Clear Time (g_c), s	11.7	0.0	14.0	0.0	9.1	0.0	8.1	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	462	0	616	0	442	0	411	0
V/C Ratio (X)	0.98	0.00	0.89	0.00	0.81	0.00	0.77	0.00
Avail Cap (c_a), veh/h	462	0	616	0	539	0	620	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	58.9	0.0	56.1	0.0	58.2	0.0	58.5	0.0
Incr Delay (d2), s/veh	36.2	0.0	14.8	0.0	7.4	0.0	3.4	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	95.1	0.0	71.0	0.0	65.6	0.0	61.9	0.0
1st-Term Q (Q1), veh/ln	5.4	0.0	6.4	0.0	4.2	0.0	3.7	0.0
2nd-Term Q (Q2), veh/ln	1.5	0.0	0.8	0.0	0.3	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.62	0.00	1.61	0.00	1.77	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	11.3	0.0	11.7	0.0	8.0	0.0	7.0	0.0
%ile Storage Ratio (RQ%)	0.54	0.00	0.58	0.00	0.40	0.00	0.33	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	3	0	3	0	3
Grp Vol (v), veh/h	0	1501	0	1298	0	985	0	1134
Grp Sat Flow (s), veh/h/ln	0	1695	0	1695	0	1695	0	1695
Q Serve Time (g_s), s	0.0	37.0	0.0	31.5	0.0	22.2	0.0	26.6
Cycle Q Clear Time (g_c), s	0.0	37.0	0.0	31.5	0.0	22.2	0.0	26.6
Lane Grp Cap (c), veh/h	0	1447	0	1232	0	1467	0	1460
V/C Ratio (X)	0.00	1.04	0.00	1.05	0.00	0.67	0.00	0.78
Avail Cap (c_a), veh/h	0	1447	0	1232	0	1467	0	1460
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	46.5	0.0	49.2	0.0	40.8	0.0	42.5
Incr Delay (d2), s/veh	0.0	33.8	0.0	40.9	0.0	1.2	0.0	2.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	80.3	0.0	90.2	0.0	42.0	0.0	45.2
1st-Term Q (Q1), veh/ln	0.0	17.3	0.0	14.7	0.0	10.4	0.0	12.5
2nd-Term Q (Q2), veh/ln	0.0	4.5	0.0	4.7	0.0	0.2	0.0	0.4

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.50	0.00	1.46
%ile Back of Q (95%), veh/ln	0.0	39.3	0.0	34.9	0.0	15.9	0.0	18.7
%ile Storage Ratio (RQ%)	0.00	0.61	0.00	1.54	0.00	0.12	0.00	0.69
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	13.4	0.0	16.4	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.3	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	382	0	76	0	397	0	247
Grp Sat Flow (s), veh/h/ln	0	1583	0	1583	0	1583	0	1583
Q Serve Time (g_s), s	0.0	29.6	0.0	5.0	0.0	27.4	0.0	17.1
Cycle Q Clear Time (g_c), s	0.0	29.6	0.0	5.0	0.0	27.4	0.0	17.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	1583.3	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	10.7	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	451	0	384	0	587	0	454
V/C Ratio (X)	0.00	0.85	0.00	0.20	0.00	0.68	0.00	0.54
Avail Cap (c_a), veh/h	0	451	0	384	0	587	0	454
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	43.8	0.0	39.2	0.0	34.4	0.0	39.1
Incr Delay (d2), s/veh	0.0	17.7	0.0	0.3	0.0	3.1	0.0	1.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	61.5	0.0	39.4	0.0	37.4	0.0	40.5
1st-Term Q (Q1), veh/ln	0.0	12.9	0.0	2.2	0.0	12.0	0.0	7.5
2nd-Term Q (Q2), veh/ln	0.0	2.2	0.0	0.0	0.0	0.5	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.42	0.00	1.80	0.00	1.46	0.00	1.59
%ile Back of Q (95%), veh/ln	0.0	21.5	0.0	3.9	0.0	18.3	0.0	12.2
%ile Storage Ratio (RQ%)	0.00	1.76	0.00	0.39	0.00	1.57	0.00	0.61
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	65.8
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	414	1209	40	223	1303	261	48	1082	192	171	1248	497
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	436	1273	42	235	1372	275	51	1139	202	180	1314	523
Adj No. of Lanes	3	3	1	2	3	1	2	3	1	2	3	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	452	1517	472	257	1437	447	108	1254	390	432	1733	1201
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.09	0.30	0.30	0.07	0.28	0.28	0.03	0.25	0.25	0.13	0.34	0.34
Ln Grp Delay, s/veh	91.2	47.6	32.6	93.2	60.1	45.9	63.8	55.4	42.5	54.3	40.5	26.5
Ln Grp LOS	F	D	C	F	E	D	E	E	D	D	D	C
Approach Vol, veh/h		1751			1882			1392			2017	
Approach Delay, s/veh		58.1			62.2			53.8			38.1	
Approach LOS		E			E			D			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	20.0	44.0	24.5	38.9	18.0	46.0	12.5	50.9
Change Period (Y+Rc), s	8.5	8.0	8.5	7.5	8.5	8.0	8.5	7.5
Max Green (Gmax), s	11.5	36.0	16.0	34.0	9.5	38.0	16.5	33.5
Max Allow Headway (MAH), s	3.7	4.8	3.7	4.7	3.7	4.8	3.7	4.7
Max Q Clear (g_c+I1), s	13.1	35.8	8.1	29.7	10.6	31.9	3.9	31.3
Green Ext Time (g_e), s	0.0	0.2	0.3	1.7	0.0	5.7	0.1	2.1
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	5003		3442		3442		3442	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		5085		5085		5085		5085

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		1583		1583		2787

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	
Lanes in Grp	3	0	2	0	2	0	2	0

Grp Vol (v), veh/h	436	0	180	0	235	0	51	0
Grp Sat Flow (s), veh/h/ln	1668	0	1721	0	1721	0	1721	0
Q Serve Time (g_s), s	11.1	0.0	6.1	0.0	8.6	0.0	1.9	0.0
Cycle Q Clear Time (g_c), s	11.1	0.0	6.1	0.0	8.6	0.0	1.9	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	452	0	432	0	257	0	108	0
V/C Ratio (X)	0.97	0.00	0.42	0.00	0.92	0.00	0.47	0.00
Avail Cap (c_a), veh/h	452	0	432	0	257	0	446	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	57.8	0.0	51.4	0.0	58.6	0.0	60.7	0.0
Incr Delay (d2), s/veh	33.5	0.0	2.9	0.0	34.6	0.0	3.2	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	91.2	0.0	54.3	0.0	93.2	0.0	63.8	0.0
1st-Term Q (Q1), veh/ln	5.1	0.0	2.9	0.0	4.1	0.0	0.9	0.0
2nd-Term Q (Q2), veh/ln	1.4	0.0	0.2	0.0	1.2	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.64	0.00	1.80	0.00	1.71	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	10.7	0.0	5.6	0.0	9.1	0.0	1.7	0.0
%ile Storage Ratio (RQ%)	0.45	0.00	0.30	0.00	0.41	0.00	0.08	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	3	0	3	0	3
Grp Vol (v), veh/h	0	1372	0	1139	0	1273	0	1314
Grp Sat Flow (s), veh/h/ln	0	1695	0	1695	0	1695	0	1695
Q Serve Time (g_s), s	0.0	33.8	0.0	27.7	0.0	29.9	0.0	29.3
Cycle Q Clear Time (g_c), s	0.0	33.8	0.0	27.7	0.0	29.9	0.0	29.3
Lane Grp Cap (c), veh/h	0	1437	0	1254	0	1517	0	1733
V/C Ratio (X)	0.00	0.95	0.00	0.91	0.00	0.84	0.00	0.76
Avail Cap (c_a), veh/h	0	1437	0	1357	0	1517	0	1733
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	44.9	0.0	46.6	0.0	41.9	0.0	37.3
Incr Delay (d2), s/veh	0.0	15.2	0.0	8.8	0.0	5.7	0.0	3.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	60.1	0.0	55.4	0.0	47.6	0.0	40.5
1st-Term Q (Q1), veh/ln	0.0	15.8	0.0	13.0	0.0	14.0	0.0	13.6
2nd-Term Q (Q2), veh/ln	0.0	2.0	0.0	1.0	0.0	0.8	0.0	0.5

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.39	0.00	1.44	0.00	1.43	0.00	1.44
%ile Back of Q (95%), veh/ln	0.0	24.7	0.0	20.1	0.0	21.2	0.0	20.3
%ile Storage Ratio (RQ%)	0.00	0.65	0.00	0.77	0.00	0.33	0.00	0.66
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	2
Grp Vol (v), veh/h	0	275	0	202	0	42	0	523
Grp Sat Flow (s), veh/h/ln	0	1583	0	1583	0	1583	0	1393
Q Serve Time (g_s), s	0.0	19.2	0.0	14.0	0.0	2.4	0.0	16.8
Cycle Q Clear Time (g_c), s	0.0	19.2	0.0	14.0	0.0	2.4	0.0	16.8
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1393.3
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.5
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	447	0	390	0	472	0	1201
V/C Ratio (X)	0.00	0.61	0.00	0.52	0.00	0.09	0.00	0.44
Avail Cap (c_a), veh/h	0	447	0	422	0	472	0	1201
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	39.7	0.0	41.5	0.0	32.2	0.0	25.4
Incr Delay (d2), s/veh	0.0	6.2	0.0	1.1	0.0	0.4	0.0	1.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	45.9	0.0	42.5	0.0	32.6	0.0	26.5
1st-Term Q (Q1), veh/ln	0.0	8.4	0.0	6.1	0.0	1.1	0.0	6.4
2nd-Term Q (Q2), veh/ln	0.0	0.8	0.0	0.1	0.0	0.0	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.54	0.00	1.66	0.00	1.80	0.00	1.64
%ile Back of Q (95%), veh/ln	0.0	14.2	0.0	10.3	0.0	2.0	0.0	10.8
%ile Storage Ratio (RQ%)	0.00	1.16	0.00	0.49	0.00	0.07	0.00	0.79
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	52.6
HCM 2010 LOS	D

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	3	662	0	38	830	47	6	0	30	28	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	325	-	-	289	-	-	-	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	697	0	40	874	49	6	0	32	29	0	0

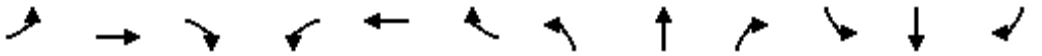
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	923	0	0	697	0	0	1220	1706	348	1333	1681	462
Stage 1	-	-	-	-	-	-	703	703	-	978	978	-
Stage 2	-	-	-	-	-	-	517	1003	-	355	703	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	736	-	-	895	-	-	136	90	648	112	94	547
Stage 1	-	-	-	-	-	-	394	438	-	269	327	-
Stage 2	-	-	-	-	-	-	509	318	-	635	438	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	736	-	-	895	-	-	131	86	648	103	89	547
Mov Cap-2 Maneuver	-	-	-	-	-	-	131	86	-	103	89	-
Stage 1	-	-	-	-	-	-	392	436	-	268	312	-
Stage 2	-	-	-	-	-	-	486	304	-	602	436	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.4	15.2	53.4
HCM LOS			C	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	391	736	-	-	895	-	-	103	-
HCM Lane V/C Ratio	0.097	0.004	-	-	0.045	-	-	0.286	-
HCM Control Delay (s)	15.2	9.9	-	-	9.2	-	-	53.4	0
HCM Lane LOS	C	A	-	-	A	-	-	F	A
HCM 95th %tile Q(veh)	0.3	0	-	-	0.1	-	-	1.1	-

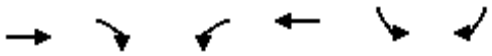
Build Alternative 2040 PM

2: West Ramp & Donald Ross Corridor: Donald Ross Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	598	78	1047	952	0	0	0	0	416	0	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0	4.0	7.0	6.0					6.0		4.0
Lane Util. Factor		0.86	1.00	0.86	0.86					0.94		1.00
Frt		1.00	0.85	1.00	1.00					1.00		0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (prot)		6408	1583	3044	3188					4990		1583
Flt Permitted		1.00	1.00	0.95	0.75					0.95		1.00
Satd. Flow (perm)		6408	1583	3044	2415					4990		1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	629	82	1102	1002	0	0	0	0	438	0	36
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	629	82	992	1112	0	0	0	0	438	0	36
Turn Type		NA	Free	Prot	NA					Prot		Free
Protected Phases		6		5	2					3		
Permitted Phases			Free									Free
Actuated Green, G (s)		23.9	90.0	30.7	61.6					16.4		90.0
Effective Green, g (s)		23.9	90.0	30.7	61.6					16.4		90.0
Actuated g/C Ratio		0.27	1.00	0.34	0.68					0.18		1.00
Clearance Time (s)		6.0		7.0	6.0					6.0		
Vehicle Extension (s)		3.0		3.0	3.0					3.0		
Lane Grp Cap (vph)		1701	1583	1038	1916					909		1583
v/s Ratio Prot		0.10		c0.33	0.20					c0.09		
v/s Ratio Perm			0.05		c0.20							0.02
v/c Ratio		0.37	0.05	0.96	0.58					0.48		0.02
Uniform Delay, d1		26.9	0.0	29.0	7.4					33.0		0.0
Progression Factor		1.00	1.00	0.97	1.01					1.00		1.00
Incremental Delay, d2		0.6	0.1	16.8	0.4					0.4		0.0
Delay (s)		27.5	0.1	45.0	7.9					33.4		0.0
Level of Service		C	A	D	A					C		A
Approach Delay (s)		24.4			25.4			0.0			30.9	
Approach LOS		C			C			A			C	

Intersection Summary			
HCM 2000 Control Delay	26.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	19.0
Intersection Capacity Utilization	59.5%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



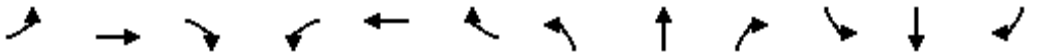
Lane Group	EBT	EBR	WBL	WBT	SBL	SBR
Lane Group Flow (vph)	629	82	992	1112	438	36
v/c Ratio	0.37	0.05	0.96	0.84	0.48	0.02
Control Delay	27.9	0.1	47.2	22.7	34.9	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	27.9	0.1	47.2	22.7	34.9	0.0
Queue Length 50th (ft)	86	0	244	197	79	0
Queue Length 95th (ft)	112	0	#434	269	110	0
Internal Link Dist (ft)	2056			679		
Turn Bay Length (ft)		433				
Base Capacity (vph)	1704	1583	1048	1328	942	1583
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.37	0.05	0.95	0.84	0.46	0.02

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Build Alternative 2040 PM

9: East Ramp & Donald Ross Corridor: Donald Ross Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	44	970	0	0	1643	1052	356	0	1317	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0			6.0	4.0	6.0		6.0			
Lane Util. Factor	0.97	0.91			0.86	1.00	0.97		0.76			
Frt	1.00	1.00			1.00	0.85	1.00		0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (prot)	3433	5085			6408	1583	3433		3610			
Flt Permitted	0.95	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (perm)	3433	5085			6408	1583	3433		3610			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	46	1021	0	0	1729	1107	375	0	1386	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	1063	0	0	0
Lane Group Flow (vph)	46	1021	0	0	1729	1107	375	0	323	0	0	0
Turn Type	Prot	NA			NA	Free	Prot		Prot			
Protected Phases	1	6			2		7		7			
Permitted Phases						Free						
Actuated Green, G (s)	2.4	23.9			53.2	90.0	16.4		16.4			
Effective Green, g (s)	2.4	23.9			53.2	90.0	16.4		16.4			
Actuated g/C Ratio	0.03	0.27			0.59	1.00	0.18		0.18			
Clearance Time (s)	6.0	6.0			6.0		6.0		6.0			
Vehicle Extension (s)	3.0	3.0			3.0		3.0		3.0			
Lane Grp Cap (vph)	91	1350			3787	1583	625		657			
v/s Ratio Prot	0.01	0.20			0.27		0.11		0.09			
v/s Ratio Perm						c0.70						
v/c Ratio	0.51	0.76			0.46	0.70	0.60		0.49			
Uniform Delay, d1	43.2	30.4			10.3	0.0	33.8		33.1			
Progression Factor	0.59	0.82			1.00	1.00	1.00		1.00			
Incremental Delay, d2	4.1	3.7			0.4	2.6	1.6		0.6			
Delay (s)	29.5	28.8			10.7	2.6	35.3		33.6			
Level of Service	C	C			B	A	D		C			
Approach Delay (s)		28.8			7.5			34.0			0.0	
Approach LOS		C			A			C			A	

Intersection Summary			
HCM 2000 Control Delay	19.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	19.0
Intersection Capacity Utilization	59.5%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Build Alternative 2040 PM

9: East Ramp & Donald Ross Corridor: Donald Ross Road

Lane Group	EBL	EBT	WBT	WBR	NBL	NBR
Lane Group Flow (vph)	46	1021	1729	1107	375	1386
v/c Ratio	0.28	0.76	0.44	0.70	0.60	0.81
Control Delay	28.6	29.2	10.1	2.6	38.2	7.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	28.6	29.2	10.1	2.6	38.2	7.5
Queue Length 50th (ft)	13	113	157	0	101	17
Queue Length 95th (ft)	m29	135	186	0	146	66
Internal Link Dist (ft)		679	2740			
Turn Bay Length (ft)						
Base Capacity (vph)	163	1352	3961	1583	648	1736
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.28	0.76	0.44	0.70	0.58	0.80

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

HOOD ROAD CORRIDOR

Arterial Level of Service: EB Hood Rd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Central Blvd	II	45	133.7	47.7	181.4	1.67	33.2	B
Military Trail	II	45	31.0	40.1	71.1	0.31	15.9	E
Total	II		164.7	87.8	252.5	1.98	28.3	B

Arterial Level of Service: WB Hood Rd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Military Trail	II	45	14.9	36.8	51.7	0.14	9.5	F
Central Blvd	II	45	31.0	33.9	64.9	0.31	17.4	D
Total	II		45.9	70.7	116.6	0.45	13.9	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	103	208	114	604	280	122	255	1222	785	252	1135	292
Future Volume (veh/h)	103	208	114	604	280	122	255	1222	785	252	1135	292
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	108	219	120	636	295	128	268	1286	826	265	1195	307
Adj No. of Lanes	2	2	1	2	2	1	2	2	1	2	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	175	405	321	643	886	397	305	1358	608	271	1323	592
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.05	0.11	0.11	0.19	0.25	0.25	0.09	0.38	0.38	0.08	0.37	0.37
Ln Grp Delay, s/veh	50.8	43.6	35.6	73.6	31.4	17.4	69.9	44.9	180.2	95.1	40.3	27.9
Ln Grp LOS	D	D	D	E	C	B	E	D	F	F	D	C
Approach Vol, veh/h		447			1059			2380			1767	
Approach Delay, s/veh		43.2			55.0			94.7			46.4	
Approach LOS		D			E			F			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	2	1	3	4	5	6	7	8
Case No	3.0	2.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	45.0	14.0	25.0	17.6	15.0	44.0	11.2	31.4
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green (Gmax), s	39.0	8.0	19.0	20.0	9.0	38.0	7.0	32.0
Max Allow Headway (MAH), s	4.5	4.6	3.7	4.6	3.7	4.6	3.7	4.6
Max Q Clear (g_c+I1), s	37.7	9.8	20.7	8.6	9.8	34.4	5.1	8.9
Green Ext Time (g_e), s	1.1	0.0	0.0	3.0	0.0	2.7	0.0	3.9
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	0.00	1.00	1.00	0.21	1.00	0.00	1.00	0.01

Left-Turn Movement Data								
Assigned Mvmt		1	3		5		7	
Mvmt Sat Flow, veh/h		3442	3442		3442		3442	

Through Movement Data								
Assigned Mvmt	2			4		6		8
Mvmt Sat Flow, veh/h	3539			3539		3539		3539

Right-Turn Movement Data								
Assigned Mvmt	12			14		16		18
Mvmt Sat Flow, veh/h	1583			1583		1583		1583

Left Lane Group Data								
Assigned Mvmt	0	1	3	0	5	0	7	0
Lane Assignment		(Prot)	(Prot)		(Prot)		(Prot)	

Lanes in Grp	0	2	2	0	2	0	2	0
Grp Vol (v), veh/h	0	265	636	0	268	0	108	0
Grp Sat Flow (s), veh/h/ln	0	1721	1721	0	1721	0	1721	0
Q Serve Time (g_s), s	0.0	7.8	18.7	0.0	7.8	0.0	3.1	0.0
Cycle Q Clear Time (g_c), s	0.0	7.8	18.7	0.0	7.8	0.0	3.1	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	271	643	0	305	0	175	0
V/C Ratio (X)	0.00	0.98	0.99	0.00	0.88	0.00	0.62	0.00
Avail Cap (c_a), veh/h	0	271	643	0	305	0	237	0
Upstream Filter (I)	0.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	0.0	46.7	41.2	0.0	45.8	0.0	47.3	0.0
Incr Delay (d2), s/veh	0.0	48.4	32.4	0.0	24.1	0.0	3.5	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	95.1	73.6	0.0	69.9	0.0	50.8	0.0
1st-Term Q (Q1), veh/ln	0.0	3.7	8.8	0.0	3.7	0.0	1.5	0.0
2nd-Term Q (Q2), veh/ln	0.0	1.8	2.9	0.0	1.0	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.70	1.48	0.00	1.75	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	0.0	9.3	17.3	0.0	8.3	0.0	2.8	0.0
%ile Storage Ratio (RQ%)	0.00	0.79	0.80	0.00	0.61	0.00	0.13	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	2	0	0	4	0	6	0	8
Lane Assignment	T			T		T		T
Lanes in Grp	2	0	0	2	0	2	0	2
Grp Vol (v), veh/h	1286	0	0	219	0	1195	0	295
Grp Sat Flow (s), veh/h/ln	1770	0	0	1770	0	1770	0	1770
Q Serve Time (g_s), s	35.7	0.0	0.0	5.9	0.0	32.4	0.0	6.9
Cycle Q Clear Time (g_c), s	35.7	0.0	0.0	5.9	0.0	32.4	0.0	6.9
Lane Grp Cap (c), veh/h	1358	0	0	405	0	1323	0	886
V/C Ratio (X)	0.95	0.00	0.00	0.54	0.00	0.90	0.00	0.33
Avail Cap (c_a), veh/h	1358	0	0	697	0	1323	0	1115
Upstream Filter (I)	1.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	30.3	0.0	0.0	42.5	0.0	30.1	0.0	31.1
Incr Delay (d2), s/veh	14.6	0.0	0.0	1.1	0.0	10.2	0.0	0.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	44.9	0.0	0.0	43.6	0.0	40.3	0.0	31.4
1st-Term Q (Q1), veh/ln	17.3	0.0	0.0	2.9	0.0	15.8	0.0	3.4

2nd-Term Q (Q2), veh/ln	2.8	0.0	0.0	0.1	0.0	1.9	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.37	0.00	0.00	1.80	0.00	1.39	0.00	1.80
%ile Back of Q (95%), veh/ln	27.4	0.0	0.0	5.3	0.0	24.5	0.0	6.2
%ile Storage Ratio (RQ%)	1.58	0.00	0.00	0.18	0.00	0.65	0.00	0.10
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	12	0	0	14	0	16	0	18
Lane Assignment	R			R		R		R
Lanes in Grp	1	0	0	1	0	1	0	1
Grp Vol (v), veh/h	826	0	0	120	0	307	0	128
Grp Sat Flow (s), veh/h/ln	1583	0	0	1583	0	1583	0	1583
Q Serve Time (g_s), s	19.7	0.0	0.0	6.6	0.0	15.3	0.0	4.9
Cycle Q Clear Time (g_c), s	19.7	0.0	0.0	6.6	0.0	15.3	0.0	4.9
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	1583.3	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	9.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	1.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	608	0	0	321	0	592	0	397
V/C Ratio (X)	1.36	0.00	0.00	0.37	0.00	0.52	0.00	0.32
Avail Cap (c_a), veh/h	608	0	0	452	0	592	0	499
Upstream Filter (I)	1.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	8.0	0.0	0.0	34.9	0.0	24.7	0.0	16.9
Incr Delay (d2), s/veh	172.2	0.0	0.0	0.7	0.0	3.2	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	180.2	0.0	0.0	35.6	0.0	27.9	0.0	17.4
1st-Term Q (Q1), veh/ln	10.5	0.0	0.0	2.9	0.0	6.7	0.0	2.7
2nd-Term Q (Q2), veh/ln	29.1	0.0	0.0	0.1	0.0	0.5	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	0.00	1.80	0.00	1.61	0.00	1.80
%ile Back of Q (95%), veh/ln	71.2	0.0	0.0	5.3	0.0	11.6	0.0	4.9
%ile Storage Ratio (RQ%)	6.46	0.00	0.00	0.18	0.00	0.88	0.00	0.36
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	54.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	68.1
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	258	510	105	406	474	129	110	805	303	158	682	534
Future Volume (veh/h)	258	510	105	406	474	129	110	805	303	158	682	534
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	272	537	111	427	499	136	116	847	319	166	718	562
Adj No. of Lanes	3	2	1	3	2	1	2	3	1	2	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	405	653	292	542	750	336	185	1173	537	215	1216	507
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.08	0.18	0.18	0.11	0.21	0.21	0.05	0.23	0.23	0.06	0.24	0.24
Ln Grp Delay, s/veh	37.0	37.8	28.9	41.8	30.6	27.5	41.3	31.7	26.3	52.1	28.6	99.8
Ln Grp LOS	D	D	C	D	C	C	D	C	C	D	C	F
Approach Vol, veh/h		920			1062			1282			1446	
Approach Delay, s/veh		36.5			34.7			31.2			59.0	
Approach LOS		D			C			C			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	12.7	26.3	14.9	24.6	13.4	25.6	17.0	22.5
Change Period (Y+Rc), s	8.5	7.5	8.5	8.0	8.5	7.5	8.5	8.0
Max Green (Gmax), s	4.7	18.3	8.5	16.0	4.9	18.1	8.5	16.0
Max Allow Headway (MAH), s	3.7	4.5	3.7	4.7	3.7	4.5	3.7	4.7
Max Q Clear (g_c+I1), s	4.6	20.8	6.1	12.2	5.7	15.1	8.5	13.4
Green Ext Time (g_e), s	0.0	0.0	0.2	2.4	0.0	2.7	0.0	1.0
Prob of Phs Call (p_c)	0.92	1.00	1.00	1.00	0.97	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3442		5003		3442		5003	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		5085		3539		5085		3539

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		1583		1583		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	

Lanes in Grp	2	0	3	0	2	0	3	0
Grp Vol (v), veh/h	116	0	272	0	166	0	427	0
Grp Sat Flow (s), veh/h/ln	1721	0	1668	0	1721	0	1668	0
Q Serve Time (g_s), s	2.6	0.0	4.1	0.0	3.7	0.0	6.5	0.0
Cycle Q Clear Time (g_c), s	2.6	0.0	4.1	0.0	3.7	0.0	6.5	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	185	0	405	0	215	0	542	0
V/C Ratio (X)	0.63	0.00	0.67	0.00	0.77	0.00	0.79	0.00
Avail Cap (c_a), veh/h	206	0	542	0	215	0	542	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	36.4	0.0	35.1	0.0	36.2	0.0	34.1	0.0
Incr Delay (d2), s/veh	5.0	0.0	2.0	0.0	15.9	0.0	7.6	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	41.3	0.0	37.0	0.0	52.1	0.0	41.8	0.0
1st-Term Q (Q1), veh/ln	1.2	0.0	1.9	0.0	1.8	0.0	3.0	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.1	0.0	0.5	0.0	0.4	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	1.80	0.00	1.80	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	2.4	0.0	3.6	0.0	4.0	0.0	6.1	0.0
%ile Storage Ratio (RQ%)	0.14	0.00	0.17	0.00	0.17	0.00	0.29	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	2	0	3	0	2
Grp Vol (v), veh/h	0	718	0	499	0	847	0	537
Grp Sat Flow (s), veh/h/ln	0	1695	0	1770	0	1695	0	1770
Q Serve Time (g_s), s	0.0	9.8	0.0	10.2	0.0	12.1	0.0	11.4
Cycle Q Clear Time (g_c), s	0.0	9.8	0.0	10.2	0.0	12.1	0.0	11.4
Lane Grp Cap (c), veh/h	0	1216	0	750	0	1173	0	653
V/C Ratio (X)	0.00	0.59	0.00	0.67	0.00	0.72	0.00	0.82
Avail Cap (c_a), veh/h	0	1216	0	750	0	1173	0	721
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	26.5	0.0	28.4	0.0	27.9	0.0	30.8
Incr Delay (d2), s/veh	0.0	2.1	0.0	2.2	0.0	3.9	0.0	7.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	28.6	0.0	30.6	0.0	31.7	0.0	37.8
1st-Term Q (Q1), veh/ln	0.0	4.6	0.0	4.9	0.0	5.6	0.0	5.6

2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.2	0.0	0.4	0.0	0.6
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.75	0.00	1.72	0.00	1.67	0.00	1.66
%ile Back of Q (95%), veh/ln	0.0	8.4	0.0	8.9	0.0	10.1	0.0	10.3
%ile Storage Ratio (RQ%)	0.00	0.23	0.00	0.35	0.00	0.34	0.00	0.17
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	562	0	136	0	319	0	111
Grp Sat Flow (s), veh/h/ln	0	1583	0	1583	0	1583	0	1583
Q Serve Time (g_s), s	0.0	18.8	0.0	5.8	0.0	13.1	0.0	4.8
Cycle Q Clear Time (g_c), s	0.0	18.8	0.0	5.8	0.0	13.1	0.0	4.8
Prot RT Sat Flow (s_R), veh/h/ln	0.0	1583.3	0.0	0.0	0.0	1583.3	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	6.4	0.0	0.0	0.0	8.5	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	507	0	336	0	537	0	292
V/C Ratio (X)	0.00	1.11	0.00	0.41	0.00	0.59	0.00	0.38
Avail Cap (c_a), veh/h	0	507	0	336	0	537	0	323
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	26.7	0.0	26.7	0.0	21.5	0.0	28.1
Incr Delay (d2), s/veh	0.0	73.1	0.0	0.8	0.0	4.8	0.0	0.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	99.8	0.0	27.5	0.0	26.3	0.0	28.9
1st-Term Q (Q1), veh/ln	0.0	10.9	0.0	2.5	0.0	5.7	0.0	2.1
2nd-Term Q (Q2), veh/ln	0.0	10.3	0.0	0.1	0.0	0.7	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.65	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	38.1	0.0	4.7	0.0	10.5	0.0	3.9
%ile Storage Ratio (RQ%)	0.00	1.61	0.00	0.38	0.00	0.88	0.00	0.30
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	13.8	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	41.6
HCM 2010 LOS	D

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Traffic Vol, veh/h	19	406	644	103	44	5
Future Vol, veh/h	19	406	644	103	44	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	399	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	20	427	678	108	46	5

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	678	0	-	0	1145	678
Stage 1	-	-	-	-	678	-
Stage 2	-	-	-	-	467	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	914	-	-	-	221	452
Stage 1	-	-	-	-	504	-
Stage 2	-	-	-	-	631	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	914	-	-	-	215	452
Mov Cap-2 Maneuver	-	-	-	-	215	-
Stage 1	-	-	-	-	504	-
Stage 2	-	-	-	-	613	-

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	25.5
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	914	-	-	-	227
HCM Lane V/C Ratio	0.022	-	-	-	0.227
HCM Control Delay (s)	9	0	-	-	25.5
HCM Lane LOS	A	A	-	-	D
HCM 95th %tile Q(veh)	0.1	-	-	-	0.8

MILITARY TRAIL CORRIDOR

Arterial Level of Service: NB N Military Trail

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
PGA Blvd	II	45	18.9	104.4	123.3	0.17	5.1	F
Kyoto Gardens Dr	II	45	43.4	22.8	66.2	0.49	26.8	C
Hood Road	II	45	104.9	29.4	134.3	1.31	35.1	A
Donald Ross	II	45	102.8	49.1	151.9	1.29	30.5	B
Total	II		270.0	205.7	475.7	3.26	24.7	C

Arterial Level of Service: SB N Military Trail

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Donald Ross	II	45	22.3	42.4	64.7	0.20	11.4	F
Hood Road	II	45	102.8	25.5	128.3	1.29	36.1	A
Kyoto Gardens Dr	II	45	104.9	47.2	152.1	1.31	31.0	B
PGA Blvd	II	45	43.4	66.6	110.0	0.49	16.1	E
Total	II		273.4	181.7	455.1	3.29	26.1	C

Movement	WBL	WBR	WBR2	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SER
Lane Configurations											
Traffic Volume (veh/h)	323	678	194	339	1136	364	25	1102	65	0	0
Future Volume (veh/h)	323	678	194	339	1136	364	25	1102	65	0	0
Number	7	14	14	1	6	16	5	2	12		
Initial Q, veh	0	0	0	0	0	0	0	0	0		
Ped-Bike Adj (A_pbT)	1.00	1.00	1.00	1.00		1.00	1.00		1.00		
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900		
Adj Flow Rate, veh/h	340	204	204	357	1196	383	26	1160	68		
Adj No. of Lanes	2	1	1	1	3	1	1	3	0		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2		
Opposing Right Turn Influence	Yes			Yes			Yes				
Cap, veh/h	616	283	283	456	2245	699	41	1796	105		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Prop Arrive On Green	0.18	0.18	0.18	0.15	0.44	0.44	0.02	0.37	0.37		
Ln Grp Delay, s/veh	25.4	28.9	28.9	17.6	14.3	16.6	47.3	20.0	22.2		
Ln Grp LOS	C	C	C	B	B	B	D	B	C		

Approach Vol, veh/h	544				1936			1254			Timer:
Approach Delay, s/veh	26.7				15.4			21.3			Assigned Phs
Approach LOS	C				B			C			Case No
Phs Duration (G+Y+Rc), s		14.0	32.1		19.8	9.0	37.1				
Change Period (Y+Rc), s		4.0	8.0		8.0	7.5	8.0				
Max Green (Gmax), s		15.0	23.0		32.0	5.4	29.1				
Max Allow Headway (MAH), s		3.7	4.8		3.8	3.7	4.8				
Max Q Clear (g_c+I1), s		9.5	14.9		10.0	3.0	13.7				
Green Ext Time (g_e), s		0.5	7.2		1.8	0.0	12.8				
Prob of Phs Call (p_c)		1.00	1.00		1.00	0.38	1.00				
Prob of Max Out (p_x)		0.36	0.00		0.00	1.00	0.00				

Left-Turn Movement Data											
Assigned Mvmt		1			7	5					
Mvmt Sat Flow, veh/h		1774			3442	1774					

Through Movement Data											
Assigned Mvmt			2		4		6				
Mvmt Sat Flow, veh/h			4914		0		5085				

Right-Turn Movement Data											
Assigned Mvmt			12		14		16				
Mvmt Sat Flow, veh/h			288		1583		1583				

Left Lane Group Data											
Assigned Mvmt		1	0	0	7	5	0	0	0		
Lane Assignment		(Pr/Pm)				(Prot)					
Lanes in Grp		1	0	0	2	1	0	0	0		
Grp Vol (v), veh/h		357	0	0	340	26	0	0	0		
Grp Sat Flow (s), veh/h/ln		1774	0	0	1721	1774	0	0	0		

Q Serve Time (g_s), s	7.5	0.0	0.0	5.9	1.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	7.5	0.0	0.0	5.9	1.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	452	0	0	1721	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	26.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	11.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	11.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	456	0	0	616	41	0	0	0
V/C Ratio (X)	0.78	0.00	0.00	0.55	0.64	0.00	0.00	0.00
Avail Cap (c_a), veh/h	590	0	0	1671	145	0	0	0
Upstream Filter (I)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	12.4	0.0	0.0	24.7	31.9	0.0	0.0	0.0
Incr Delay (d2), s/veh	5.2	0.0	0.0	0.8	15.3	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	17.6	0.0	0.0	25.4	47.3	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	3.6	0.0	0.0	2.8	0.5	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.7	0.0	0.0	0.1	0.2	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	0.00	1.80	1.80	0.00	0.00	0.00
%ile Back of Q (95%), veh/ln	7.6	0.0	0.0	5.2	1.2	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.64	0.00	0.00	0.18	0.08	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	3	0	0
Grp Vol (v), veh/h	0	800	0	0	0	1196	0	0
Grp Sat Flow (s), veh/h/ln	0	1695	0	0	0	1695	0	0
Q Serve Time (g_s), s	0.0	12.9	0.0	0.0	0.0	11.3	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	12.9	0.0	0.0	0.0	11.3	0.0	0.0
Lane Grp Cap (c), veh/h	0	1239	0	0	0	2245	0	0
V/C Ratio (X)	0.00	0.65	0.00	0.00	0.00	0.53	0.00	0.00
Avail Cap (c_a), veh/h	0	1239	0	0	0	2245	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	17.4	0.0	0.0	0.0	13.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	2.6	0.0	0.0	0.0	0.9	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	20.0	0.0	0.0	0.0	14.3	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	6.0	0.0	0.0	0.0	5.2	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.0	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.65	0.00	1.00	0.00	1.71	0.00	0.00

%ile Back of Q (95%), veh/ln	0.0	10.6	0.0	0.0	0.0	9.2	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.04	0.00	0.00	0.00	0.59	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment		T+R		R		R		
Lanes in Grp	0	1	0	1	0	1	0	0
Grp Vol (v), veh/h	0	428	0	204	0	383	0	0
Grp Sat Flow (s), veh/h/ln	0	1812	0	1583	0	1583	0	0
Q Serve Time (g_s), s	0.0	12.9	0.0	8.0	0.0	11.7	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	12.9	0.0	8.0	0.0	11.7	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.16	0.00	1.00	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	662	0	283	0	699	0	0
V/C Ratio (X)	0.00	0.65	0.00	0.72	0.00	0.55	0.00	0.00
Avail Cap (c_a), veh/h	0	662	0	769	0	699	0	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	17.4	0.0	25.5	0.0	13.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	4.8	0.0	3.4	0.0	3.1	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	22.2	0.0	28.9	0.0	16.6	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	6.4	0.0	6.7	0.0	5.1	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.9	0.0	0.3	0.0	0.6	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.61	0.00	1.62	0.00	1.69	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	11.7	0.0	11.4	0.0	9.6	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.04	0.00	0.39	0.00	0.81	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	19.0
HCM 2010 LOS	B

NORTHLAKE BOULEVARD CORRIDOR

Arterial Level of Service: EB Northlake Blvd

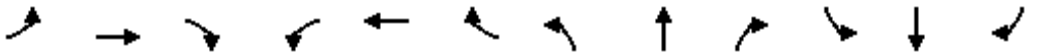
Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Keating Dr	II	45	17.3	22.5	39.8	0.16	14.4	E
West Ramps	II	45	12.7	54.3	67.0	0.12	6.2	F
East Ramps	II	45	11.1	12.4	23.5	0.10	15.6	E
Roan Ln	II	45	8.8	0.3	9.1	0.08	32.1	B
Sandtree Dr	II	45	13.5	28.0	41.5	0.12	10.8	F
Total	II		63.4	117.5	180.9	0.58	11.6	F

Arterial Level of Service: WB Northlake Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Sunrise Dr	II	45	15.3	83.0	98.3	0.14	5.1	F
Roan Ln	II	45	13.5	7.2	20.7	0.12	21.6	D
East Ramps	II	45	8.8	48.9	57.7	0.08	5.1	F
West Ramps	II	45	11.1	8.0	19.1	0.10	19.2	D
Keating Dr	II	45	12.7	10.9	23.6	0.12	17.7	D
Total	II		61.4	158.0	219.4	0.56	9.2	F

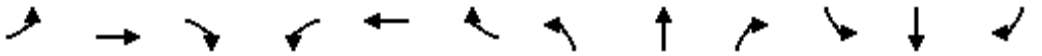
Build Alternative 2040 PM

3: Keating Dr & Northlake Blvd Corridor: Northlake Boulevard



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1839	60	188	2249	167	61	3	251	73	2	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0	4.0	5.0	5.0	6.0	6.0	6.0		6.0	
Lane Util. Factor		0.91	1.00	1.00	0.91	1.00	0.95	0.95	1.00		0.95	
Frt		1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85		1.00	
Flt Protected		1.00	1.00	0.95	1.00	1.00	0.95	0.96	1.00		0.95	
Satd. Flow (prot)		5085	1583	1770	5085	1583	1681	1692	1583		3375	
Flt Permitted		1.00	1.00	0.10	1.00	1.00	0.95	0.64	1.00		0.74	
Satd. Flow (perm)		5085	1583	187	5085	1583	1681	1132	1583		2607	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	1936	63	198	2367	176	64	3	264	77	2	0
RTOR Reduction (vph)	0	0	35	0	0	65	0	0	146	0	0	0
Lane Group Flow (vph)	0	1936	28	198	2367	111	33	34	118	0	79	0
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	Prot	NA	Perm	pm+pt	NA	
Protected Phases		6		5	2		7	4		3	8	
Permitted Phases	6		6	2		2			4	8		
Actuated Green, G (s)		35.8	35.8	50.5	50.5	50.5	2.4	18.5	18.5		10.1	
Effective Green, g (s)		35.8	35.8	50.5	50.5	50.5	2.4	18.5	18.5		10.1	
Actuated g/C Ratio		0.45	0.45	0.63	0.63	0.63	0.03	0.23	0.23		0.13	
Clearance Time (s)		5.0	5.0	4.0	5.0	5.0	6.0	6.0	6.0		6.0	
Vehicle Extension (s)		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)		2275	708	329	3209	999	50	278	366		329	
v/s Ratio Prot		c0.38		0.08	c0.47		0.02	0.00				
v/s Ratio Perm			0.02	0.30		0.07		0.02	c0.07		0.03	
v/c Ratio		0.85	0.04	0.60	0.74	0.11	0.66	0.12	0.32		0.24	
Uniform Delay, d1		19.7	12.4	14.1	10.2	5.8	38.4	24.3	25.5		31.5	
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	
Incremental Delay, d2		4.2	0.1	3.1	1.6	0.2	28.1	0.2	0.5		0.4	
Delay (s)		24.0	12.5	17.2	11.7	6.1	66.5	24.5	26.1		31.9	
Level of Service		C	B	B	B	A	E	C	C		C	
Approach Delay (s)		23.6			11.8			29.9			31.9	
Approach LOS		C			B			C			C	

Intersection Summary			
HCM 2000 Control Delay	17.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	21.0
Intersection Capacity Utilization	70.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

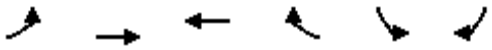


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1481	617	1322	1818	0	0	0	0	656	0	838
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0	4.0	7.0	6.5					6.0		6.0
Lane Util. Factor		0.81	1.00	0.97	0.91					0.97		0.88
Frt		1.00	0.85	1.00	1.00					1.00		0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (prot)		7544	1583	3433	5085					3433		2787
Flt Permitted		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (perm)		7544	1583	3433	5085					3433		2787
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	1559	649	1392	1914	0	0	0	0	691	0	882
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	23
Lane Group Flow (vph)	0	1559	649	1392	1914	0	0	0	0	691	0	859
Turn Type		NA	Free	Prot	NA					Prot		Perm
Protected Phases		6		5	2					3		
Permitted Phases			Free									3 6
Actuated Green, G (s)		25.0	110.0	44.0	75.5					22.0		53.0
Effective Green, g (s)		25.0	110.0	44.0	75.5					22.0		53.0
Actuated g/C Ratio		0.23	1.00	0.40	0.69					0.20		0.48
Clearance Time (s)		6.0		7.0	6.5					6.0		
Vehicle Extension (s)		3.0		3.0	3.0					3.0		
Lane Grp Cap (vph)		1714	1583	1373	3490					686		1342
v/s Ratio Prot		c0.21		c0.41	0.38					c0.20		
v/s Ratio Perm			0.41									0.31
v/c Ratio		0.91	0.41	1.01	0.55					1.01		0.64
Uniform Delay, d1		41.4	0.0	33.0	8.7					44.0		21.4
Progression Factor		1.00	1.00	1.00	1.00					1.00		1.00
Incremental Delay, d2		8.7	0.8	27.8	0.6					36.2		1.1
Delay (s)		50.1	0.8	60.8	9.3					80.2		22.4
Level of Service		D	A	E	A					F		C
Approach Delay (s)		35.6			31.0			0.0			47.8	
Approach LOS		D			C			A			D	

Intersection Summary			
HCM 2000 Control Delay	36.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	19.0
Intersection Capacity Utilization	89.6%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

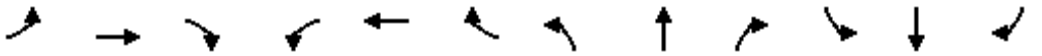
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	758	1379	0	0	2236	931	904	0	1246	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	6.0			6.5	4.0	6.0		6.5			
Lane Util. Factor	0.97	0.91			0.81	1.00	0.97		0.88			
Frt	1.00	1.00			1.00	0.85	1.00		0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (prot)	3433	5085			7544	1583	3433		2787			
Flt Permitted	0.95	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (perm)	3433	5085			7544	1583	3433		2787			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	798	1452	0	0	2354	980	952	0	1312	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	723	0	0	0
Lane Group Flow (vph)	798	1452	0	0	2354	980	952	0	589	0	0	0
Turn Type	Prot	NA			NA	Free	Prot		Perm			
Protected Phases	1	6			2		7					
Permitted Phases						Free			2			
Actuated Green, G (s)	28.0	75.0			39.5	120.0	33.0		39.5			
Effective Green, g (s)	28.0	75.0			39.5	120.0	33.0		39.5			
Actuated g/C Ratio	0.23	0.62			0.33	1.00	0.28		0.33			
Clearance Time (s)	7.0	6.0			6.5		6.0		6.5			
Vehicle Extension (s)	3.0	3.0			3.0		3.0		3.0			
Lane Grp Cap (vph)	801	3178			2483	1583	944		917			
v/s Ratio Prot	c0.23	0.29			c0.31		c0.28					
v/s Ratio Perm						0.62			0.21			
v/c Ratio	1.00	0.46			0.95	0.62	1.01		0.64			
Uniform Delay, d1	45.9	11.8			39.2	0.0	43.5		34.2			
Progression Factor	1.00	1.00			1.00	1.00	1.00		1.00			
Incremental Delay, d2	30.7	0.5			9.4	1.8	31.4		3.4			
Delay (s)	76.6	12.3			48.7	1.8	74.9		37.7			
Level of Service	E	B			D	A	E		D			
Approach Delay (s)		35.1			34.9			53.3			0.0	
Approach LOS		D			C			D			A	

Intersection Summary			
HCM 2000 Control Delay	40.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	89.6%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



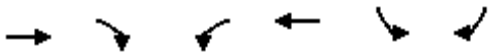
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	105	2258	3382	131	0	103
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	8.0	6.5	6.5	4.0		4.0
Lane Util. Factor	1.00	0.91	0.76	1.00		1.00
Frt	1.00	1.00	1.00	0.85		0.86
Flt Protected	0.95	1.00	1.00	1.00		1.00
Satd. Flow (prot)	1770	5085	8494	1583		1611
Flt Permitted	0.95	1.00	1.00	1.00		1.00
Satd. Flow (perm)	1770	5085	8494	1583		1611
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	111	2377	3560	138	0	108
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	111	2377	3560	138	0	108
Turn Type	Prot	NA	NA	Free		Free
Protected Phases	1	6	2			
Permitted Phases				Free		Free
Actuated Green, G (s)	3.2	40.0	22.3	40.0		40.0
Effective Green, g (s)	3.2	40.0	22.3	40.0		40.0
Actuated g/C Ratio	0.08	1.00	0.56	1.00		1.00
Clearance Time (s)	8.0	6.5	6.5			
Vehicle Extension (s)	3.0	3.0	3.0			
Lane Grp Cap (vph)	141	5085	4735	1583		1611
v/s Ratio Prot	0.06	c0.47	c0.42			
v/s Ratio Perm				0.09		0.07
v/c Ratio	0.79	0.47	0.75	0.09		0.07
Uniform Delay, d1	18.1	0.0	6.7	0.0		0.0
Progression Factor	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	24.5	0.3	1.1	0.1		0.1
Delay (s)	42.6	0.3	7.9	0.1		0.1
Level of Service	D	A	A	A		A
Approach Delay (s)		2.2	7.6		0.1	
Approach LOS		A	A		A	

Intersection Summary			
HCM 2000 Control Delay	5.3	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	14.5
Intersection Capacity Utilization	50.6%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	152	1818	288	124	2729	149	421	1	120	47	1	161
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.5	7.5	7.0	7.5		6.0	6.5	6.5	6.5	6.5	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91		0.97	0.95	0.95	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.85	0.85	1.00	0.85	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1583	3433	5046		3433	1508	1504	1770	1585	
Flt Permitted	0.06	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.71	1.00	
Satd. Flow (perm)	103	5085	1583	3433	5046		3433	1508	1504	1328	1585	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	160	1914	303	131	2873	157	443	1	126	49	1	169
RTOR Reduction (vph)	0	0	141	0	4	0	0	47	47	0	82	0
Lane Group Flow (vph)	160	1914	162	131	3026	0	443	17	16	49	88	0
Turn Type	pm+pt	NA	Perm	Prot	NA		Prot	NA	Perm	Perm	NA	
Protected Phases	1	6		5	2		7	4			8	
Permitted Phases	6		6						4	8		
Actuated Green, G (s)	80.0	80.0	80.0	10.0	82.0		20.7	39.0	39.0	12.3	12.3	
Effective Green, g (s)	80.0	80.0	80.0	10.0	82.0		20.7	39.0	39.0	12.3	12.3	
Actuated g/C Ratio	0.53	0.53	0.53	0.07	0.55		0.14	0.26	0.26	0.08	0.08	
Clearance Time (s)	7.0	7.5	7.5	7.0	7.5		6.0	6.5	6.5	6.5	6.5	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	143	2712	844	228	2758		473	392	391	108	129	
v/s Ratio Prot	c0.06	0.38		0.04	c0.60		c0.13	0.01			c0.06	
v/s Ratio Perm	0.53		0.10						0.01	0.04		
v/c Ratio	1.12	0.71	0.19	0.57	1.10		0.94	0.04	0.04	0.45	0.68	
Uniform Delay, d1	44.6	26.2	18.2	67.9	34.0		64.0	41.5	41.5	65.6	67.0	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	110.7	1.6	0.5	3.5	50.1		26.1	0.0	0.0	3.0	14.0	
Delay (s)	155.3	27.8	18.7	71.4	84.1		90.1	41.6	41.6	68.7	81.0	
Level of Service	F	C	B	E	F		F	D	D	E	F	
Approach Delay (s)		35.2			83.6			79.3			78.2	
Approach LOS		D			F			E			E	

Intersection Summary			
HCM 2000 Control Delay	64.8	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.03		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	27.0
Intersection Capacity Utilization	109.0%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



Lane Group	EBT	EBR	WBL	WBT	SBL	SBR
Lane Group Flow (vph)	1559	649	1392	1914	691	882
v/c Ratio	0.91	0.41	1.01	0.55	1.01	0.65
Control Delay	50.4	0.8	61.2	9.4	80.5	23.0
Queue Delay	0.0	0.0	32.4	0.6	0.0	0.0
Total Delay	50.4	0.8	93.6	10.0	80.5	23.0
Queue Length 50th (ft)	266	0	~514	222	~256	245
Queue Length 95th (ft)	#311	0	#670	257	#380	321
Internal Link Dist (ft)	533			458		
Turn Bay Length (ft)						
Base Capacity (vph)	1714	1583	1373	3490	686	1365
Starvation Cap Reductn	0	0	110	1039	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.91	0.41	1.10	0.78	1.01	0.65

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Build Alternative 2040 PM

9: East Ramps & Northlake Blvd Corridor: Northlake Boulevard

Lane Group	EBL	EBT	WBT	WBR	NBL	NBR
Lane Group Flow (vph)	798	1452	2354	980	952	1312
v/c Ratio	1.00	0.46	0.95	0.62	1.01	0.80
Control Delay	77.1	12.4	48.9	1.8	74.9	10.4
Queue Delay	0.0	0.4	44.2	0.0	0.0	0.0
Total Delay	77.1	12.8	93.0	1.8	74.9	10.4
Queue Length 50th (ft)	320	201	437	0	~386	82
Queue Length 95th (ft)	#454	235	#489	0	#527	193
Internal Link Dist (ft)		458	348			
Turn Bay Length (ft)				400		
Base Capacity (vph)	801	3178	2483	1583	944	1640
Starvation Cap Reductn	0	1086	360	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.00	0.69	1.11	0.62	1.01	0.80

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

PGA BOULEVARD CORRIDOR

Arterial Level of Service: EB PGA Blvd

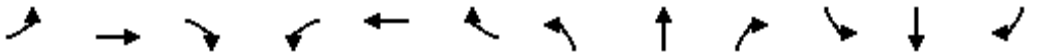
Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
FL Turnpike	II	45	16.8	75.1	91.9	0.15	6.0	F
Central Blvd	II	45	36.7	19.4	56.1	0.39	25.1	C
N Military Trail	II	45	81.7	112.6	194.3	1.02	18.9	D
West Ramps	II	45	20.5	5.5	26.0	0.19	26.0	C
East Ramps	II	45	6.3	15.6	21.9	0.06	9.6	F
RCA	II	45	25.6	0.2	25.8	0.25	34.3	B
Lake Victoria Garden	II	45	41.9	4.0	45.9	0.46	36.1	A
Total	II		229.5	232.4	461.9	2.52	19.6	D

Arterial Level of Service: WB PGA Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Lake Victoria Garden	II	45	13.7	45.1	58.8	0.13	7.7	F
RCA	II	45	41.9	0.2	42.1	0.46	39.4	A
East Ramps	II	45	25.6	0.1	25.7	0.25	34.5	B
West Ramps	II	45	6.3	7.7	14.0	0.06	15.0	E
N Military Trail	II	45	20.5	46.2	66.7	0.19	10.2	F
Central Blvd	II	45	25.0	67.1	92.1	0.24	9.4	F
FL Turnpike	II	45	36.7	142.5	179.2	0.39	7.8	F
Total	II		169.7	308.9	478.6	1.71	12.9	F

Build Alternative 2040 PM

3: FL Turnpike & PGA Blvd Corridor: PGA Boulevard



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	109	893	49	276	1509	861	65	230	805	1016	55	117
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.5		7.5	8.0	7.5	7.5	7.5	7.5	7.5	7.5	4.0
Lane Util. Factor	0.97	0.91		0.97	0.91	0.88	1.00	0.95	0.95	0.91	0.91	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	0.91	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.96	1.00
Satd. Flow (prot)	3433	5045		3433	5085	2787	1770	1618	1504	3221	1626	1583
Flt Permitted	0.15	1.00		0.95	1.00	1.00	0.10	1.00	1.00	0.95	0.96	1.00
Satd. Flow (perm)	531	5045		3433	5085	2787	189	1618	1504	3221	1626	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	115	940	52	291	1588	906	68	242	847	1069	58	123
RTOR Reduction (vph)	0	5	0	0	0	334	0	35	154	0	0	0
Lane Group Flow (vph)	115	987	0	291	1588	572	68	529	371	748	379	123
Turn Type	pm+pt	NA		Prot	NA	pm+ov	Perm	NA	Prot	Split	NA	Free
Protected Phases	7	4		3	8	6		2	2	6	6	
Permitted Phases	4					8	2					Free
Actuated Green, G (s)	31.2	27.2		11.8	35.0	61.5	39.5	39.5	39.5	26.5	26.5	135.0
Effective Green, g (s)	31.2	27.2		11.8	35.0	61.5	39.5	39.5	39.5	26.5	26.5	135.0
Actuated g/C Ratio	0.23	0.20		0.09	0.26	0.46	0.29	0.29	0.29	0.20	0.20	1.00
Clearance Time (s)	7.0	7.5		7.5	8.0	7.5	7.5	7.5	7.5	7.5	7.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	208	1016		300	1318	1269	55	473	440	632	319	1583
v/s Ratio Prot	0.02	0.20		c0.08	c0.31	0.09		0.33	0.25	0.23	c0.23	
v/s Ratio Perm	0.11					0.12	c0.36					0.08
v/c Ratio	0.55	0.97		0.97	1.20	0.45	1.24	1.12	0.84	1.18	1.19	0.08
Uniform Delay, d1	43.3	53.5		61.4	50.0	25.2	47.8	47.8	44.8	54.2	54.2	0.0
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.2	21.5		43.2	99.6	0.3	198.2	77.6	13.7	98.1	111.7	0.1
Delay (s)	46.5	75.0		104.6	149.6	25.4	246.0	125.3	58.5	152.3	165.9	0.1
Level of Service	D	E		F	F	C	F	F	E	F	F	A
Approach Delay (s)		72.1			104.5			102.1			141.5	
Approach LOS		E			F			F			F	

Intersection Summary			
HCM 2000 Control Delay	105.7	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.24		
Actuated Cycle Length (s)	135.0	Sum of lost time (s)	30.0
Intersection Capacity Utilization	105.7%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1170	1396	23	189	1863	423	50	38	196	211	37	927
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.5	8.5		7.0	8.0	8.0		8.5	7.0	8.5	8.5	8.5
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00		1.00	1.00	0.95	0.95	0.88
Frt	1.00	1.00		1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.97	1.00	0.95	0.97	1.00
Satd. Flow (prot)	3433	5073		1770	5085	1583		1811	1583	1681	1709	2787
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.63	1.00	0.70	0.73	1.00
Satd. Flow (perm)	3433	5073		1770	5085	1583		1167	1583	1233	1296	2787
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1232	1469	24	199	1961	445	53	40	206	222	39	976
RTOR Reduction (vph)	0	1	0	0	0	117	0	0	71	0	0	19
Lane Group Flow (vph)	1232	1492	0	199	1961	328	0	93	135	129	132	957
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA	pm+ov	Perm	NA	pt+ov
Protected Phases	1	6		5	2			4	5		8	8 1
Permitted Phases						2	4		4	8		
Actuated Green, G (s)	51.9	87.9		21.6	57.6	57.6		16.5	38.1	16.5	16.5	76.9
Effective Green, g (s)	51.9	87.9		21.6	57.6	57.6		16.5	38.1	16.5	16.5	76.9
Actuated g/C Ratio	0.35	0.59		0.14	0.38	0.38		0.11	0.25	0.11	0.11	0.51
Clearance Time (s)	7.5	8.5		7.0	8.0	8.0		8.5	7.0	8.5	8.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	1187	2972		254	1952	607		128	402	135	142	1428
v/s Ratio Prot	c0.36	0.29		0.11	c0.39				0.05			0.34
v/s Ratio Perm						0.21		0.08	0.04	c0.10	0.10	
v/c Ratio	1.04	0.50		0.78	1.00	0.54		0.73	0.34	0.96	0.93	0.67
Uniform Delay, d1	49.0	18.2		61.9	46.2	35.9		64.6	45.6	66.4	66.2	27.1
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	36.5	0.6		14.5	21.5	3.4		18.5	0.5	66.4	58.7	1.2
Delay (s)	85.5	18.8		76.5	67.7	39.3		83.0	46.1	132.8	124.9	28.3
Level of Service	F	B		E	E	D		F	D	F	F	C
Approach Delay (s)		49.0			63.5			57.6			49.5	
Approach LOS		D			E			E			D	

Intersection Summary			
HCM 2000 Control Delay	55.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.01		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	102.9%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Build Alternative 2040 PM

24: PGA Blvd & West Ramps Corridor: PGA Boulevard

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (vph)	0	0	0	174	0	107	0	938	1733	0	2262	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0		6.0		6.0	4.0		6.0	
Lane Util. Factor				0.97		0.88		0.91	1.00		0.86	
Frt				1.00		0.85		1.00	0.85		1.00	
Flt Protected				0.95		1.00		1.00	1.00		1.00	
Satd. Flow (prot)				3433		2787		5085	1583		6408	
Flt Permitted				0.95		1.00		1.00	1.00		1.00	
Satd. Flow (perm)				3433		2787		5085	1583		6408	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	183	0	113	0	987	1824	0	2381	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	183	0	113	0	987	1824	0	2381	0
Turn Type				Prot		Prot		NA	Free		NA	
Protected Phases				3		3		6			2	
Permitted Phases									Free			
Actuated Green, G (s)				6.0		6.0		22.0	40.0		22.0	
Effective Green, g (s)				6.0		6.0		22.0	40.0		22.0	
Actuated g/C Ratio				0.15		0.15		0.55	1.00		0.55	
Clearance Time (s)				6.0		6.0		6.0			6.0	
Vehicle Extension (s)				3.0		3.0		3.0			3.0	
Lane Grp Cap (vph)				514		418		2796	1583		3524	
v/s Ratio Prot				0.05		0.04		0.19			0.37	
v/s Ratio Perm									c1.15			
v/c Ratio				0.36		0.27		0.35	1.15		0.68	
Uniform Delay, d1				15.3		15.1		5.0	20.0		6.4	
Progression Factor				1.00		1.00		1.00	1.00		1.00	
Incremental Delay, d2				1.9		1.6		0.1	76.2		0.5	
Delay (s)				17.2		16.6		5.1	96.2		7.0	
Level of Service				B		B		A	F		A	
Approach Delay (s)		0.0			17.0			64.2			7.0	
Approach LOS		A			B			E			A	

Intersection Summary			
HCM 2000 Control Delay	36.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.65		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	62.4%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	NBL	NBR	NET	NER	SWL	SWT
Lane Configurations						
Volume (vph)	0	1327	1112	0	0	1353
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0	6.0			6.0
Lane Util. Factor		0.76	0.91			0.86
Frt		0.85	1.00			1.00
Flt Protected		1.00	1.00			1.00
Satd. Flow (prot)		3610	5085			6408
Flt Permitted		1.00	1.00			1.00
Satd. Flow (perm)		3610	5085			6408
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	1397	1171	0	0	1424
RTOR Reduction (vph)	0	38	0	0	0	0
Lane Group Flow (vph)	0	1359	1171	0	0	1424
Turn Type		Prot	NA			NA
Protected Phases		2	3 4			Free
Permitted Phases						2 8
Actuated Green, G (s)		26.2	26.8			65.0
Effective Green, g (s)		26.2	26.8			65.0
Actuated g/C Ratio		0.40	0.41			1.00
Clearance Time (s)		6.0				
Vehicle Extension (s)		3.0				
Lane Grp Cap (vph)		1455	2096			6408
v/s Ratio Prot		c0.38	c0.23			0.22
v/s Ratio Perm						
v/c Ratio		0.93	0.56			0.22
Uniform Delay, d1		18.6	14.6			0.0
Progression Factor		1.00	1.00			1.00
Incremental Delay, d2		12.4	0.3			0.0
Delay (s)		31.0	14.9			0.0
Level of Service		C	B			A
Approach Delay (s)	31.0		14.9			0.0
Approach LOS	C		B			A

Intersection Summary			
HCM 2000 Control Delay	15.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	62.4%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	570	1569	424	0	2797	0	300	0	129	0	0	47
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0		6.0		6.0	4.0	6.0			6.0
Lane Util. Factor	0.97	0.91	1.00		0.91		0.91	0.86	0.95			1.00
Frt	1.00	1.00	0.85		1.00		1.00	0.96	0.85			0.86
Flt Protected	0.95	1.00	1.00		1.00		0.95	0.96	1.00			1.00
Satd. Flow (prot)	3433	5085	1583		5085		3221	1482	1504			1611
Flt Permitted	0.95	1.00	1.00		1.00		0.95	0.96	1.00			1.00
Satd. Flow (perm)	3433	5085	1583		5085		3221	1482	1504			1611
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	600	1652	446	0	2944	0	316	0	136	0	0	49
RTOR Reduction (vph)	0	0	87	0	0	0	0	67	68	0	0	44
Lane Group Flow (vph)	600	1652	359	0	2944	0	234	46	37	0	0	5
Turn Type	Prot	NA	Perm		NA		Prot	NA	custom			Perm
Protected Phases	7	4			8		5	2	5			
Permitted Phases			4									5
Actuated Green, G (s)	23.7	104.7	104.7		75.0		13.3	15.3	13.3			13.3
Effective Green, g (s)	23.7	104.7	104.7		75.0		13.3	15.3	13.3			13.3
Actuated g/C Ratio	0.18	0.81	0.81		0.58		0.10	0.12	0.10			0.10
Clearance Time (s)	6.0	6.0	6.0		6.0		6.0	4.0	6.0			6.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0	3.0			3.0
Lane Grp Cap (vph)	625	4095	1274		2933		329	174	153			164
v/s Ratio Prot	c0.17	c0.32			c0.58		c0.07	0.03	0.02			
v/s Ratio Perm			0.23					0.00				0.00
v/c Ratio	0.96	0.40	0.28		1.00		0.71	0.26	0.24			0.03
Uniform Delay, d1	52.7	3.6	3.2		27.5		56.5	52.2	53.7			52.5
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00	1.00			1.00
Incremental Delay, d2	27.4	0.3	0.6		17.5		7.1	0.8	0.8			0.1
Delay (s)	80.1	3.9	3.7		45.0		63.6	53.0	54.5			52.6
Level of Service	F	A	A		D		E	D	D			D
Approach Delay (s)		20.8			45.0			58.8			52.6	
Approach LOS		C			D			E			D	

Intersection Summary			
HCM 2000 Control Delay	35.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	90.0%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	0	17	236	0	359	0	0	47	230
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					6.0	6.0		6.0			6.0	6.0
Lane Util. Factor					1.00	1.00		0.95			1.00	1.00
Frt					1.00	0.85		1.00			1.00	0.85
Flt Protected					1.00	1.00		1.00			1.00	1.00
Satd. Flow (prot)					1863	1583		3539			1863	1583
Flt Permitted					1.00	1.00		1.00			1.00	1.00
Satd. Flow (perm)					1863	1583		3539			1863	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	0	18	248	0	378	0	0	49	242
RTOR Reduction (vph)	0	0	0	0	0	113	0	0	0	0	0	217
Lane Group Flow (vph)	0	0	0	0	18	135	0	378	0	0	49	25
Turn Type					NA	Perm		NA			NA	Perm
Protected Phases					16			15			5	
Permitted Phases						16						5
Actuated Green, G (s)					71.0	71.0		27.7			13.3	13.3
Effective Green, g (s)					71.0	71.0		27.7			13.3	13.3
Actuated g/C Ratio					0.55	0.55		0.21			0.10	0.10
Clearance Time (s)					6.0	6.0		6.0			6.0	6.0
Vehicle Extension (s)					3.0	3.0		3.0			3.0	3.0
Lane Grp Cap (vph)					1017	864		754			190	161
v/s Ratio Prot					0.01			c0.11			c0.03	
v/s Ratio Perm						c0.09						0.02
v/c Ratio					0.02	0.16		0.50			0.26	0.15
Uniform Delay, d1					13.5	14.6		45.1			53.8	53.2
Progression Factor					1.00	1.00		0.00			1.00	1.00
Incremental Delay, d2					0.0	0.4		0.7			0.7	0.4
Delay (s)					13.6	15.0		0.7			54.5	53.7
Level of Service					B	B		A			D	D
Approach Delay (s)		0.0			14.9			0.7			53.8	
Approach LOS		A			B			A			D	

Intersection Summary			
HCM 2000 Control Delay	21.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.25		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	34.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Volume (vph)	0	546	1761	756	71	1873
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		1.00	0.86		1.00	0.91
Frt		0.86	0.95		1.00	1.00
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		1611	6119		1770	5085
Flt Permitted		1.00	1.00		0.10	1.00
Satd. Flow (perm)		1611	6119		188	5085
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	575	1854	796	75	1972
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	575	2650	0	75	1972
Turn Type		Perm	NA		Perm	NA
Protected Phases			4			8
Permitted Phases		4			8	
Actuated Green, G (s)		39.6	39.6		39.6	39.6
Effective Green, g (s)		39.6	39.6		39.6	39.6
Actuated g/C Ratio		1.00	1.00		1.00	1.00
Clearance Time (s)		4.0	4.0		4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Lane Grp Cap (vph)		1611	6119		188	5085
v/s Ratio Prot			c0.43			0.39
v/s Ratio Perm		0.36			0.40	
v/c Ratio		0.36	0.43		0.40	0.39
Uniform Delay, d1		0.0	0.0		0.0	0.0
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.1	0.0		1.4	0.0
Delay (s)		0.1	0.0		1.4	0.0
Level of Service		A	A		A	A
Approach Delay (s)	0.1		0.0			0.1
Approach LOS	A		A			A

Intersection Summary			
HCM 2000 Control Delay	0.1	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	39.6	Sum of lost time (s)	4.0
Intersection Capacity Utilization	78.7%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	253	1456	729	633	1002	600	958	1189	87	863	666	271
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	266	1533	0	666	1055	0	1008	1252	0	908	701	285
Adj No. of Lanes	3	3	1	3	3	1	3	3	1	3	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	335	1373	427	600	1676	522	1090	1170	364	817	909	283
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.07	0.27	0.00	0.12	0.33	0.00	0.22	0.23	0.00	0.16	0.18	0.18
Ln Grp Delay, s/veh	77.8	117.7	0.0	136.5	44.3	0.0	69.8	105.1	0.0	129.3	62.8	116.8
Ln Grp LOS	E	F		F	D		E	F		F	E	F
Approach Vol, veh/h		1799			1721			2260			1894	
Approach Delay, s/veh		111.8			80.0			89.3			102.8	
Approach LOS		F			E			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	18.1	56.9	33.0	42.0	27.0	48.0	40.7	34.3
Change Period (Y+Rc), s	8.0	7.5	8.5	7.5	9.0	7.5	8.0	7.5
Max Green (Gmax), s	12.0	47.5	24.5	34.5	18.0	40.5	34.0	25.5
Max Allow Headway (MAH), s	3.7	4.9	3.7	4.8	3.7	4.9	3.7	4.8
Max Q Clear (g_c+I1), s	9.9	28.3	26.5	36.5	20.0	42.5	31.6	28.8
Green Ext Time (g_e), s	0.2	15.4	0.0	0.0	0.0	0.0	1.1	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	5003		5003		5003		5003	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		5085		5085		5085		5085

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1583		1583		1583		1583

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Prot)		(Prot)		(Prot)	
Lanes in Grp	3	0	3	0	3	0	3	0

Grp Vol (v), veh/h	266	0	908	0	666	0	1008	0
Grp Sat Flow (s), veh/h/ln	1668	0	1668	0	1668	0	1668	0
Q Serve Time (g_s), s	7.9	0.0	24.5	0.0	18.0	0.0	29.6	0.0
Cycle Q Clear Time (g_c), s	7.9	0.0	24.5	0.0	18.0	0.0	29.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	335	0	817	0	600	0	1090	0
V/C Ratio (X)	0.79	0.00	1.11	0.00	1.11	0.00	0.92	0.00
Avail Cap (c_a), veh/h	400	0	817	0	600	0	1134	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	68.9	0.0	62.8	0.0	66.0	0.0	57.5	0.0
Incr Delay (d2), s/veh	8.9	0.0	66.6	0.0	70.5	0.0	12.3	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	77.8	0.0	129.3	0.0	136.5	0.0	69.8	0.0
1st-Term Q (Q1), veh/ln	3.6	0.0	11.3	0.0	8.3	0.0	13.6	0.0
2nd-Term Q (Q2), veh/ln	0.3	0.0	5.0	0.0	3.9	0.0	1.2	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	1.80	0.00	1.80	0.00	1.43	0.00
%ile Back of Q (95%), veh/ln	7.0	0.0	29.4	0.0	22.0	0.0	21.2	0.0
%ile Storage Ratio (RQ%)	0.39	0.00	1.65	0.00	1.12	0.00	1.23	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	22.7	0.0	16.4	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.3	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	3	0	3	0	3	0	3
Grp Vol (v), veh/h	0	1055	0	1252	0	1533	0	701
Grp Sat Flow (s), veh/h/ln	0	1695	0	1695	0	1695	0	1695
Q Serve Time (g_s), s	0.0	26.3	0.0	34.5	0.0	40.5	0.0	19.7
Cycle Q Clear Time (g_c), s	0.0	26.3	0.0	34.5	0.0	40.5	0.0	19.7
Lane Grp Cap (c), veh/h	0	1676	0	1170	0	1373	0	909
V/C Ratio (X)	0.00	0.63	0.00	1.07	0.00	1.12	0.00	0.77
Avail Cap (c_a), veh/h	0	1676	0	1170	0	1373	0	909
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	42.5	0.0	57.8	0.0	54.8	0.0	58.7
Incr Delay (d2), s/veh	0.0	1.8	0.0	47.4	0.0	62.9	0.0	4.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	44.3	0.0	105.1	0.0	117.7	0.0	62.8
1st-Term Q (Q1), veh/ln	0.0	12.3	0.0	16.1	0.0	18.9	0.0	9.2
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	5.1	0.0	8.0	0.0	0.3

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.46	0.00	1.80	0.00	1.80	0.00	1.53
%ile Back of Q (95%), veh/ln	0.0	18.4	0.0	38.3	0.0	48.5	0.0	14.6
%ile Storage Ratio (RQ%)	0.00	1.16	0.00	1.32	0.00	1.17	0.00	0.43
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	20.6	0.0	40.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.3	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	0	0	0	0	285
Grp Sat Flow (s), veh/h/ln	0	1583	0	1583	0	1583	0	1583
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26.8
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26.8
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	522	0	364	0	427	0	283
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.01
Avail Cap (c_a), veh/h	0	522	0	364	0	427	0	283
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	61.6
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	116.8
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.7
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.9
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.63
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3

Intersection Summary	
HCM 2010 Ctrl Delay	95.8
HCM 2010 LOS	F

Lane Group	SBL	SBR	NET	NER	SWT
Lane Group Flow (vph)	183	113	987	1824	2381
v/c Ratio	0.36	0.27	0.35	1.15	0.68
Control Delay	17.5	17.0	5.5	84.7	7.7
Queue Delay	0.0	0.0	0.0	0.0	0.1
Total Delay	17.5	17.0	5.5	84.7	7.7
Queue Length 50th (ft)	19	13	37	~121	92
Queue Length 95th (ft)	39	30	54	#330	122
Internal Link Dist (ft)			215		227
Turn Bay Length (ft)					
Base Capacity (vph)	514	418	2796	1583	3524
Starvation Cap Reductn	0	0	0	0	172
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.36	0.27	0.35	1.15	0.71

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	NBR	NET	SWT
Lane Group Flow (vph)	1397	1171	1424
v/c Ratio	0.94	0.56	0.22
Control Delay	32.7	15.6	0.1
Queue Delay	0.0	0.5	0.0
Total Delay	32.7	16.0	0.1
Queue Length 50th (ft)	223	119	0
Queue Length 95th (ft)	#350	157	0
Internal Link Dist (ft)		227	250
Turn Bay Length (ft)			
Base Capacity (vph)	1490	2190	6408
Starvation Cap Reductn	0	521	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.94	0.70	0.22

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	SBL	SBR	NEL	NET	SWT	SWR
Lane Configurations						
Volume (vph)	0	0	173	2266	1353	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	500			0
Storage Lanes	0	0	1			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.86	0.91	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	6408	5085	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	6408	5085	0
Link Speed (mph)	45			45	45	
Link Distance (ft)	247			189	328	
Travel Time (s)	3.7			2.9	5.0	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	182	2385	1424	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	182	2385	1424	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	89.1%	ICU Level of Service	E
Analysis Period (min)	15		

APPENDIX V

NO BUILD LINK VOLUME DEVELOPMENT TABLES

APPENDIX V - NO BUILD VOLUME DEVELOPMENT

TABLE 1

I-95/PGA Boulevard PD&E

No Build Volume Development - AM Peak Hour

Segment				Existing Counts		Model Outputs				Δ % Growth		Adjusted Pk Hour Volumes[4]					
	Limits			2013 Peak Hr[1]		2010 Peak Hour		2040 Peak Hour		2010 to 2040[3]		2020		2030		2040	
	From	To	Station ID	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
Northlake Boulevard																	
	Military Trail	I-95	2207	2,065	1,403	2,714	1,224	3,457	1,817	27%	48%	2,189	1,557	2,395	1,782	2,581	2,020
	I-95	Congress Ave	2309	1,943	1,654	2,551	1,608	3,191	1,865	25%	16%	2,060	1,720	2,215	1,803	2,390	1,886
PGA Boulevard																	
	West of Florida's Turnpike		2103	936	1,068	2,794	2,480	3,464	3,162	24%	28%	992	1,132	1,067	1,239	1,142	1,335
	Turnpike	Central Blvd	2201	2,096	1,563	2,794	2,480	3,464	3,162	24%	28%	2,222	1,657	2,389	1,813	2,557	1,954
	Central Blvd	Military Trail	2609	2,166	1,540	2,254	1,703	3,067	2,020	36%	19%	2,339	1,602	2,599	1,709	2,859	1,802
	Military Trail	I-95	2203	2,174	1,203	2,888	2,379	3,380	3,023	17%	27%	2,261	1,275	2,391	1,383	2,500	1,492
	I-95	Lake Victoria Gardens	2303	3,458	1,474 [2]	3,630	697	4,359	954	20%	37%	3,596	1,577	3,838	1,769 [5]	4,046	1,946
	East of Lake Victoria Gardens		2829	2,491	1,048	2,430	1,145	2,978	1,632	23%	43%	2,616	1,153	2,815	1,300	2,989	1,446
Hood Road																	
	W of Central Boulevard	Central Boulevard	2105	498	283	590	319	1,247	540	111%	69%	627	328	812	393	996	458
	Central Boulevard	Military Trail	2611	626	441	1,002	1,041	2,067	1,171	106%	12%	783	454	1,002	472	1,227	490
	Military Trail	SR 811	2213	779	449	1,375	1,284	2,591	1,803	88%	40%	943	489	1,169	552	1,402	611
Donald Ross Road																	
	W of I-95		1105	781	360	1,066	1,845	1,492	2,365	40%	28%	851	385	961	418	1,062	450
	I-95	Parkside Drive	1219	1,789	1,405	2,340	1,843	3,345	2,568	43%	39%	1,968	1,531	2,218	1,714	2,487	1,897
	Parkside Drive	Central Blvd	1205	1,708	896	1,444	1,203	2,268	2,148	57%	79%	1,930	1,057	2,255	1,299	2,579	1,532
	Central Boulevard	Military Trail	-	1,598 [6]	903 [6]	1,638	1,151	1,962	1,597	20%	39%	1,678	984	1,774	1,101	1,886	1,218
	East of Military Trail		1211	1,488	909	1,638	1,151	1,962	1,597	20%	39%	1,562	991	1,652	1,109	1,756	1,227
Central Boulevard																	
	PGA Blvd	I-95	2608	915	927	1,110	1,366	1,470	2,107	32%	54%	988	1,048	1,080	1,214	1,180	1,381
	I-95	Hood Road	2608	915	927	1,042	1,597	1,785	2,325	71%	46%	1,071	1,029	1,281	1,168	1,501	1,307
	Hood Road	Donald Ross Rd	2210	607	774	807	1,030	1,589	2,203	97%	114%	747	983	941	1,277	1,135	1,563
	Donald Ross Rd	Frederick Small Rd	1206	644	639	825	1,361	1,857	2,878	125%	111%	831	805	1,101	1,042	1,372	1,278
Military Trail																	
	South of PGA Blvd		2606	1,465	1,414	2,258	2,507	2,828	3,499	25%	40%	1,553	1,541	1,670	1,725	1,802	1,923
	PGA Blvd	I-95	2624	1,162	1,549	2,616	3,064	3,373	3,717	29%	21%	1,243	1,626	1,348	1,735	1,464	1,843
	I-95	Hood Road	2604	976	1,045	2,071	2,519	2,939	3,528	42%	40%	1,074	1,139	1,210	1,285	1,347	1,421
	Hood Road	Donald Ross Rd	2208	954	1,229	1,807	1,984	2,166	2,523	20%	27%	1,002	1,303	1,059	1,413	1,126	1,524
	Donald Ross Rd	Frederick Small Rd	1602	1,458	1,641	2,228	2,583	2,473	3,079	11%	19%	1,502	1,707	1,545	1,822	1,604	1,920
I-95																	
Northbound	South of Northlake Blvd		-	6,274	-	6,984	-	9,554	-	41%	-	6,901	-	7,717	-	8,595	-
	Northlake Blvd (NB Off-Ramp)	Northlake Blvd (NB On-Ramp)	-	4,831	-	5,979	-	8,013	-	41%	-	5,314	-	5,942	-	6,618	-
	Northlake Blvd (NB On-Ramp)	PGA Blvd (EB Off-Ramp)	2187	5,902	-	6,722	-	9,577	-	41%	-	6,492	-	7,259	-	8,086	-
	PGA Blvd (EB Off-Ramp)	PGA Blvd (WB Off-Ramp)	-	3,715	-	5,301	-	7,491	-	41%	-	4,087	-	4,570	-	5,090	-
	PGA Blvd (WB Off-Ramp)	PGA Blvd (EB &WB On-Ramp)	-	2,772	-	3,919	-	5,616	-	41%	-	3,049	-	3,410	-	3,798	-
	PGA Blvd (EB &WB On-Ramp)	Military Tr (NB & SB On-Ramp)	-	2,893	-	3,721	-	5,647	-	41%	-	3,183	-	3,559	-	3,964	-
	Military Tr (NB & SB On-Ramp)	Donald Ross Rd (NB Off-Ramp)	2214	2,988	-	3,830	-	5,489	-	41%	-	3,287	-	3,675	-	4,094	-
	Donald Ross Rd (NB Off-Ramp)	Donald Ross Rd (NB On-Ramp)	-	1,953	-	2,919	-	4,294	-	41%	-	2,148	-	2,402	-	2,676	-
	North of Donald Ross Rd		-	2,380	-	3,194	-	4,237	-	41%	-	2,618	-	2,927	-	3,261	-
Southbound	North of Donald Ross Rd				4,396	-	5,876	-	7,830	-	29%	-	4,704	-	5,099	-	5,539
	Donald Ross Rd (SB Off-Ramp)	Donald Ross Rd (SB On-Ramp)	-	-	3,694	-	5,453	-	7,174	-	29%	-	3,953	-	4,285	-	4,654
	Donald Ross Rd (SB On-Ramp)	Military Tr (SB Off-Ramp)	2214	-	5,168	-	6,873	-	8,842	-	29%	-	5,530	-	5,995	-	6,512
	Military Tr (SB Off-Ramp)	PGA Blvd (EB &WB Off-Ramp)	-	-	4,843	-	6,732	-	8,899	-	29%	-	5,182	-	5,618	-	6,102
	PGA Blvd (EB &WB Off-Ramp)	PGA Blvd (WB On-Ramp)	-	-	4,200	-	6,246	-	8,409	-	29%	-	4,494	-	4,872	-	5,292
	PGA Blvd (WB On-Ramp)	PGA Blvd (EB On-Ramp)	-	-	5,364	-	8,003	-	10,466	-	29%	-	5,740	-	6,223	-	6,759
	PGA Blvd (EB On-Ramp)	Northlake Blvd (SB Off-Ramp)	2187	-	6,533	-	9,316	-	12,051	-	29%	-	6,990	-	7,578	-	8,232
	Northlake Blvd (SB Off-Ramp)	Northlake Blvd (SB On-Ramp)	-	-	5,607	-	8,471	-	10,203	-	29%	-	5,999	-	6,504	-	7,065
	South of Northlake Blvd		-	-	7,166	-	9788	-	12132	-	29%	-	7,668	-	8,313	-	9029

APPENDIX V - NO BUILD VOLUME DEVELOPMENT

TABLE 1

I-95/PGA Boulevard PD&E

No Build Volume Development - AM Peak Hour

Segment				Existing Counts		Model Outputs				Δ % Growth		Adjusted Pk Hour Volumes[4]					
	Limits			2013 Peak Hr[1]		2010 Peak Hour		2040 Peak Hour		2010 to 2040[3]		2020		2030		2040	
	From	To	Station ID	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
Ramps																	
I-95 Nbound	Northlake Blvd. (EB & WB Off-Ramp)		4077	1,443	-		-		-		-	1,587	-	1,775	-	1,977	-
	Northlake Blvd. (EB & WB On-Ramp)		4078	1071	-		-		-		-	1,178	-	1,317	-	1,468	-
	PGA Blvd (EB Off-Ramp)		4081	2,187 [7]	-		-		-		-	2,405	-	2,689	-	2,996	-
	PGA Blvd (WB Off-Ramp)		4581	943 [7]	-		-		-		-	1,038	-	1,160	-	1,292	-
	PGA Blvd (EB &WB On-Ramp)		4082	121 [7]	-		-		-		-	134	-	149	-	166	-
	Military Tr (NB & SB On-Ramp)		4095	95 [7]	-		-		-		-	104	-	116	-	130	-
	Donald Ross Rd. (EB & WB Off-Ramp)		4085	1035	-		-		-		-	1,139	-	1,273	-	1,418	-
	Donald Ross Rd. (EB & WB On-Ramp)		4086	427	-		-		-		-	470	-	525	-	585	-
I-95 Sbound	Donald Ross Rd. (EB & WB Off-Ramp)		4087	-	702	-		-		-		-	751	-	814	-	885
	Donald Ross Rd. (EB & WB On-Ramp)		4088	-	1474	-		-		-		-	1,577	-	1,710	-	1,858
	Military Tr (SB Off-Ramp)		4096	-	325 [7]	-		-		-		-	348	-	377	-	410
	PGA Blvd (EB &WB Off-Ramp)		4083	-	644 [7]	-		-		-		-	688	-	746	-	810
	PGA Blvd (WB On-Ramp)		4584	-	1,165 [7]	-		-		-		-	1,246	-	1,351	-	1,467
	PGA Blvd (EB On-Ramp)		4084	-	1,169 [7]	-		-		-		-	1,250	-	1,355	-	1,473
	Northlake Blvd. (EB & WB Off-Ramp)		4079	-	926	-		-		-		-	991	-	1,074	-	1,167
	Northlake Blvd. (EB & WB On-Ramp)		4080	-	1,559	-		-		-		-	1,669	-	1,809	-	1,964
Florida's Turnpike Ramps at PGA Boulevard																	
	On Ramp from PGA Blvd		-	874	-	1,045	-	1,045	-	0%	-	874	-	874	-	874	-
	Off Ramp to PGA Blvd		-	-	1,242	-	1,404	-	1,680	-	20%	-	1,304	-	1,379	-	1,466

Notes

1. Existing counts obtained from "Palm Beach County 2013 Historic Traffic Growth Table" and "FDOT Florida Traffic Online (2013)".

2. Existing counts obtained from "Palm Beach County 2014 Historic Traffic Growth Table" and represents existing count data collected in 2014 since count data for 2013 were unavailable for this roadway link.

3. 2010 to 2040 percentage growth in model volumes.

4. 2013 to 2020, 2013 to 2030 and 2013 to 2040 percentage growths were obtained by prorating percentage model growth (between 2010 and 2040) by factors of 7/30, 17/30 and 27/30 respectively which accounts for the three year difference in base years between model and available existing counts.

5. Since the base counts for this segment were taken in 2014 (as per Note 2), factors of 6/30, 16/30 and 26/30 were applied to determine the future volumes for this link in 2020, 2030 and 2040 respectively.

6. Represents average of peak hour link counts on adjacent links due to the unavailability of a traffic count on this link from the Palm Beach County Traffic Count Program.

7. Pursuant to guidelines contained in "Section 6.9 - Balancing Volumes in a Corridor" (NCHRP Report 765 - Analytical Travel Forecasting Approaches for Project-Level Planning and Design) ramp volumes were adjusted in order to resolve imbalances between upstream and downstream mainline traffic counts at noted count stations.

APPENDIX V - NO BUILD VOLUME DEVELOPMENT

TABLE 2

I-95/PGA Boulevard PD&E

No Build Volume Development - PM Peak Hour

Segment	Limits			Existing Counts		Model Outputs				Δ % Growth		Adjusted Pk Hour Volumes[4]					
				2013 Peak Hr[1]		2010 Peak Hour		2040 Peak Hour		2010 to 2040[3]		2020		2030		2040	
	From	To	Station ID	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
Northlake Boulevard																	
	Military Trail	I-95	2207	1,832	2,065	1,812	2,308	2,549	3,256	41%	41%	1,997	2,272	2,253	2,540	2,510	2,829
	I-95	Congress Ave	2309	1,988	2,666	2,233	2,673	2,581	3,180	16%	19%	2,068	2,773	2,167	2,959	2,266	3,119
PGA Boulevard																	
	West of Florida's Turnpike		2103	808	1,125	2,317	3,043	3,068	3,761	32%	24%	873	1,193	953	1,271	1,042	1,361
	Turnpike	Central Blvd	2201	1,654	2,129	2,317	3,043	3,068	3,761	32%	24%	1,786	2,257	1,952	2,406	2,134	2,576
	Central Blvd	Military Trail	2609	1,845	2,103	1,767	2,540	2,059	3,320	17%	31%	1,919	2,250	2,011	2,461	2,122	2,692
	Military Trail	I-95	2203	1,981	2,090	2,444	3,233	2,971	3,803	22%	18%	2,080	2,174	2,219	2,299	2,357	2,424
	I-95	Lake Victoria Gardens	2303	2,912	2,940 [2]	3,349	1,608	3,640	2,201	9%	37%	2,970	3,146	3,058	3,528 [5]	3,145	3,881
	East of Lake Victoria Gardens		2829	1,996	2,221	2,010	2,553	2,777	3,249	38%	27%	2,176	2,354	2,435	2,554	2,675	2,776
Hood Road																	
	W of Central Boulevard	Central Boulevard	2105	259	368	414	550	710	1,214	71%	121%	303	471	365	618	425	769
	Central Boulevard	Military Trail	2611	446	497	958	1,040	1,871	2,048	95%	97%	544	611	687	770	830	929
	Military Trail	SR 811	2213	620	675	1,639	1,379	2,371	2,231	45%	62%	682	770	775	911	868	1,053
Donald Ross Road																	
	W of I-95		1105	512	705	968	1,713	1,336	2,624	38%	53%	558	790	625	917	686	1,043
	I-95	Parkside Drive	1219	1,682	1,694	2,376	2,093	2,908	3,153	22%	51%	1,766	1,897	1,901	2,185	2,018	2,473
	Parkside Drive	Central Blvd	1205	1,296	1,570	1,714	1,392	2,653	2,445	55%	76%	1,464	1,853	1,698	2,245	1,931	2,638
	Central Boulevard	Military Trail	-	1,154 [6]	1,523 [6]	1,235	1,698	1,782	2,047	44%	21%	1,269	1,599	1,442	1,706	1,615	1,797
	East of Military Trail		1211	1,011	1,476	1,235	1,698	1,782	2,047	44%	21%	1,112	1,550	1,264	1,653	1,415	1,742
Central Boulevard																	
	PGA Blvd	I-95	2608	638	798	1,291	1,276	2,489	2,055	93%	61%	778	910	976	1,077	1,174	1,237
	I-95	Hood Road	2608	638	798	1,439	1,256	2,777	2,208	93%	76%	778	942	976	1,141	1,174	1,341
	Hood Road	Donald Ross Rd	2210	681	691	1,038	880	2,521	2,305	143%	162%	906	954	1,233	1,327	1,559	1,700
	Donald Ross Rd	Frederick Small Rd	1206	859	649	1,779	778	2,906	2,033	63%	161%	988	896	1,168	1,240	1,349	1,590
Military Trail																	
	South of PGA Blvd		2606	1,813	1,632	2,735	2,423	3,959	3,162	45%	30%	1,994	1,746	2,266	1,909	2,538	2,073
	PGA Blvd	I-95	2624	1,613	1,616	3,325	2,728	4,049	3,393	22%	24%	1,694	1,713	1,807	1,842	1,936	1,972
	I-95	Hood Road	2604	1,077	1,096	2,438	2,153	3,453	2,870	42%	33%	1,185	1,184	1,335	1,304	1,475	1,425
	Hood Road	Donald Ross Rd	2208	975	1,141	1,663	1,856	2,274	2,225	37%	20%	1,063	1,198	1,180	1,267	1,297	1,346
	Donald Ross Rd	Frederick Small Rd	1602	1,317	1,738	2,213	2,341	2,800	2,491	27%	6%	1,396	1,755	1,515	1,808	1,633	1,842
I-95																	
Northbound	South of Northlake Blvd		-	6,112	-	10,014	-	12,495	-	34%	-	6,601	-	7,334	-	8,007	-
	Northlake Blvd (NB Off-Ramp)	Northlake Blvd (NB On-Ramp)	-	4,307	-	8,445	-	10,239	-	34%	-	4,652	-	5,168	-	5,642	-
	Northlake Blvd (NB On-Ramp)	PGA Blvd (EB Off-Ramp)	2187	5,678	-	9,421	-	12,113	-	34%	-	6,132	-	6,814	-	7,438	-
	PGA Blvd (EB Off-Ramp)	PGA Blvd (WB Off-Ramp)	-	4,513	-	7,663	-	10,154	-	34%	-	4,874	-	5,416	-	5,912	-
	PGA Blvd (WB Off-Ramp)	PGA Blvd (EB &WB On-Ramp)	-	3,665	-	5,832	-	8,075	-	34%	-	3,958	-	4,398	-	4,801	-
	PGA Blvd (EB &WB On-Ramp)	Military Tr (NB & SB On-Ramp)	-	4,315	-	6,251	-	8,625	-	34%	-	4,660	-	5,178	-	5,653	-
	Military Tr (NB & SB On-Ramp)	Donald Ross Rd (NB Off-Ramp)	2214	4,814	-	6,353	-	8,735	-	34%	-	5,199	-	5,777	-	6,306	-
	Donald Ross Rd (NB Off-Ramp)	Donald Ross Rd (NB On-Ramp)	-	3,338	-	4,915	-	7,059	-	34%	-	3,605	-	4,006	-	4,373	-
	North of Donald Ross Rd		-	4,216	-	5,243	-	7,610	-	34%	-	4,553	-	5,059	-	5,523	-
Southbound	North of Donald Ross Rd				2,961	-	4,892	-	6,722	-	39%	-	3,227	-	3,612	-	3,997
	Donald Ross Rd (SB Off-Ramp)	Donald Ross Rd (SB On-Ramp)	-	-	2,586	-	4,370	-	6,285	-	39%	-	2,819	-	3,155	-	3,491
	Donald Ross Rd (SB On-Ramp)	Military Tr (SB Off-Ramp)	2214	-	3,577	-	5,315	-	7,514	-	39%	-	3,899	-	4,364	-	4,829
	Military Tr (SB Off-Ramp)	PGA Blvd (EB &WB Off-Ramp)	-	-	3,416	-	5,231	-	7,648	-	39%	-	3,723	-	4,167	-	4,611
	PGA Blvd (EB &WB Off-Ramp)	PGA Blvd (WB On-Ramp)	-	-	3,170	-	5,110	-	7,394	-	39%	-	3,456	-	3,868	-	4,280
	PGA Blvd (WB On-Ramp)	PGA Blvd (EB On-Ramp)	-	-	5,219	-	6,829	-	9,363	-	39%	-	5,689	-	6,368	-	7,046
	PGA Blvd (EB On-Ramp)	Northlake Blvd (SB Off-Ramp)	2187	-	6,663	-	7,974	-	10,876	-	39%	-	7,263	-	8,129	-	8,995
	Northlake Blvd (SB Off-Ramp)	Northlake Blvd (SB On-Ramp)	-	-	5,694	-	6,924	-	9,273	-	39%	-	6,206	-	6,947	-	7,687
	South of Northlake Blvd		-	-	7,143	-	8475	-	10921	-	39%	-	7,786	-	8,714	-	9643

APPENDIX V - NO BUILD VOLUME DEVELOPMENT

TABLE 2

I-95/PGA Boulevard PD&E

No Build Volume Development - PM Peak Hour

Segment				Existing Counts		Model Outputs				Δ % Growth		Adjusted Pk Hour Volumes[4]					
	Limits			2013 Peak Hr[1]		2010 Peak Hour		2040 Peak Hour		2010 to 2040[3]		2020		2030		2040	
	From	To	Station ID	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
Ramps																	
I-95 Nbound	Northlake Blvd. (EB & WB Off-Ramp)		4077	1,805	-		-		-		-	1,949	-	2,166	-	2,365	-
	Northlake Blvd. (EB & WB On-Ramp)		4078	1371	-		-		-		-	1,480	-	1,646	-	1,796	-
	PGA Blvd (EB Off-Ramp)		4081	1,165 [7]	-		-		-		-	1,258	-	1,398	-	1,526	-
	PGA Blvd (WB Off-Ramp)		4581	848 [7]	-		-		-		-	916	-	1,018	-	1,111	-
	PGA Blvd (EB &WB On-Ramp)		4082	650 [7]	-		-		-		-	702	-	780	-	852	-
	Military Tr (NB & SB On-Ramp)		4095	499 [7]	-		-		-		-	539	-	599	-	653	-
	Donald Ross Rd. (EB & WB Off-Ramp)		4085	1476	-		-		-		-	1,594	-	1,771	-	1,933	-
	Donald Ross Rd. (EB & WB On-Ramp)		4086	878	-		-		-		-	948	-	1,053	-	1,150	-
I-95 Sbound	Donald Ross Rd. (EB & WB Off-Ramp)		4087	-	375	-		-		-		-	408	-	457	-	506
	Donald Ross Rd. (EB & WB On-Ramp)		4088	-	991	-		-		-		-	1,080	-	1,209	-	1,338
	Military Tr (SB Off-Ramp)		4096	-	161 [7]	-		-		-		-	176	-	197	-	218
	PGA Blvd (EB &WB Off-Ramp)		4083	-	245 [7]	-		-		-		-	267	-	299	-	331
	PGA Blvd (WB On-Ramp)		4584	-	2,049 [7]	-		-		-		-	2,233	-	2,500	-	2,766
	PGA Blvd (EB On-Ramp)		4084	-	1,444 [7]	-		-		-		-	1,574	-	1,761	-	1,949
	Northlake Blvd. (EB & WB Off-Ramp)		4079	-	969	-		-		-		-	1,057	-	1,182	-	1,308
	Northlake Blvd. (EB & WB On-Ramp)		4080	-	1,449	-		-		-		-	1,580	-	1,767	-	1,956
Florida's Turnpike Ramps at PGA Boulevard																	
	On Ramp from PGA Blvd		-	1,329	-	1,254	-	1,500	-	20%	-	1,395	-	1,475	-	1,568	-
	Off Ramp to PGA Blvd		-	-	750	-	1,134	-	1,134	-	0%	-	750	-	750	-	750

Notes

1. Existing counts obtained from "Palm Beach County 2013 Historic Traffic Growth Table" and "FDOT Florida Traffic Online (2013)".

2. Existing counts obtained from "Palm Beach County 2014 Historic Traffic Growth Table" and represents existing count data collected in 2014 since count data for 2013 were unavailable for this roadway link.

3. 2010 to 2040 percentage growth in model volumes.

4. 2013 to 2020, 2013 to 2030 and 2013 to 2040 percentage growths were obtained by prorating percentage model growth (between 2010 and 2040) by factors of 7/30, 17/30 and 27/30 respectively which accounts for the three year difference in base years between model and available existing counts.

5. Since the base counts for this segment were taken in 2014 (as per Note 2), factors of 6/30, 16/30 and 26/30 were applied to determine the future volumes for this link in 2020, 2030 and 2040 respectively.

6. Represents average of peak hour link counts on adjacent links due to the unavailability of a traffic count on this link from the Palm Beach County Traffic Count Program.

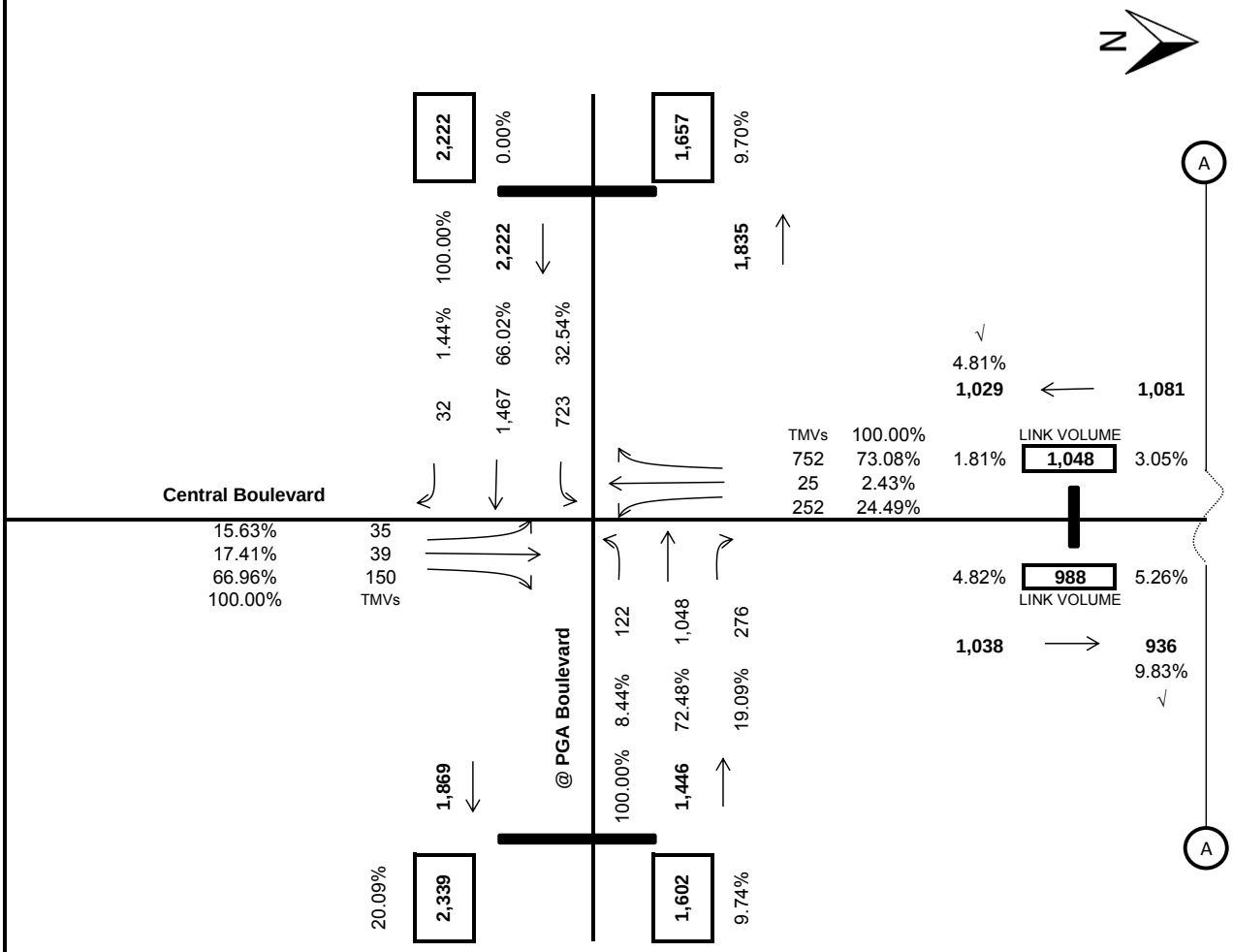
7. Pursuant to guidelines contained in "Section 6.9 - Balancing Volumes in a Corridor" (NCHRP Report 765 - Analytical Travel Forecasting Approaches for Project-Level Planning and Design) ramp volumes were adjusted in order to resolve imbalances between upstream and downstream mainline traffic counts at noted count stations.

APPENDIX W

BALANCED TURNING MOVEMENT DEVELOPMENT SHEETS

2020 NO BUILD AM PEAK HOUR

@ PGA Boulevard



Turning Movement Volumes
@ PGA Boulevard

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes												
TM Pk Hr Counts												
% Turns												
Calc. Pk Hr Volumes												
Adjustments												
Bal Pk Hr Volumes	**252**	**25**	**752**	**122**	**1048**	**276**	**35**	**39**	**150**	**723**	**1467**	**32**

LEGEND

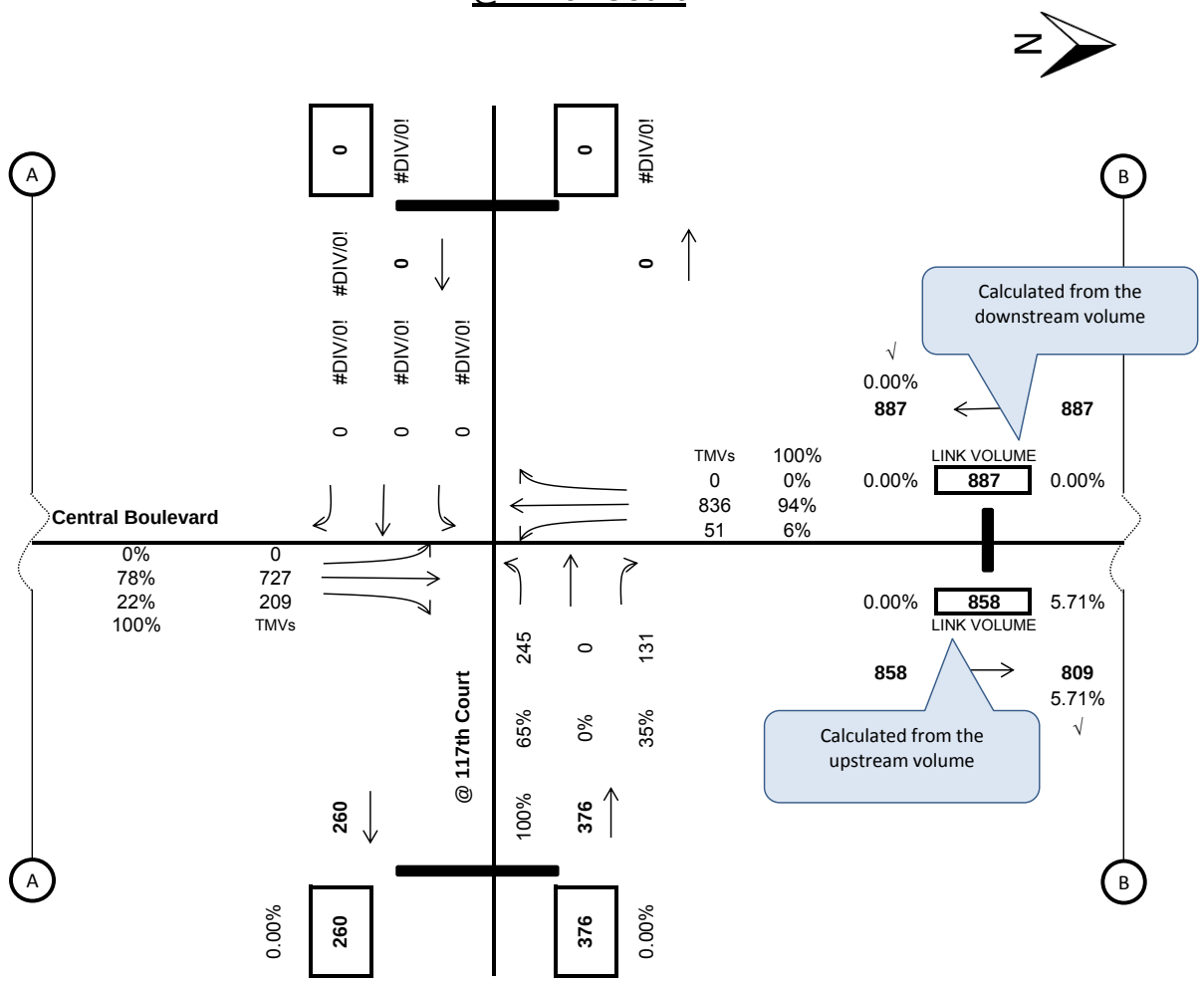
1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

For consistency, balanced peak hour volumes from major street arterial (aka PGA Boulevard) were used. See PGA Boulevard Arterial for details

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Central Boulevard** **Turning Movement Volume Development** **2020 No Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **1 of 5** *Date:* 9/24/15

@ 117th Court



Turning Movement Volumes
@ 117th Court

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**887**			**376**			**988**			**0**	
TM Pk Hr Counts	88	1447	0	245	0	131	0	926	262	0	0	0
% Turns	6%	94%	0%	65%	0%	35%	0%	78%	22%	0%	0%	0%
Calc. Pk Hr Volumes	51	836	0	245	0	131	0	770	218	0	0	0
Adjustments								-43	-9			
Bal Pk Hr Volumes	**51**	**836**	**0**	**245**	**0**	**131**	**0**	**727**	**209**	**0**	**0**	**0**

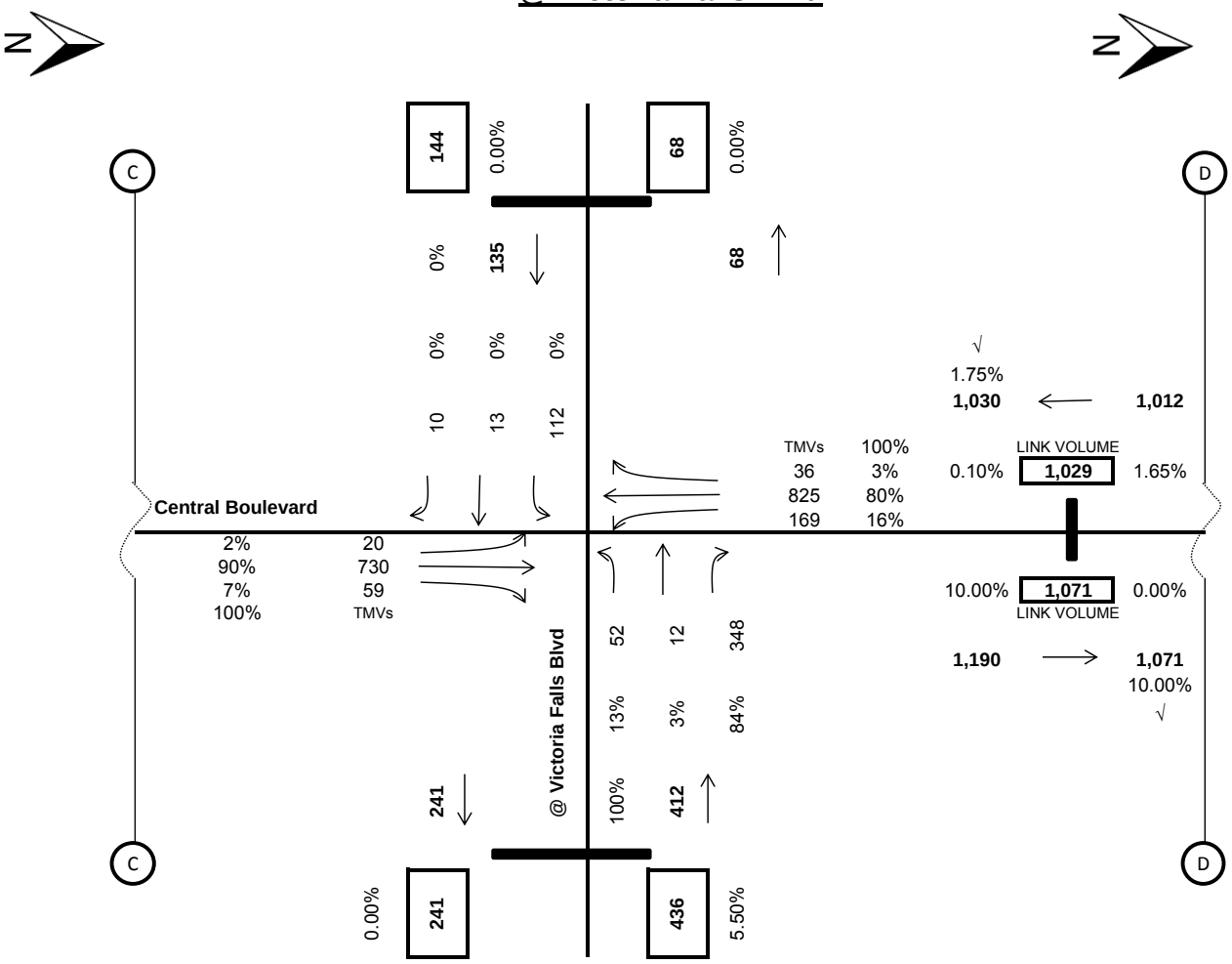
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A / A	Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Central Boulevard** **Turning Movement Volume Development** **2020 No Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **2 of 5** *Date:* 9/24/15

@ Victoria Falls Blvd



Turning Movement Volumes
@ Victoria Falls Blvd

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,029**			**436**			**858**			**144**	
TM Pk Hr Counts	307	1501	65	52	12	372	27	1026	78	121	13	10
% Turns	16%	80%	3%	12%	3%	85%	2%	91%	7%	84%	9%	7%
Calc. Pk Hr Volumes	169	825	36	52	12	372	20	778	59	121	13	10
Adjustments						-24		-48		-9		
Bal Pk Hr Volumes	**169**	**825**	**36**	**52**	**12**	**348**	**20**	**730**	**59**	**112**	**13**	**10**

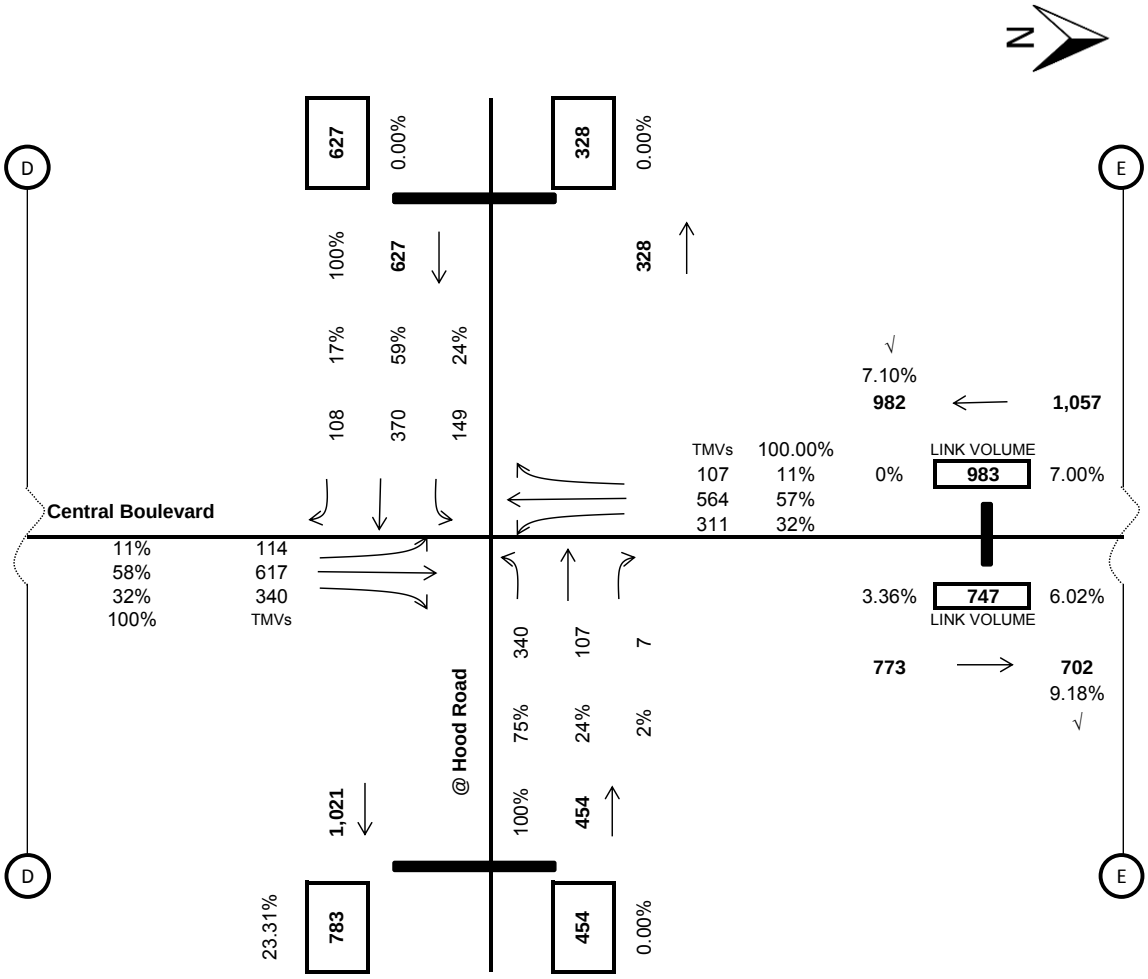
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Central Boulevard Turning Movement Volume Development 2020 No Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **3 of 5** *Date:* 9/24/15

@ Hood Road



Turning Movement Volumes
@ Hood Road

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**983**			**454**			**1,071**			**627**		
TM Pk Hr Counts	510	924	176	687	217	14	149	805	444	275	681	198
% Turns	32%	57%	11%	75%	24%	2%	11%	58%	32%	24%	59%	17%
Calc. Pk Hr Volumes	311	564	107	340	107	7	114	617	340	149	370	108
Adjustments												
Bal Pk Hr Volumes	**311**	**564**	**107**	**340**	**107**	**7**	**114**	**617**	**340**	**149**	**370**	**108**

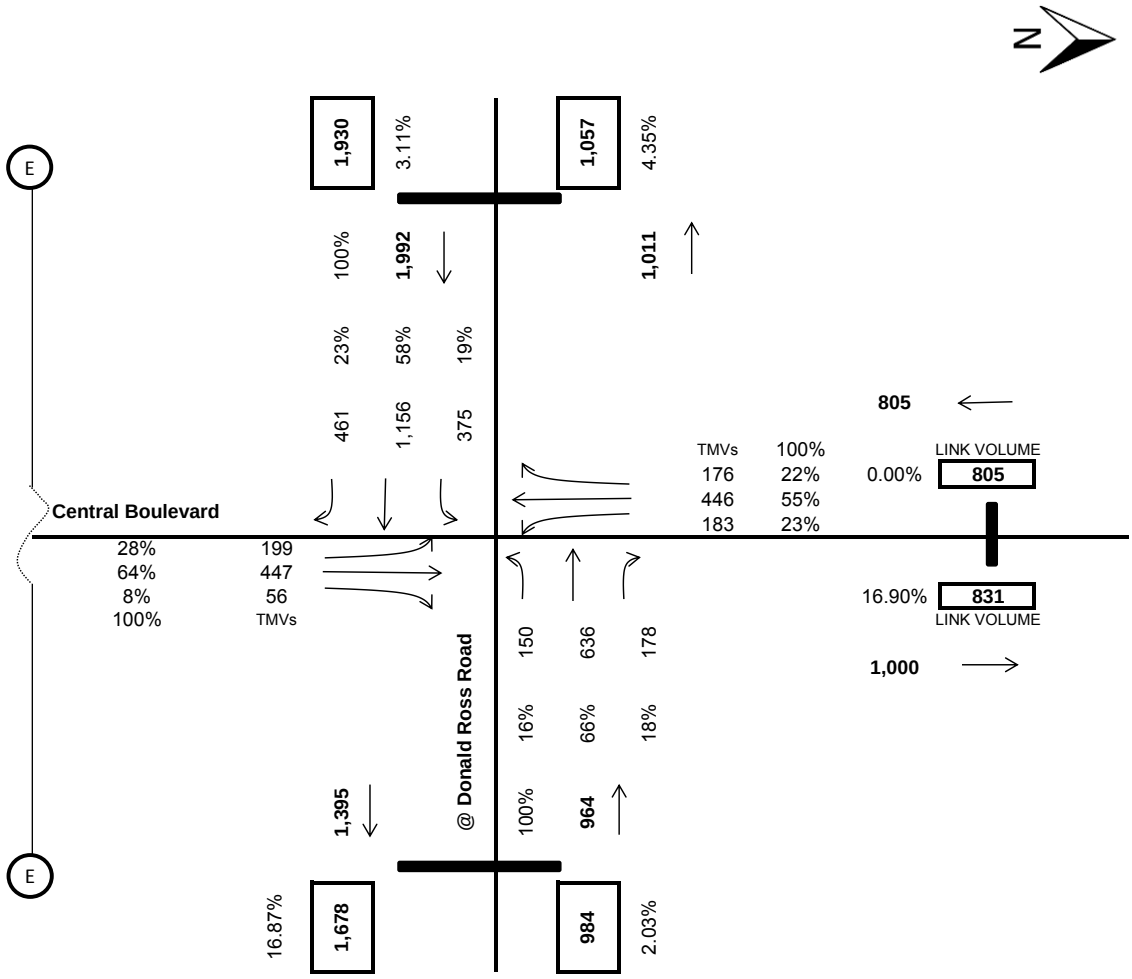
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66 →	Turning Movement Volumes (Balanced)
A … A	Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Central Boulevard** **Turning Movement Volume Development** **2020 No Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **4 of 5** *Date:* 9/24/15

@ Donald Ross Road



Turning Movement Volumes
@ Donald Ross Road

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**805**			**984**			**747**			**1,930**		
TM Pk Hr Counts	500	1216	479	191	812	253	360	889	102	364	930	406
% Turns	23%	55%	22%	15%	65%	20%	27%	66%	8%	21%	55%	24%
Calc. Pk Hr Volumes	183	446	176	150	636	198	199	492	56	413	1056	461
Adjustments						-20		-45		-38	100	
Bal Pk Hr Volumes	**183**	**446**	**176**	**150**	**636**	**178**	**199**	**447**	**56**	**375**	**1156**	**461**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

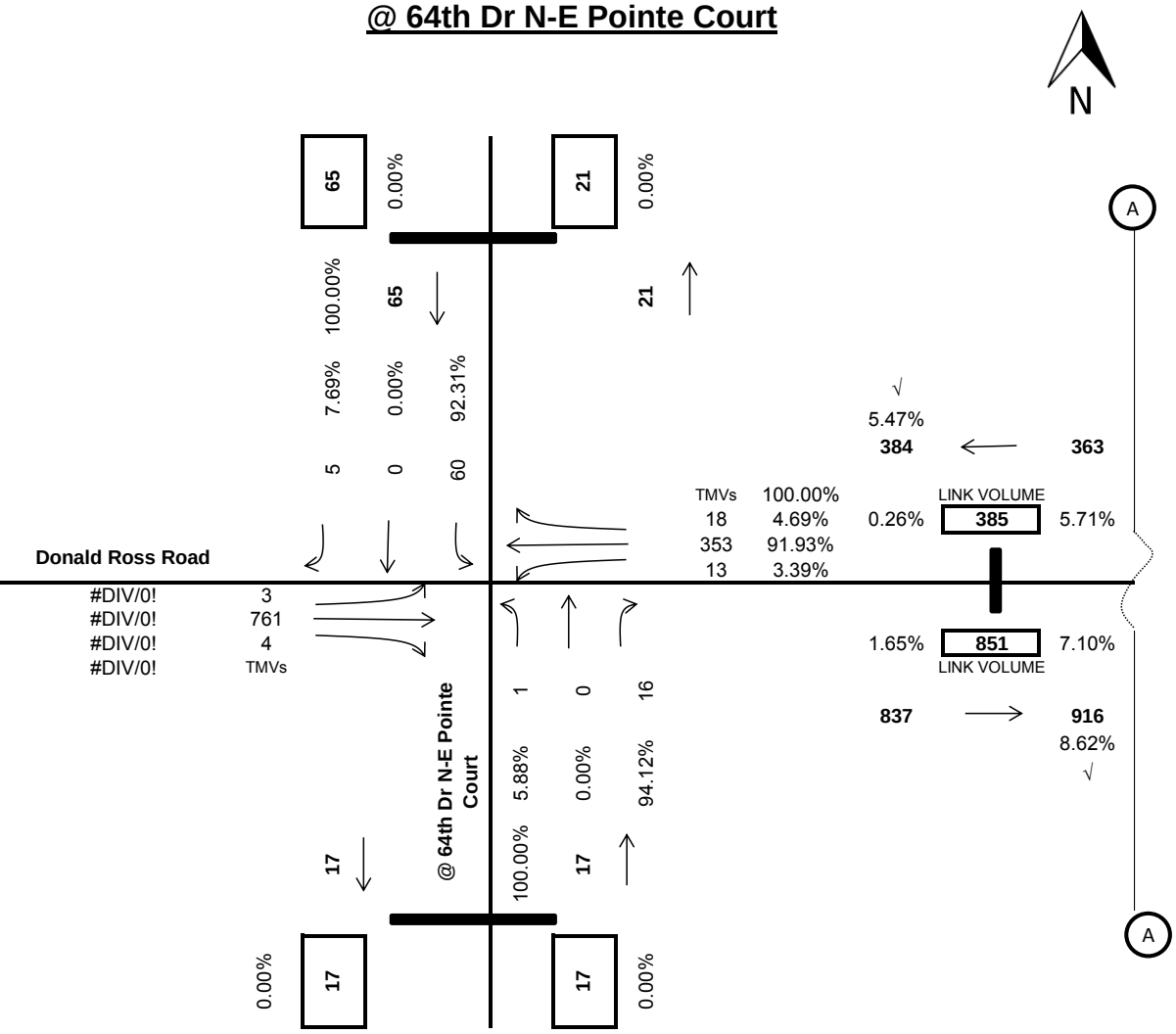
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Central Boulevard** **Turning Movement Volume Development** **2020 No Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **5 of 5** *Date:* 9/24/15

@ 64th Dr N-E Pointe Court



Turning Movement Volumes
@ 64th Dr N-E Pointe Court

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**385**			**17**			**768**			**65**	
TM Pk Hr Counts	14	368	19	1	0	16	3	761	4	60	0	5
% Turns	3%	92%	5%	6%	0%	94%	0%	99%	1%	92%	0%	8%
Calc. Pk Hr Volumes	13	353	18	1	0	16	3	761	4	60	0	5
Adjustments												
Bal Pk Hr Volumes	**13**	**353**	**18**	**1**	**0**	**16**	**3**	**761**	**4**	**60**	**0**	**5**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

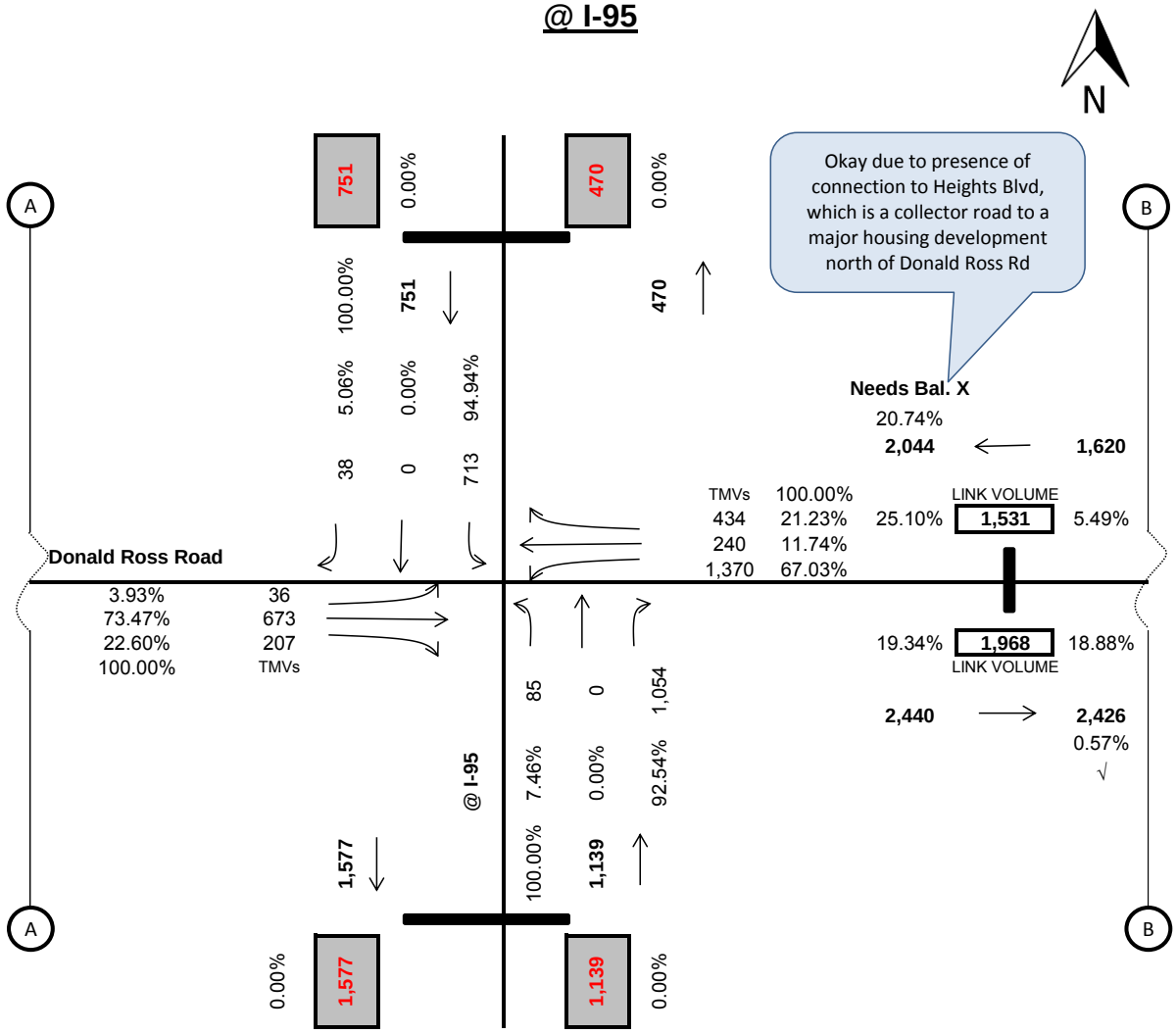
66 → — Turning Movement Volumes (Balanced)

A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

@ I-95



Turning Movement Volumes
@ I-95

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,531**			**1,139**			**851**			**751**	
TM Pk Hr Counts	1512	349	364	112	0	1388	36	1134	264	687	0	37
% Turns	68%	16%	16%	7%	0%	93%	3%	79%	18%	95%	0%	5%
Calc. Pk Hr Volumes	1040	240	250	85	0	1054	21	673	157	713	0	38
Adjustments	330		184		0		15		50		0	
Bal Pk Hr Volumes	**1370**	**240**	**434**	**85**	**0**	**1054**	**36**	**673**	**207**	**713**	**0**	**38**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

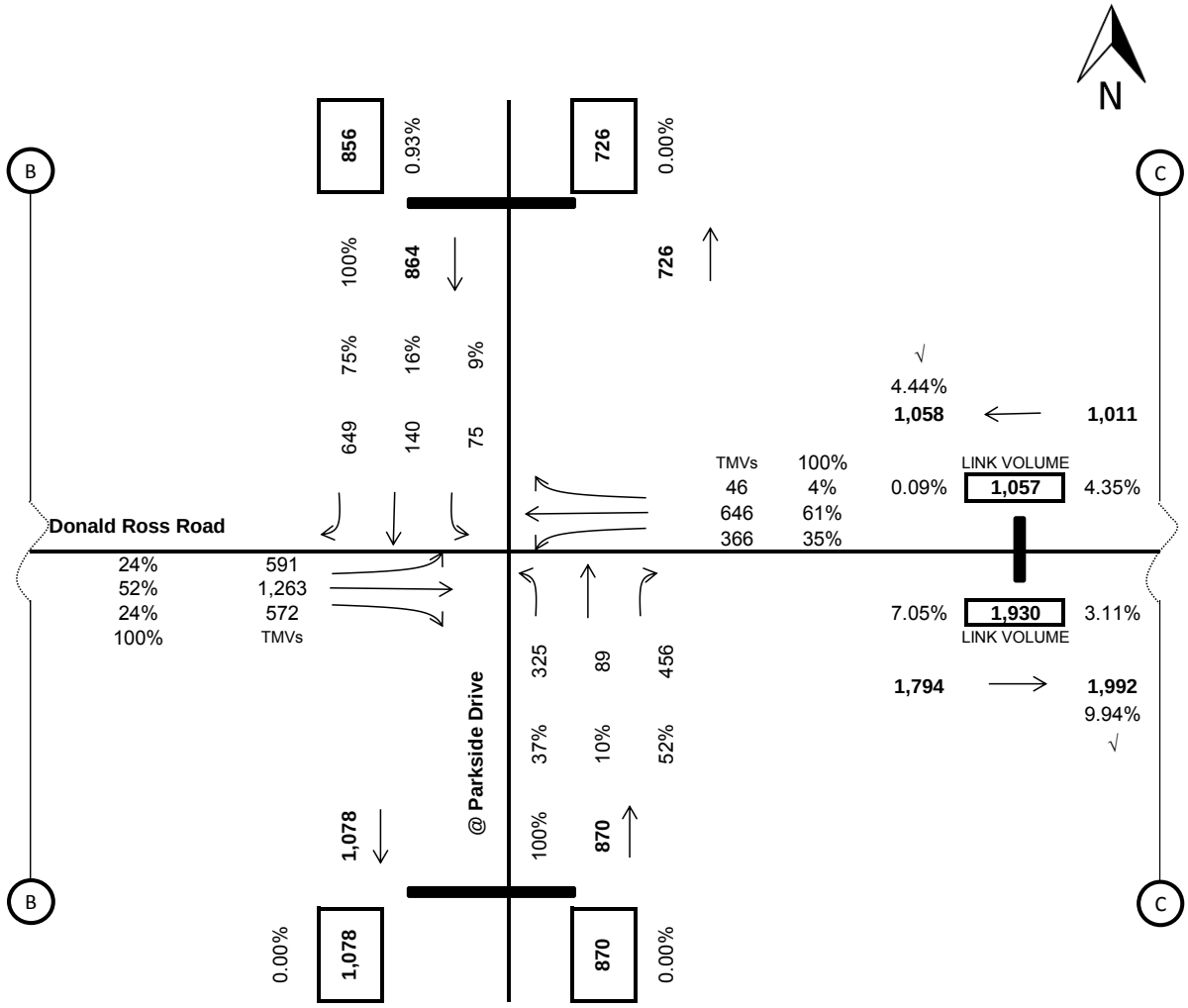
66 → — Turning Movement Volumes (Balanced)

A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

@ Parkside Drive



Turning Movement Volumes
@ Parkside Drive

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,057**			**870**			**1,968**			**856**	
TM Pk Hr Counts	592	1045	74	325	89	456	656	1343	631	67	140	649
% Turns	35%	61%	4%	37%	10%	52%	25%	51%	24%	8%	16%	76%
Calc. Pk Hr Volumes	366	646	46	325	89	456	491	1005	472	67	140	649
Adjustments							100	258	100	8		
Bal Pk Hr Volumes	**366**	**646**	**46**	**325**	**89**	**456**	**591**	**1263**	**572**	**75**	**140**	**649**

LEGEND

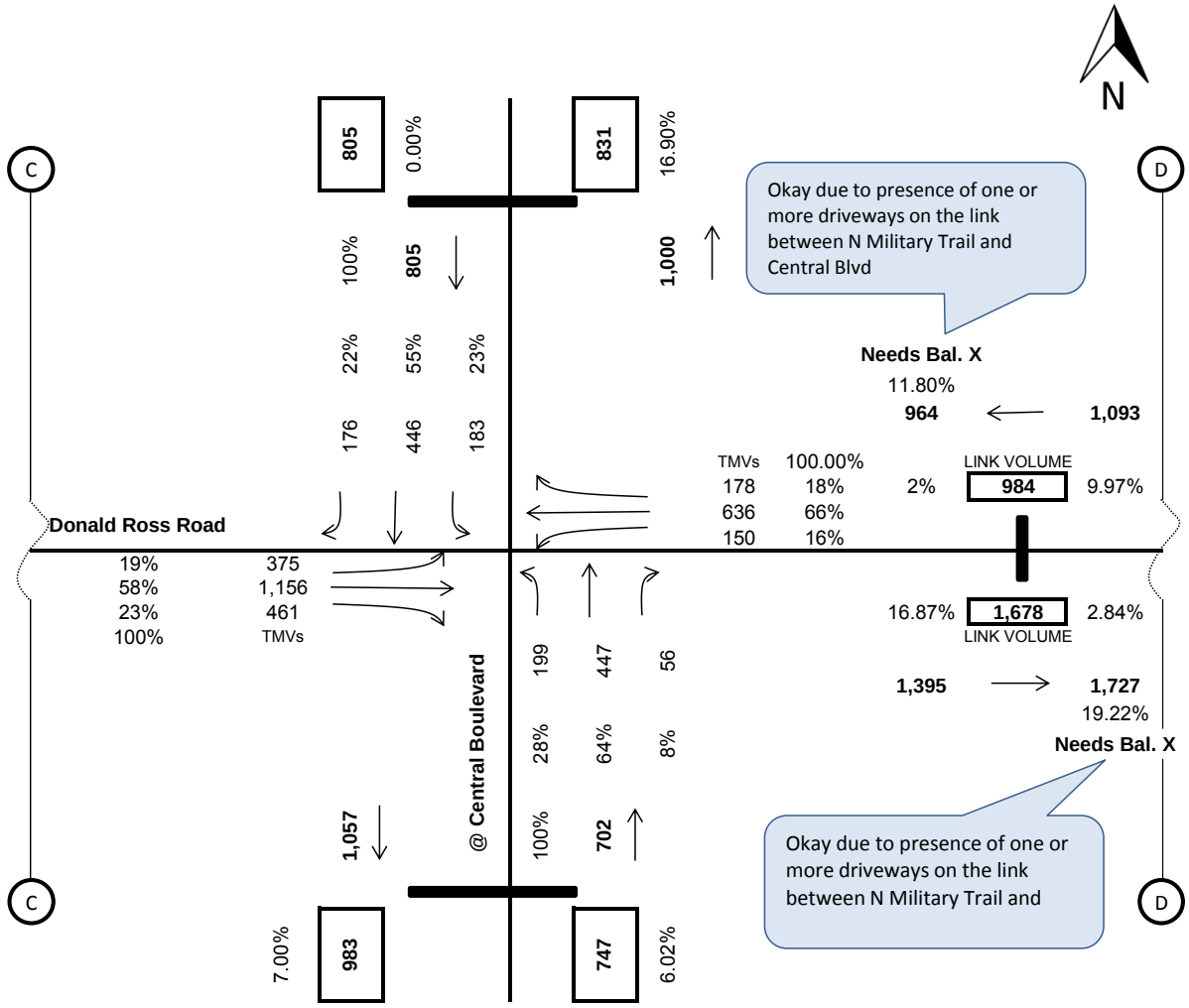
1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

2

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 242171-22-01	*Exhibit Name:* **Donald Ross Road** **Turning Movement Volume Development** **2020 No Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **3 of 5** *Date:* 9/24/15

@ Central Boulevard



Turning Movement Volumes
@ Central Boulevard

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes												
TM Pk Hr Counts												
% Turns												
Calc. Pk Hr Volumes												
Adjustments												
Bal Pk Hr Volumes	**150**	**636**	**178**	**199**	**447**	**56**	**375**	**1156**	**461**	**183**	**446**	**176**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

A — Match Line

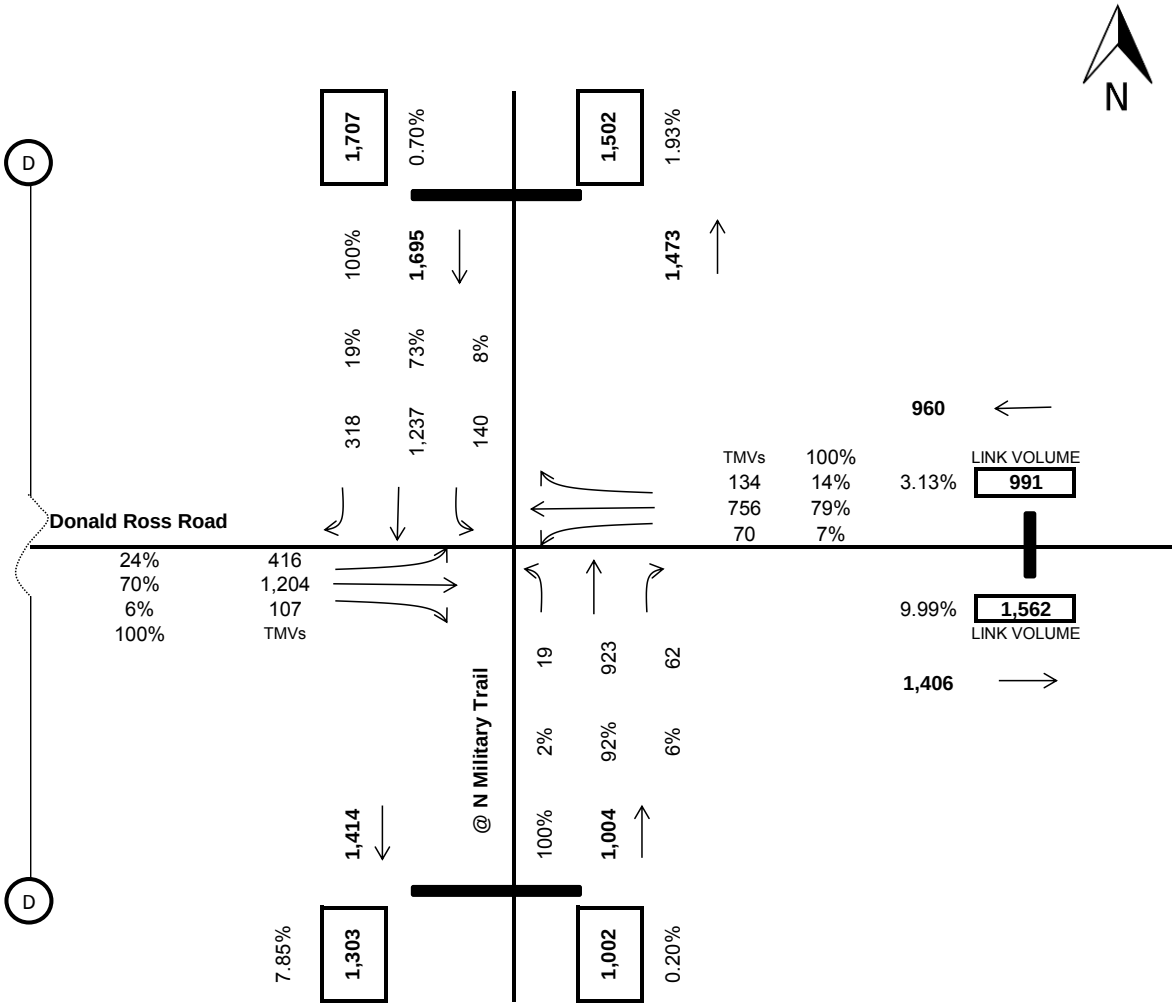
A

For consistency, balanced peak hour volumes from major street arterial (aka Central Boulevard) were used. See Central Boulevard Arterial for details

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 242491-22-01	*Exhibit Name:* **Donald Ross Road** **Turning Movement Volume Development** **2020 No Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **4 of 5** *Date:* 9/24/15

@ N Military Trail



Turning Movement Volumes
@ N Military Trail

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes												
TM Pk Hr Counts												
% Turns												
Calc. Pk Hr Volumes												
Adjustments												
Bal Pk Hr Volumes	**70**	**756**	**134**	**19**	**923**	**62**	**416**	**1204**	**107**	**140**	**1237**	**318**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 → Turning Movement Volumes (Balanced)

A — Match Line

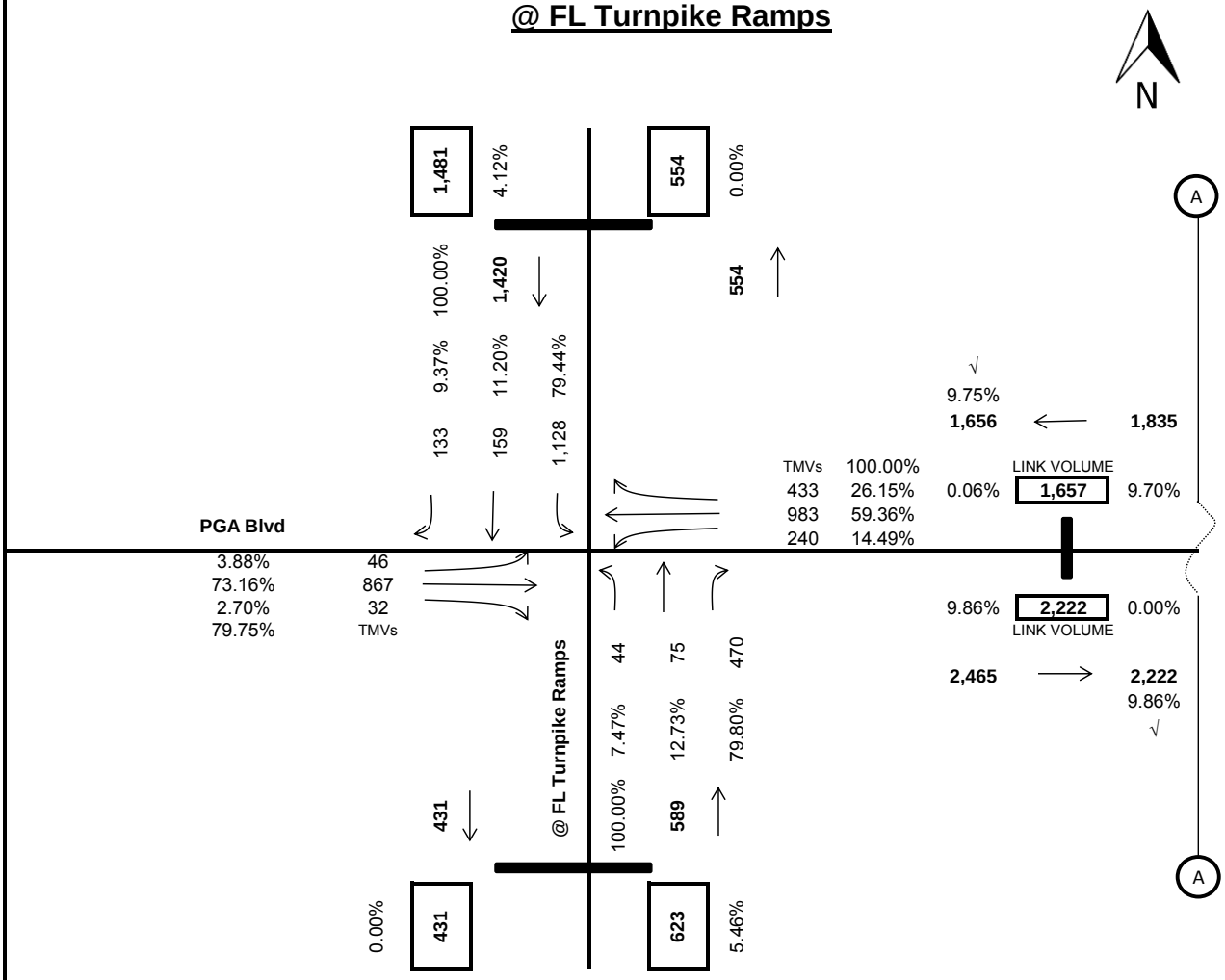
A

For consistency, balanced peak hour volumes from major street arterial (aka N Military Trail) were used. See N Military Trail Arterial for details

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FPID No. 413261-1-22-01	*Exhibit Name:* **Donald Ross Road Turning Movement Volume Development 2020 No Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **5 of 5** *Date:* 9/24/15

@ FL Turnpike Ramps



Turning Movement Volumes
@ FL Turnpike Ramps

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,657**			**623**			**992**			**1,481**	
TM Pk Hr Counts	410	1679	740	45	77	501	76	1510	53	1189	159	133
% Turns	14%	59%	26%	7%	12%	80%	5%	92%	3%	80%	11%	9%
Calc. Pk Hr Volumes	240	983	433	44	75	498	46	914	32	1189	159	133
Adjustments						-28		-47		-61		
Bal Pk Hr Volumes	**240**	**983**	**433**	**44**	**75**	**470**	**46**	**867**	**32**	**1128**	**159**	**133**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

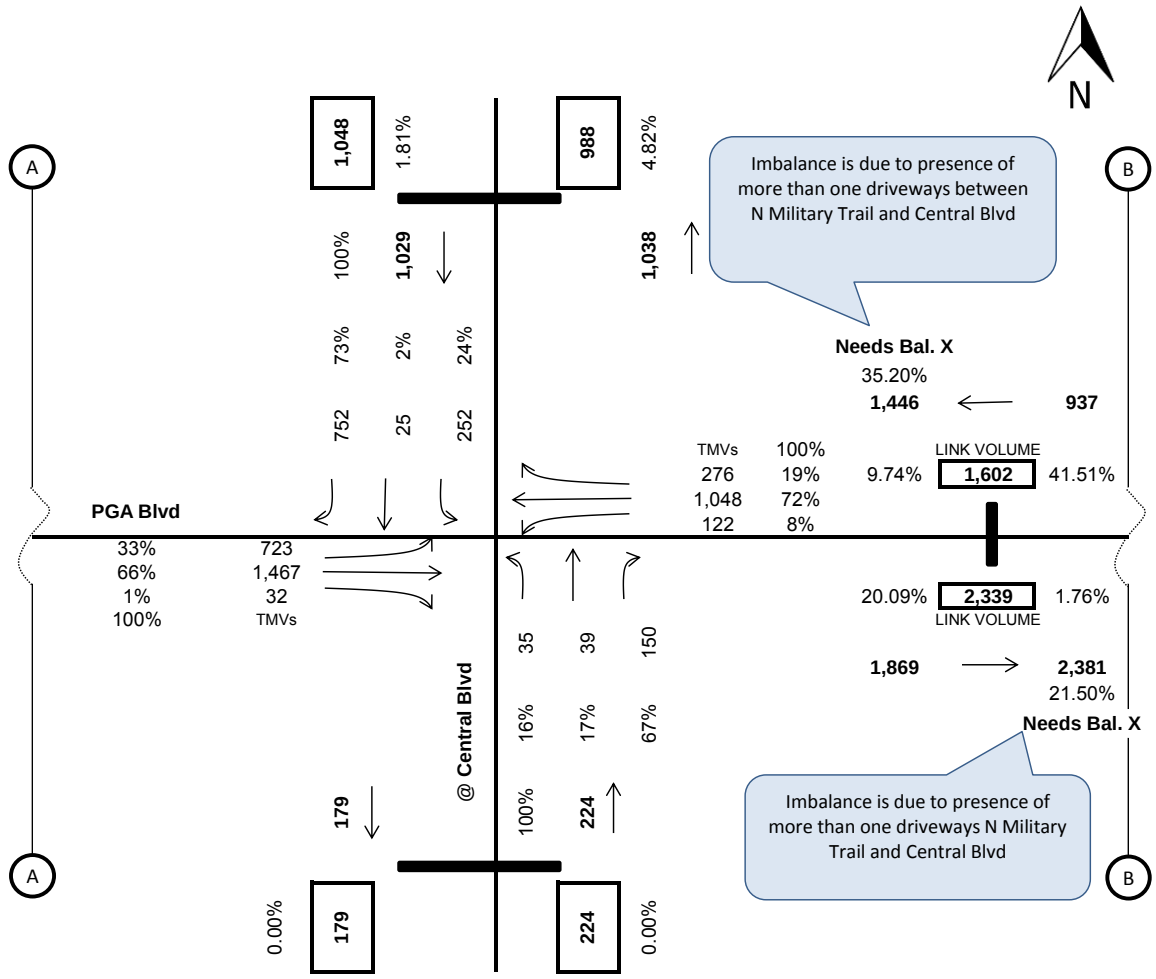
66 → Turning Movement Volumes (Balanced)

A … A — Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard** **Turning Movement Volume Development** **2020 No Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **1 of 8** *Date:* 9/24/15

@ Central Blvd



Turning Movement Volumes
@ Central Blvd

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**1,602**			**224**			**2,222**			**1,048**		
TM Pk Hr Counts	136	1134	312	35	39	150	891	1809	40	448	44	1373
% Turns	9%	72%	20%	16%	17%	67%	33%	66%	1%	24%	2%	74%
Calc. Pk Hr Volumes	138	1148	316	35	39	150	723	1467	32	252	25	772
Adjustments	-16	-100	-40									-20
Bal Pk Hr Volumes	**122**	**1048**	**276**	**35**	**39**	**150**	**723**	**1467**	**32**	**252**	**25**	**752**

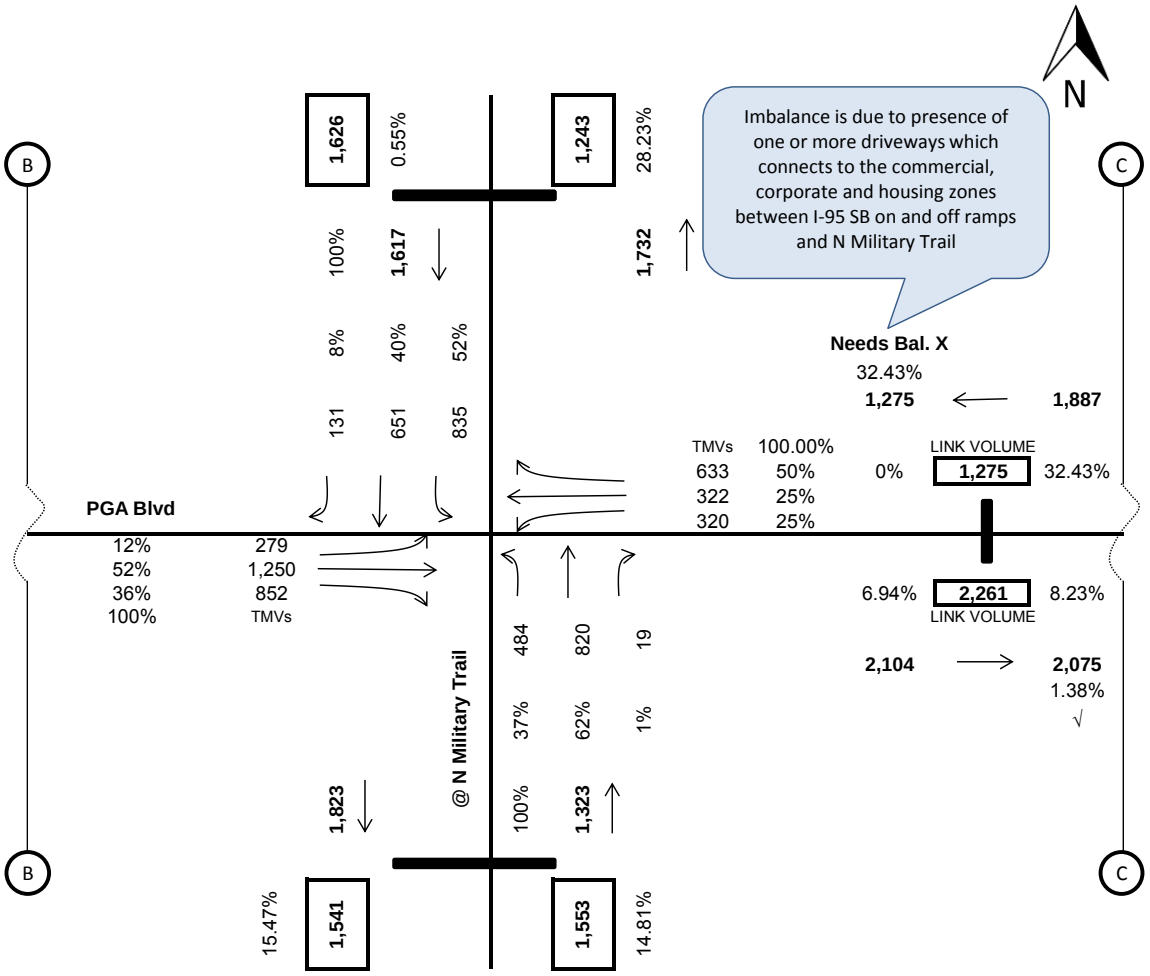
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard** **Turning Movement Volume Development** **2020 No Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **2 of 8** *Date:* 9/24/15

@ N Military Trail



Turning Movement Volumes
@ N Military Trail

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**1,275**			**1,553**			**2,339**			**1,626**		
TM Pk Hr Counts	592	596	1172	793	1388	30	290	1224	916	1452	1213	233
% Turns	25%	25%	50%	36%	63%	1%	12%	50%	38%	50%	42%	8%
Calc. Pk Hr Volumes	320	322	633	557	975	21	279	1178	882	815	681	131
Adjustments				-73	-155	-2		72	-30	20	-30	
Bal Pk Hr Volumes	**320**	**322**	**633**	**484**	**820**	**19**	**279**	**1250**	**852**	**835**	**651**	**131**

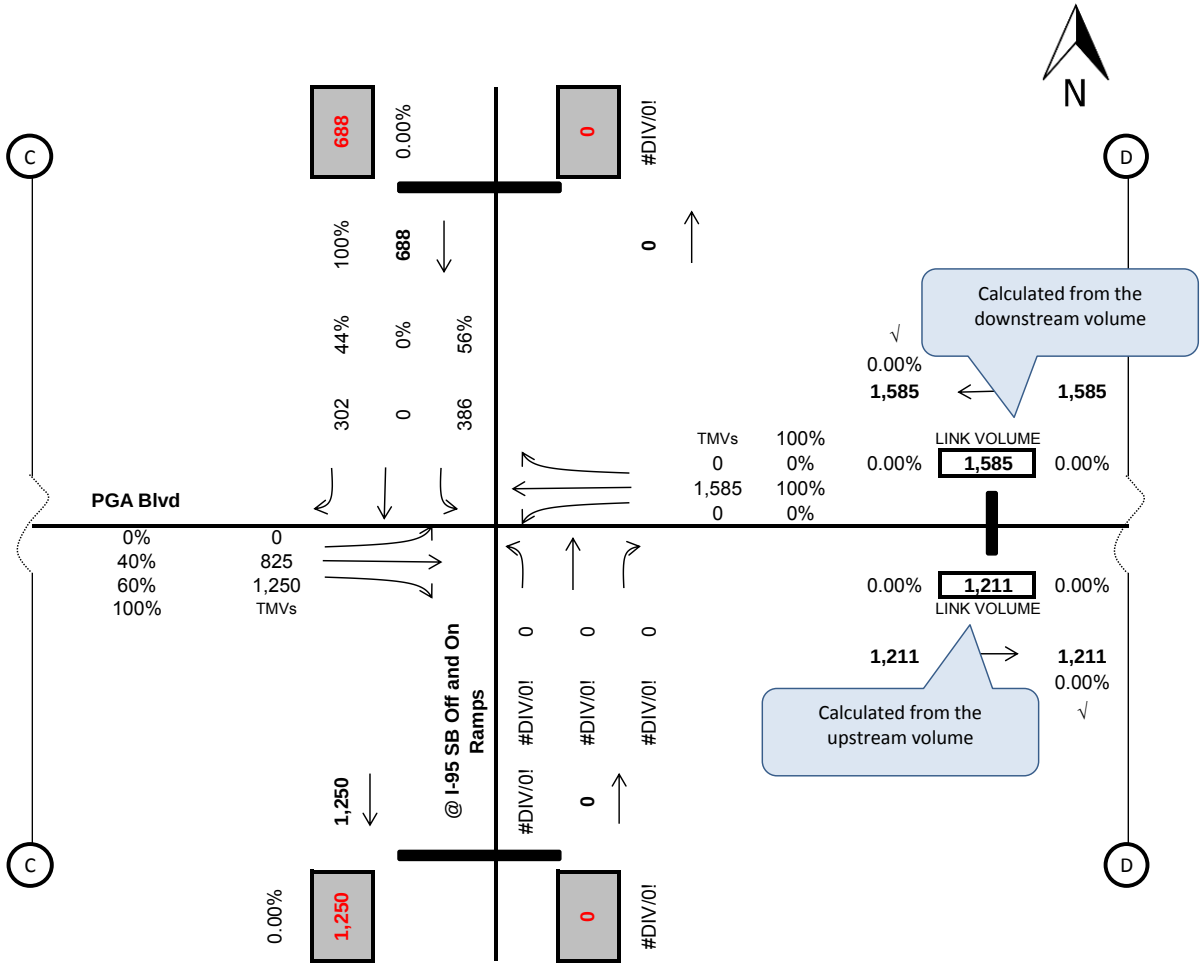
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66 →	Turning Movement Volumes (Balanced)
A … A	Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard** **Turning Movement Volume Development** **2020 No Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **3 of 8** *Date:* 9/24/15

@ I-95 SB Off and On Ramps



Turning Movement Volumes
@ I-95 SB Off and On Ramps

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,585**			**0**			**2,261**			**688**	
TM Pk Hr Counts	0	2105	0	0	0	0	0	894	1739	351	0	275
% Turns	0%	100%	0%	0%	0%	0%	0%	34%	66%	56%	0%	44%
Calc. Pk Hr Volumes	0	1585	0	0	0	0	0	768	1493	386	0	302
Adjustments								57	-243			
Bal Pk Hr Volumes	**0**	**1585**	**0**	**0**	**0**	**0**	**0**	**825**	**1250**	**386**	**0**	**302**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

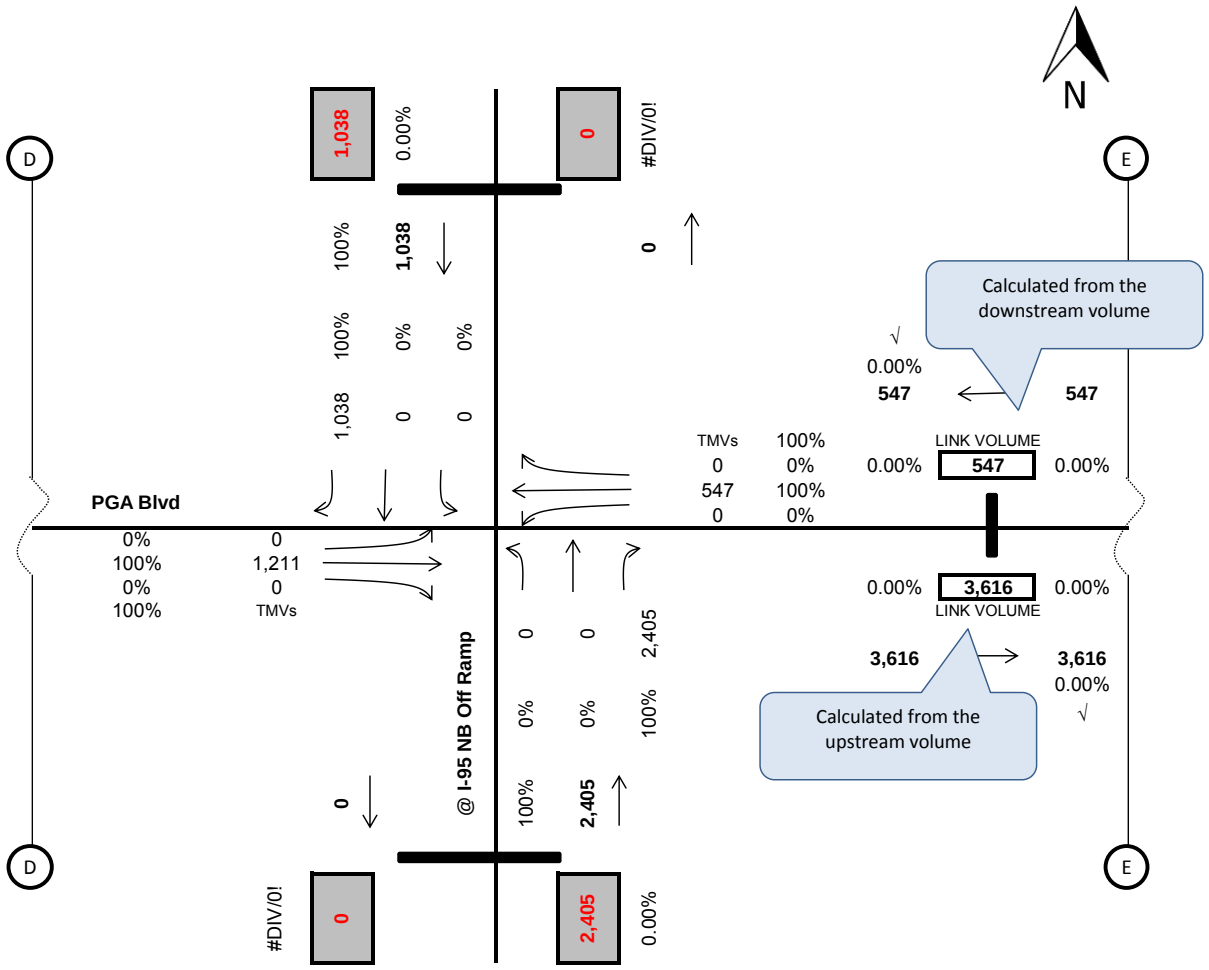
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard** **Turning Movement Volume Development** **2020 No Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **4 of 8** *Date:* 9/24/15

@ I-95 NB Off Ramp



Turning Movement Volumes
@ I-95 NB Off Ramp

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**547**			**2,405**			**1,211**			**1,038**	
TM Pk Hr Counts	0	2105	0	0	0	2169	0	1245	0	0	0	1464
% Turns	0%	100%	0%	0%	0%	100%	0%	100%	0%	0%	0%	100%
Calc. Pk Hr Volumes	0	547	0	0	0	2405	0	1211	0	0	0	1038
Adjustments												
Bal Pk Hr Volumes	**0**	**547**	**0**	**0**	**0**	**2405**	**0**	**1211**	**0**	**0**	**0**	**1038**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 → — Turning Movement Volumes (Balanced)

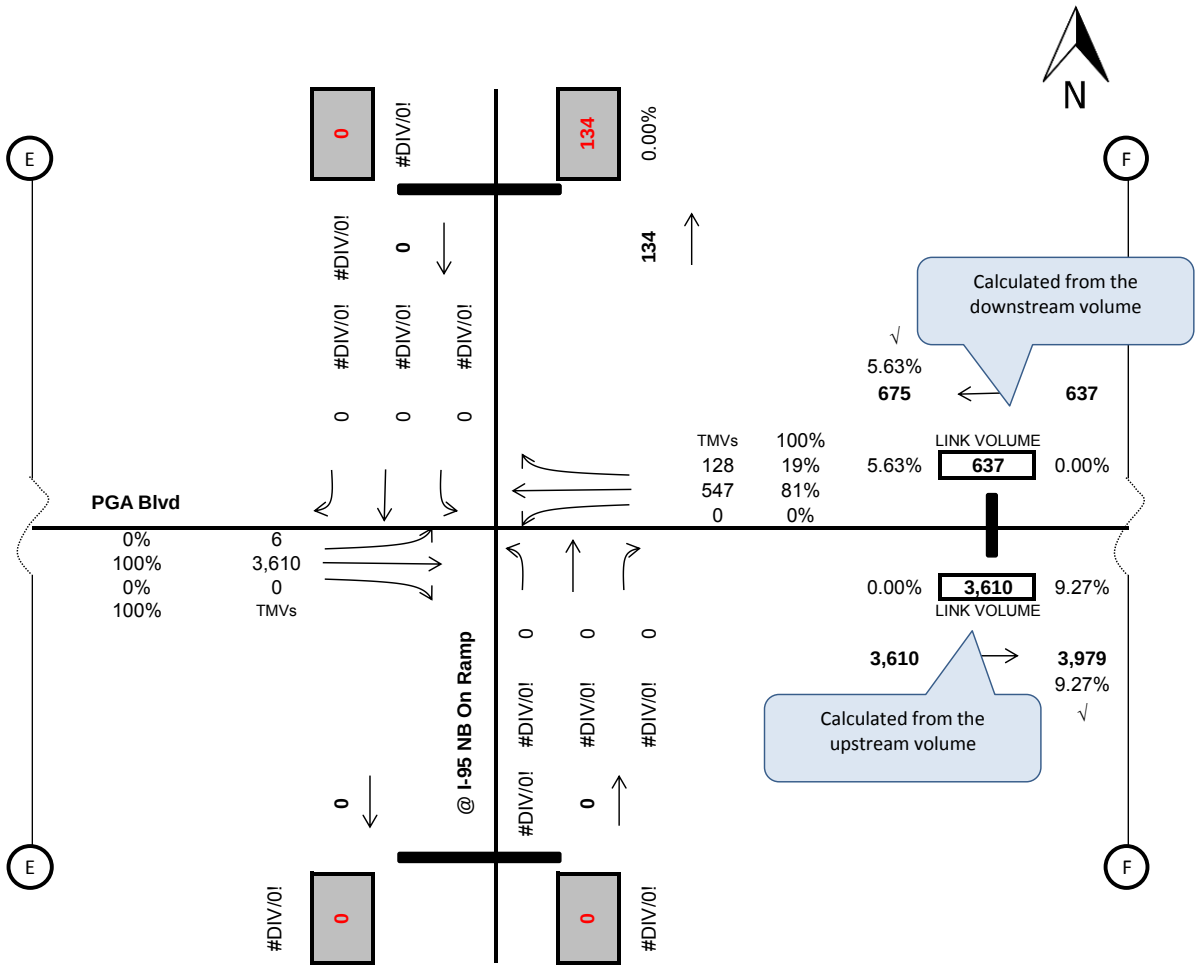
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard Turning Movement Volume Development 2020 No Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **5 of 8** *Date:* 9/24/15

@ I-95 NB On Ramp



Turning Movement Volumes
@ I-95 NB On Ramp

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**637**			**0**			**3,616**			**0**	
TM Pk Hr Counts	0	641	106	0	0	0	4	3411	0	0	0	0
% Turns	0%	86%	14%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Calc. Pk Hr Volumes	0	547	90	0	0	0	4	3612	0	0	0	0
Adjustments			38		0		2	-2				
Bal Pk Hr Volumes	**0**	**547**	**128**	**0**	**0**	**0**	**6**	**3610**	**0**	**0**	**0**	**0**

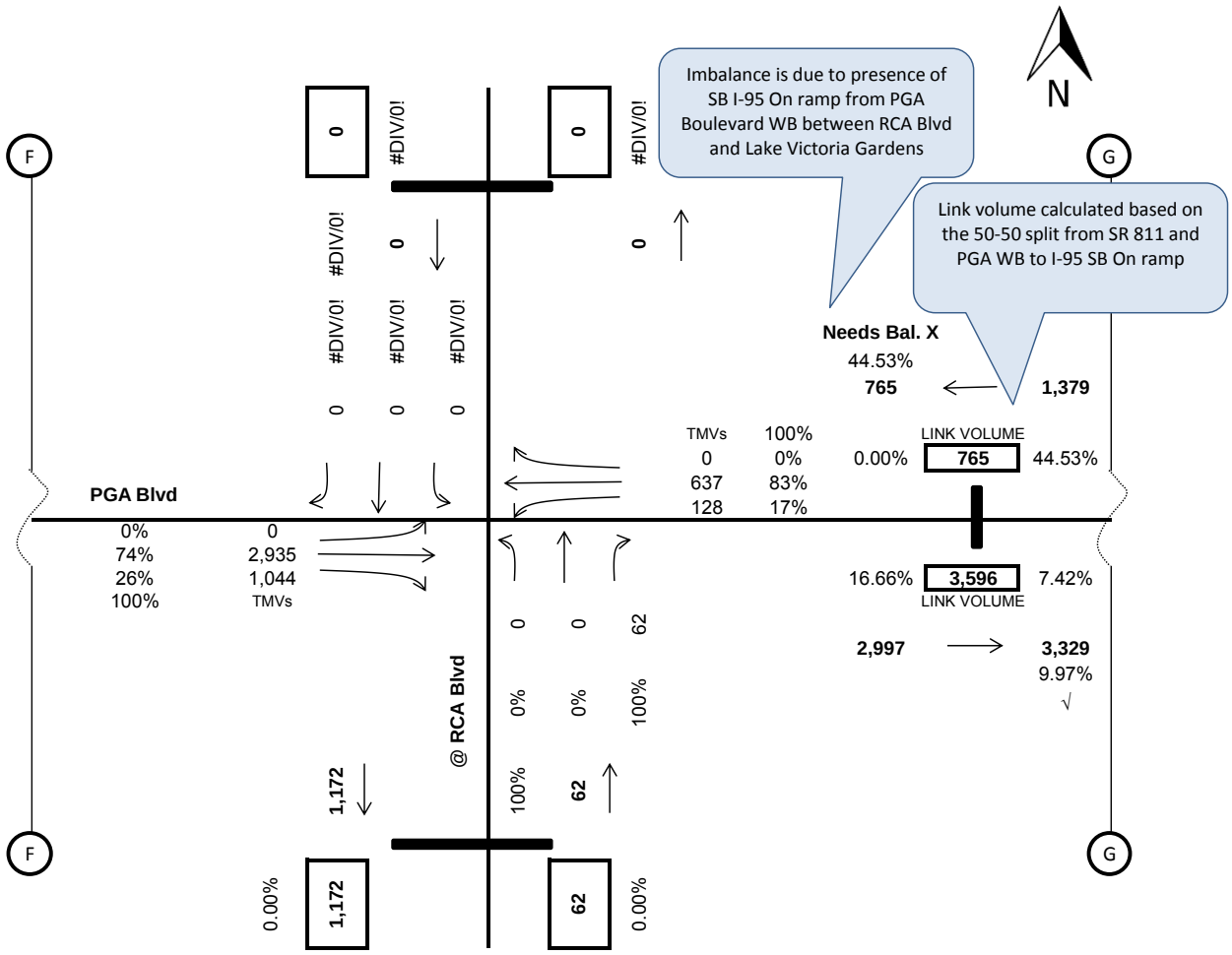
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard** **Turning Movement Volume Development** **2020 No Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **6 of 8** *Date:* 9/24/15

@ RCA Blvd



Turning Movement Volumes
@ RCA Blvd

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**765**			**62**			**3,610**			**0**	
TM Pk Hr Counts	150	748	0	0	0	62	0	2273	1137	0	0	0
% Turns	17%	83%	0%	0%	0%	100%	0%	67%	33%	0%	0%	0%
Calc. Pk Hr Volumes	128	637	0	0	0	62	0	2406	1204	0	0	0
Adjustments								529	-160			
Bal Pk Hr Volumes	**128**	**637**	**0**	**0**	**0**	**62**	**0**	**2935**	**1044**	**0**	**0**	**0**

Adjusted in order to change the uneven splits when compared to the existing counts

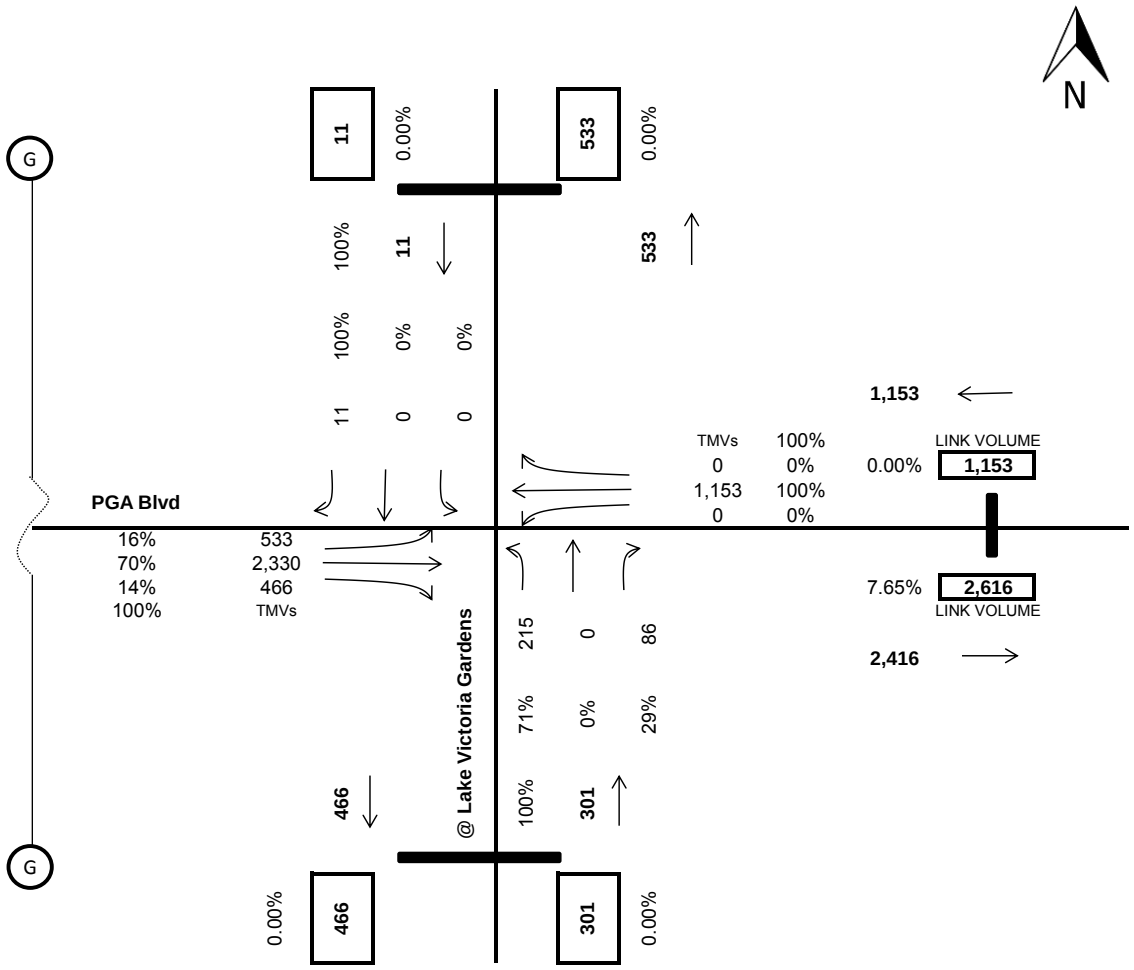
LEGEND

- **1,500** — Control Volumes (Peak Hour)*
- **1,300** — Link Volumes (Peak Hour)
- 66 → — Turning Movement Volumes (Balanced)
- A — Match Line
- A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard** **Turning Movement Volume Development** **2020 No Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **7 of 8** *Date:* 9/24/15

@ Lake Victoria Gardens



Turning Movement Volumes
@ Lake Victoria Gardens

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,153**			**301**			**3,596**			**11**	
TM Pk Hr Counts	0	1280	0	215	0	86	424	1699	368	0	0	11
% Turns	0%	100%	0%	71%	0%	29%	17%	68%	15%	0%	0%	100%
Calc. Pk Hr Volumes	0	1153	0	215	0	86	612	2453	531	0	0	11
Adjustments							-79	-123	-65			
Bal Pk Hr Volumes	**0**	**1153**	**0**	**215**	**0**	**86**	**533**	**2330**	**466**	**0**	**0**	**11**

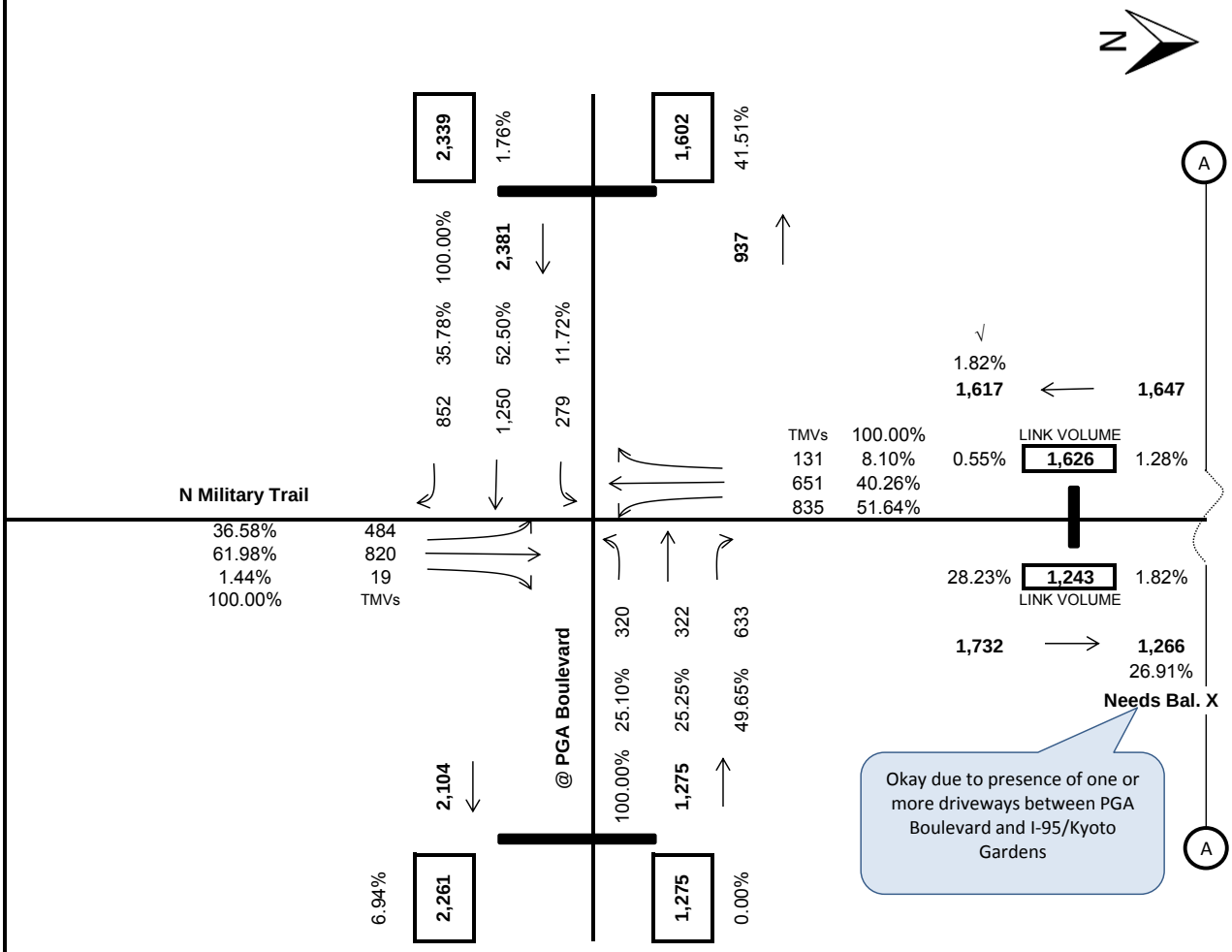
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard** **Turning Movement Volume Development** **2020 No Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **8 of 8** *Date:* 9/24/15

@ PGA Boulevard



Turning Movement Volumes
@ PGA Boulevard

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes												
TM Pk Hr Counts												
% Turns												
Calc. Pk Hr Volumes												
Adjustments												
Bal Pk Hr Volumes	**835**	**651**	**131**	**320**	**322**	**633**	**484**	**820**	**19**	**279**	**1250**	**852**

For consistency, balanced peak hour volumes from major street arterial (aka PGA Boulevard) were used. See PGA Boulevard Arterial for details

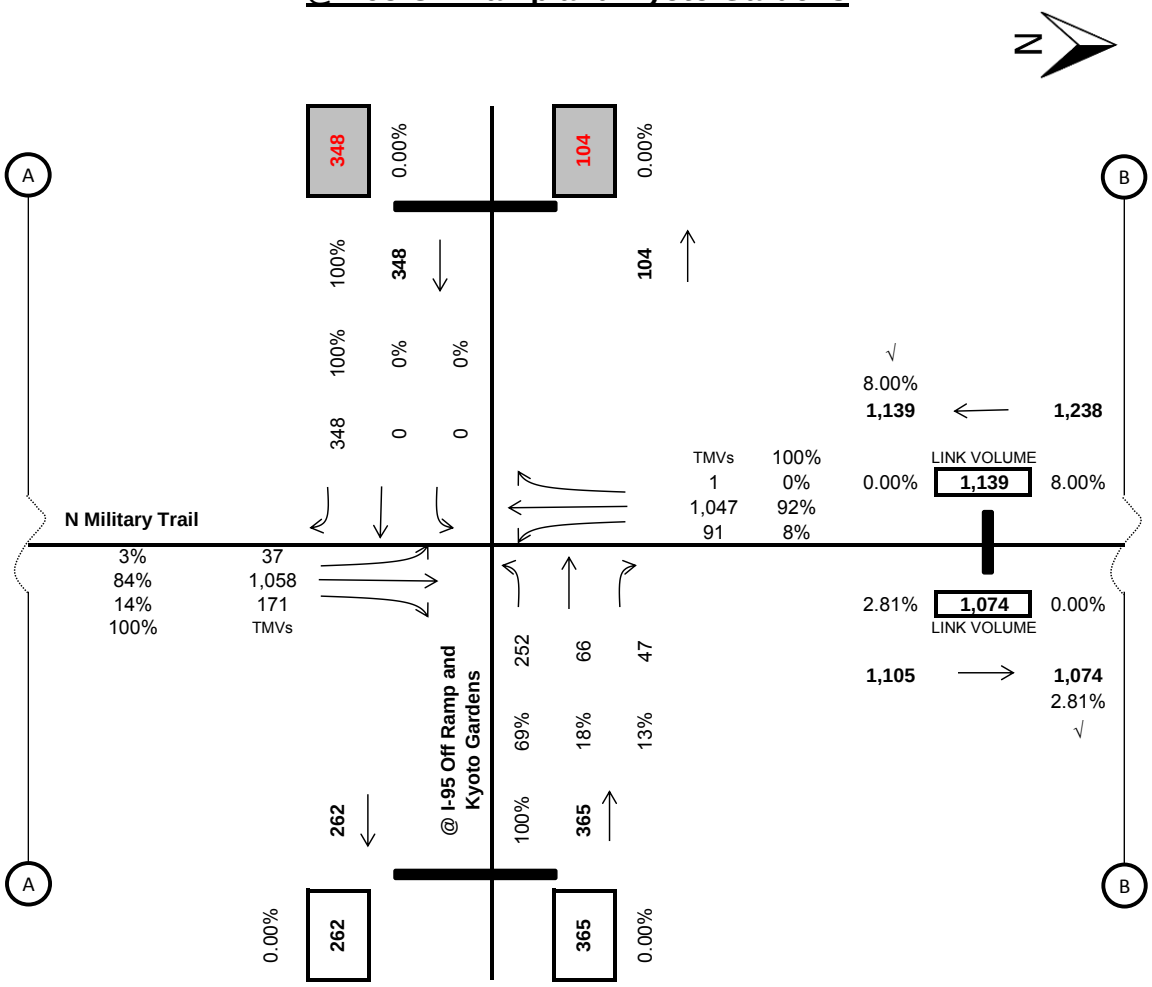
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A / A	Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **N Military Trail** **Turning Movement Volume Development** **2020 No Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **1 of 4** *Date:* 9/24/15

@ I-95 Off Ramp and Kyoto Gardens



Turning Movement Volumes
@ I-95 Off Ramp and Kyoto

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,139**			**365**			**1,243**			**348**	
TM Pk Hr Counts	229	2638	2	252	66	47	30	2292	370	0	0	65
% Turns	8%	92%	0%	69%	18%	13%	1%	85%	14%	0%	0%	100%
Calc. Pk Hr Volumes	91	1047	1	252	66	47	14	1058	171	0	0	348
Adjustments							23					
Bal Pk Hr Volumes	**91**	**1047**	**1**	**252**	**66**	**47**	**37**	**1058**	**171**	**0**	**0**	**348**

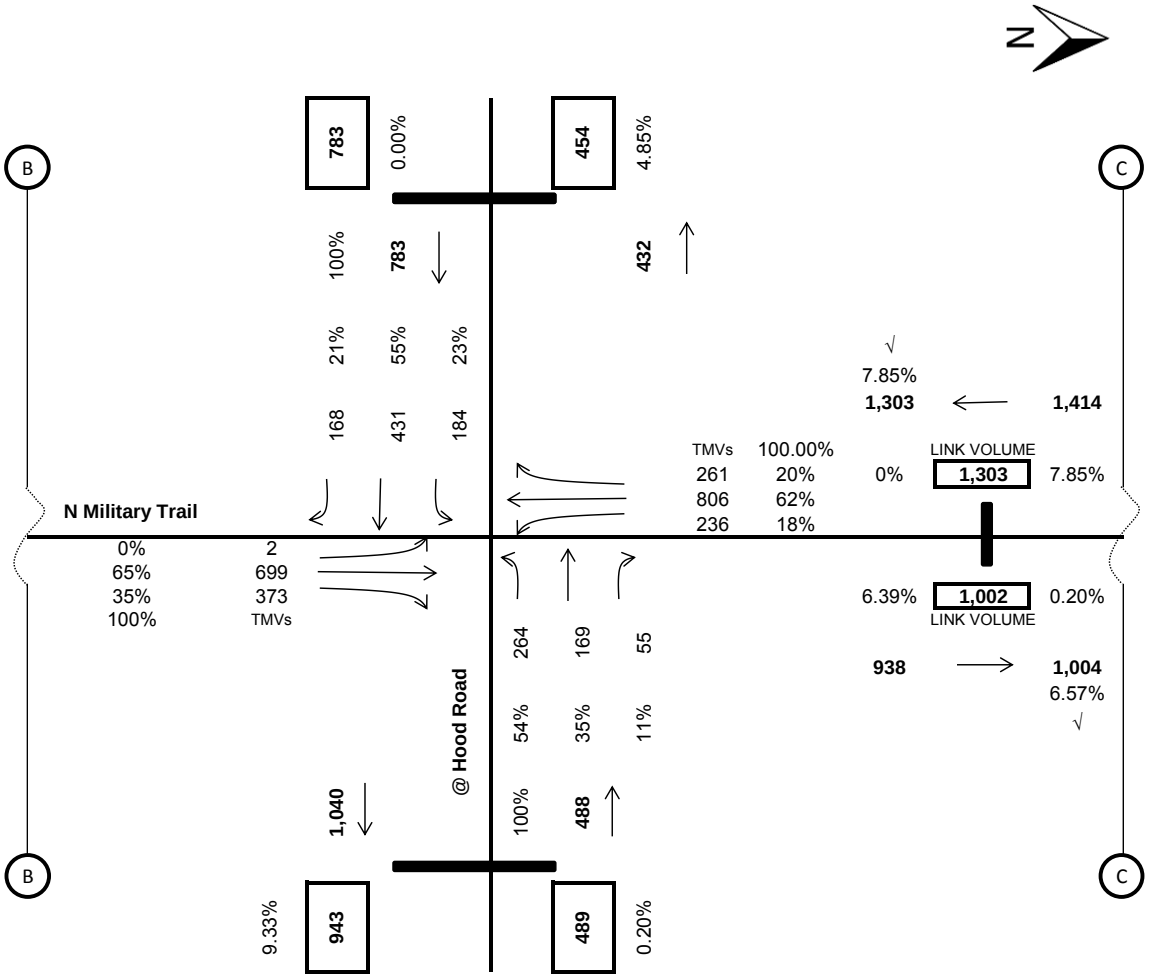
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66 →	Turning Movement Volumes (Balanced)
A / A	Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard, Project Development & Environmental Study, FM No. 413265-1-22-01	*Exhibit Name:* **N Military Trail, Turning Movement Volume Development, 2020 No Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **2 of 4** *Date:* 9/24/15

@ Hood Road



Turning Movement Volumes
@ Hood Road

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,303**			**489**			**1,074**			**783**	
TM Pk Hr Counts	395	1350	437	748	480	157	4	1279	682	385	900	351
% Turns	18%	62%	20%	54%	35%	11%	0%	65%	35%	24%	55%	21%
Calc. Pk Hr Volumes	236	806	261	264	169	55	2	699	373	184	431	168
Adjustments												
Bal Pk Hr Volumes	**236**	**806**	**261**	**264**	**169**	**55**	**2**	**699**	**373**	**184**	**431**	**168**

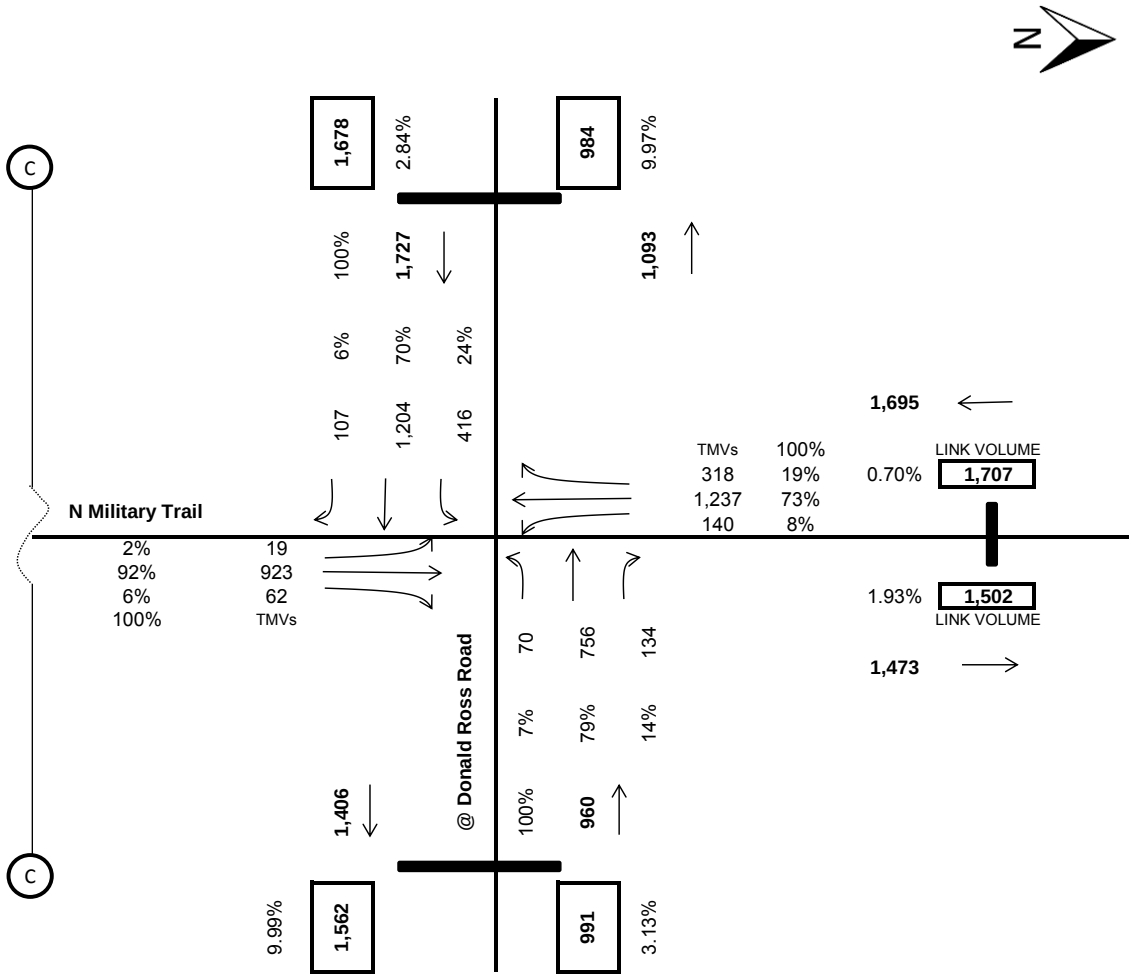
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66 →	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **N Military Trail** **Turning Movement Volume Development** **2020 No Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **3 of 4** *Date:* 9/24/15

@ Donald Ross Road



Turning Movement Volumes
@ Donald Ross Road

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,707**			**991**			**1,002**			**1,678**	
TM Pk Hr Counts	201	1778	474	68	765	130	31	1434	91	377	1048	97
% Turns	8%	72%	19%	7%	79%	13%	2%	92%	6%	25%	69%	6%
Calc. Pk Hr Volumes	140	1237	330	70	787	134	20	923	59	416	1155	107
Adjustments			-12		-31		-1		3		49	
Bal Pk Hr Volumes	**140**	**1237**	**318**	**70**	**756**	**134**	**19**	**923**	**62**	**416**	**1204**	**107**

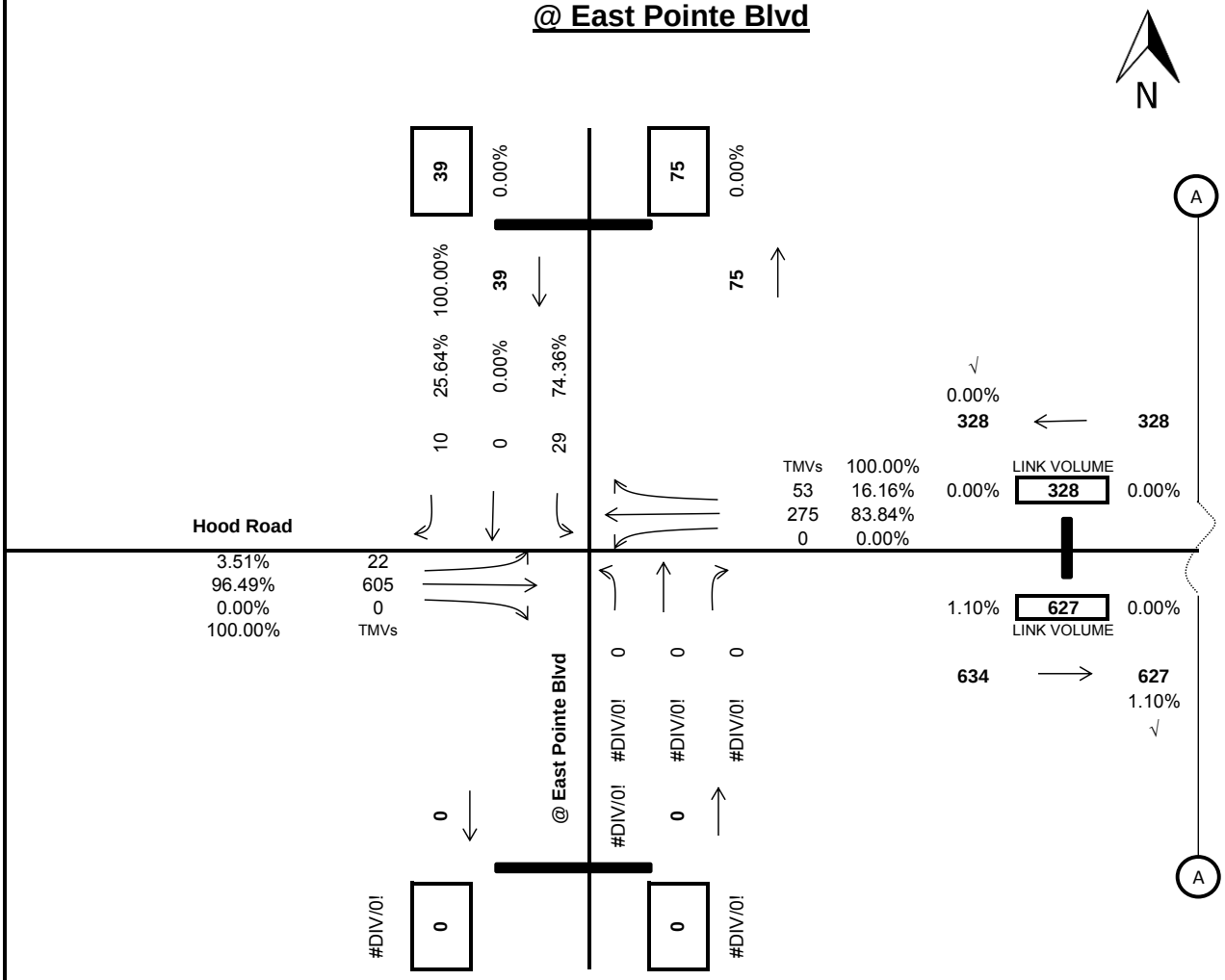
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **N Military Trail** **Turning Movement Volume Development** **2020 No Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **4 of 4** *Date:* 9/24/15

@ East Pointe Blvd



Turning Movement Volumes
@ East Pointe Blvd

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**328**			**0**			**627**			**39**	
TM Pk Hr Counts	0	157	30	0	0	0	10	278	0	29	0	10
% Turns	0%	84%	16%	0%	0%	0%	3%	97%	0%	74%	0%	26%
Calc. Pk Hr Volumes	0	275	53	0	0	0	22	605	0	29	0	10
Adjustments												
Bal Pk Hr Volumes	**0**	**275**	**53**	**0**	**0**	**0**	**22**	**605**	**0**	**29**	**0**	**10**

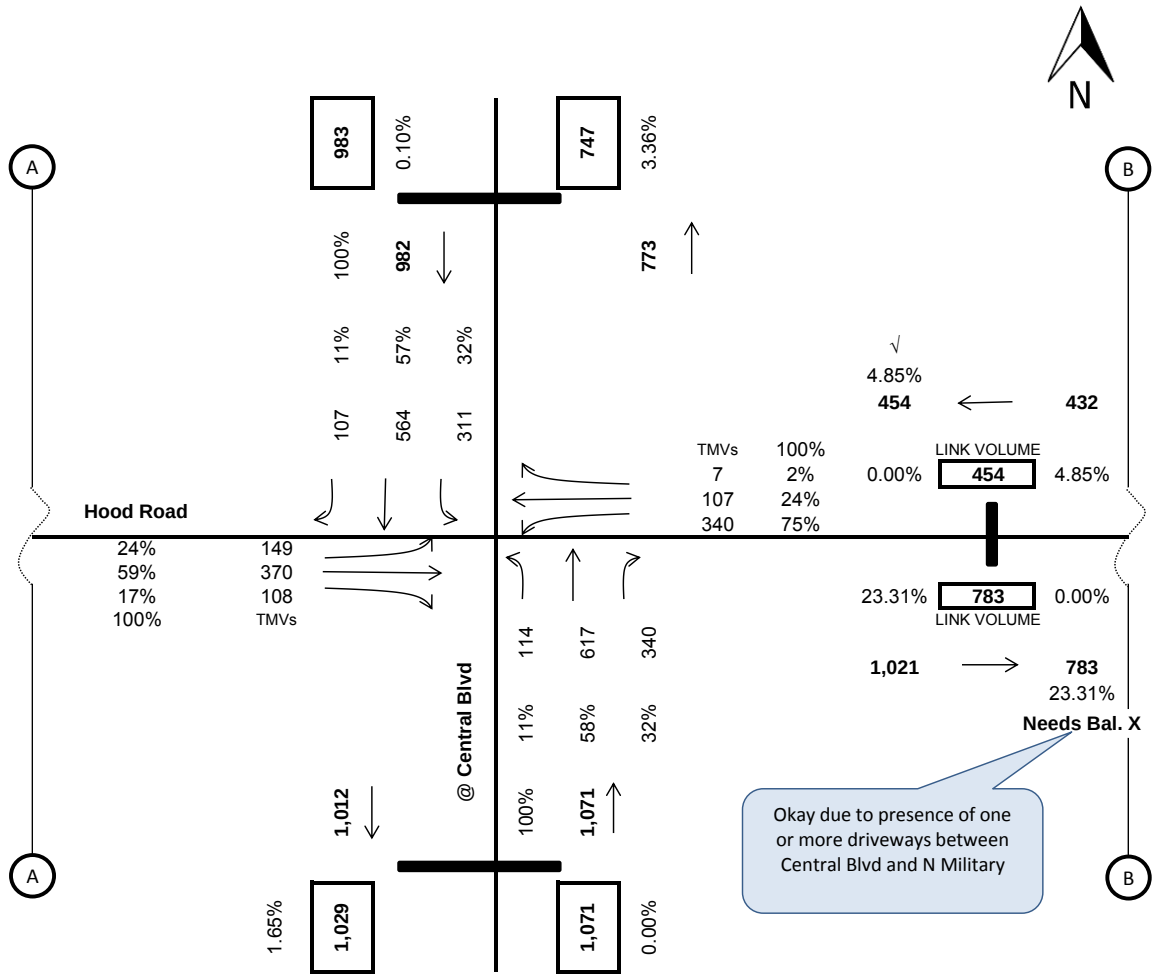
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66 →	Turning Movement Volumes (Balanced)
A … A	Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Hood Road** **Turning Movement Volume Development** **2020 No Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **1 of 3** *Date:* 9/24/15

@ Central Blvd



Turning Movement Volumes
@ Central Blvd

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes												
TM Pk Hr Counts												
% Turns												
Calc. Pk Hr Volumes												
Adjustments												
Bal Pk Hr Volumes	**340**	**107**	**7**	**114**	**617**	**340**	**149**	**370**	**108**	**311**	**564**	**107**

LEGEND

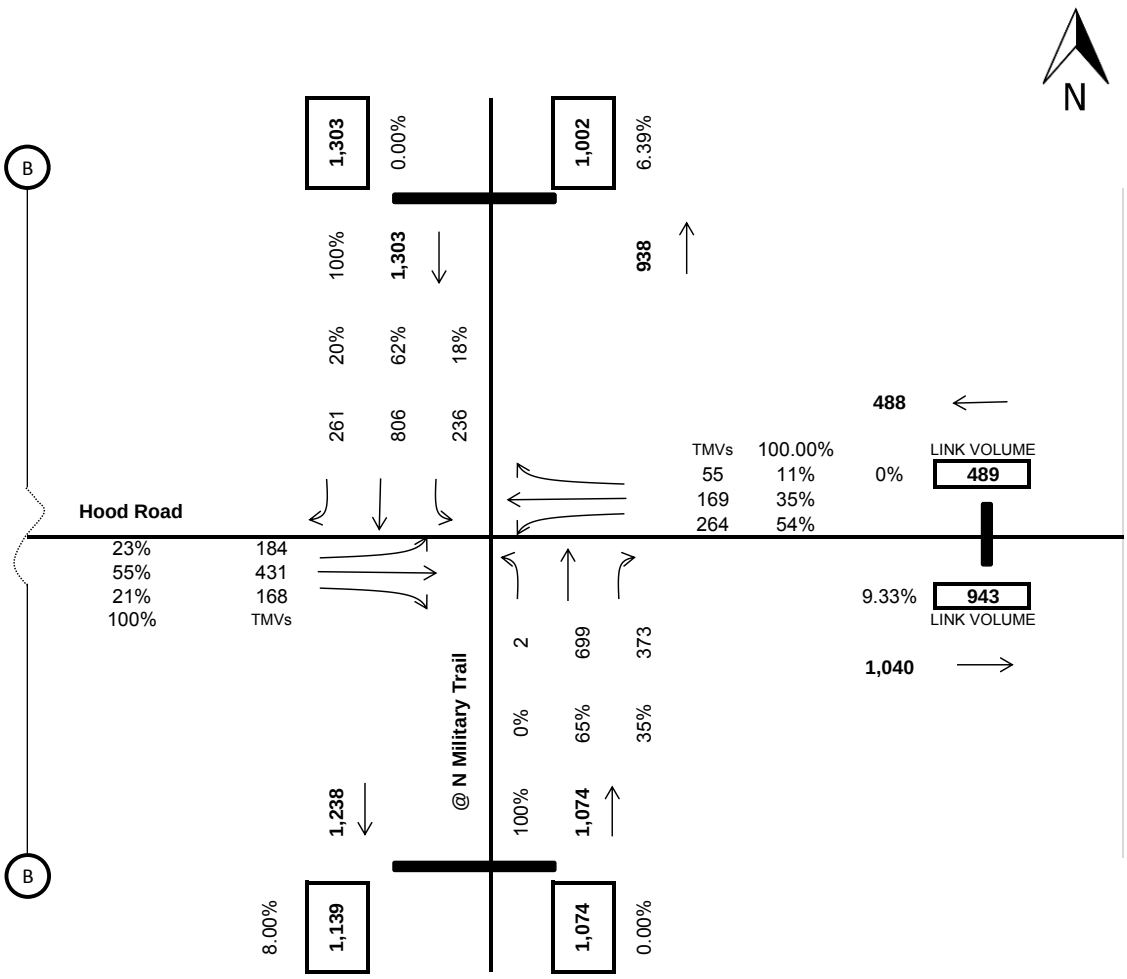
1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A / A	Match Line

For consistency, balanced peak hour volumes from major street arterial (aka Central Boulevard) were used. See Central Boulevard Arterial for details

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard, Project Development & Environmental Study, FM No. 413265-1-22-01	*Exhibit Name:* **Hood Road, Turning Movement Volume Development, 2020 No Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **2 of 3** *Date:* 9/24/15

@ N Military Trail



Turning Movement Volumes
@ N Military Trail

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes												
TM Pk Hr Counts												
% Turns												
Calc. Pk Hr Volumes												
Adjustments												
Bal Pk Hr Volumes	**264**	**169**	**55**	**2**	**699**	**373**	**184**	**431**	**168**	**236**	**806**	**261**

For consistency, balanced peak hour volumes from major street arterial (aka N Military Trail) were used. See N Military Trail Arterial for details

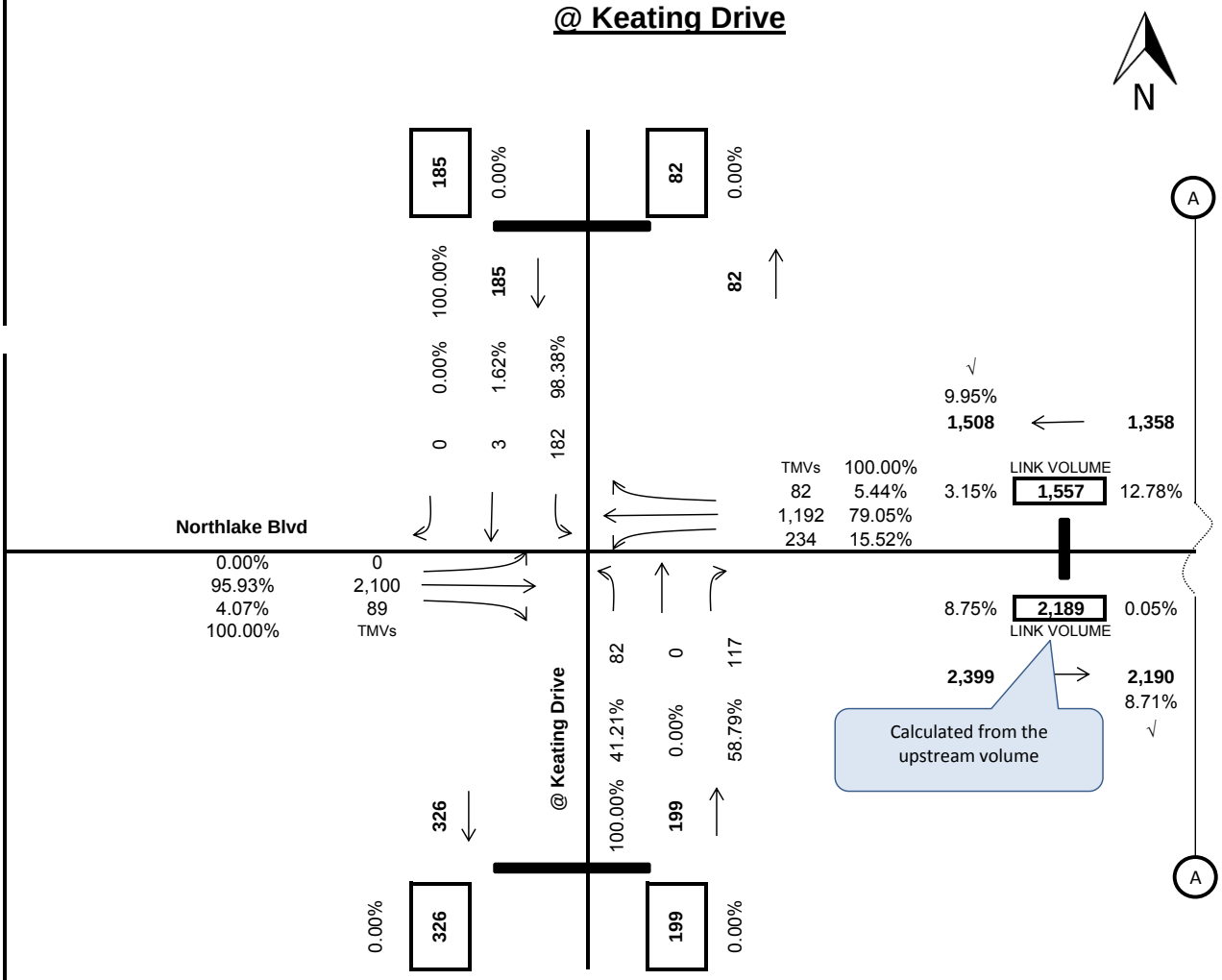
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66 →	Turning Movement Volumes (Balanced)
A … A	Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Hood Road** **Turning Movement Volume Development** **2020 No Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **3 of 3** *Date:* 9/24/15

@ Keating Drive



Turning Movement Volumes
@ Keating Drive

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,557**			**199**			**2,189**			**185**	
TM Pk Hr Counts	242	1223	85	82	0	117	0	2513	106	182	3	0
% Turns	16%	79%	5%	41%	0%	59%	0%	96%	4%	98%	2%	0%
Calc. Pk Hr Volumes	243	1229	85	82	0	117	0	2100	89	182	3	0
Adjustments	-9	-37	-3									
Bal Pk Hr Volumes	**234**	**1192**	**82**	**82**	**0**	**117**	**0**	**2100**	**89**	**182**	**3**	**0**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

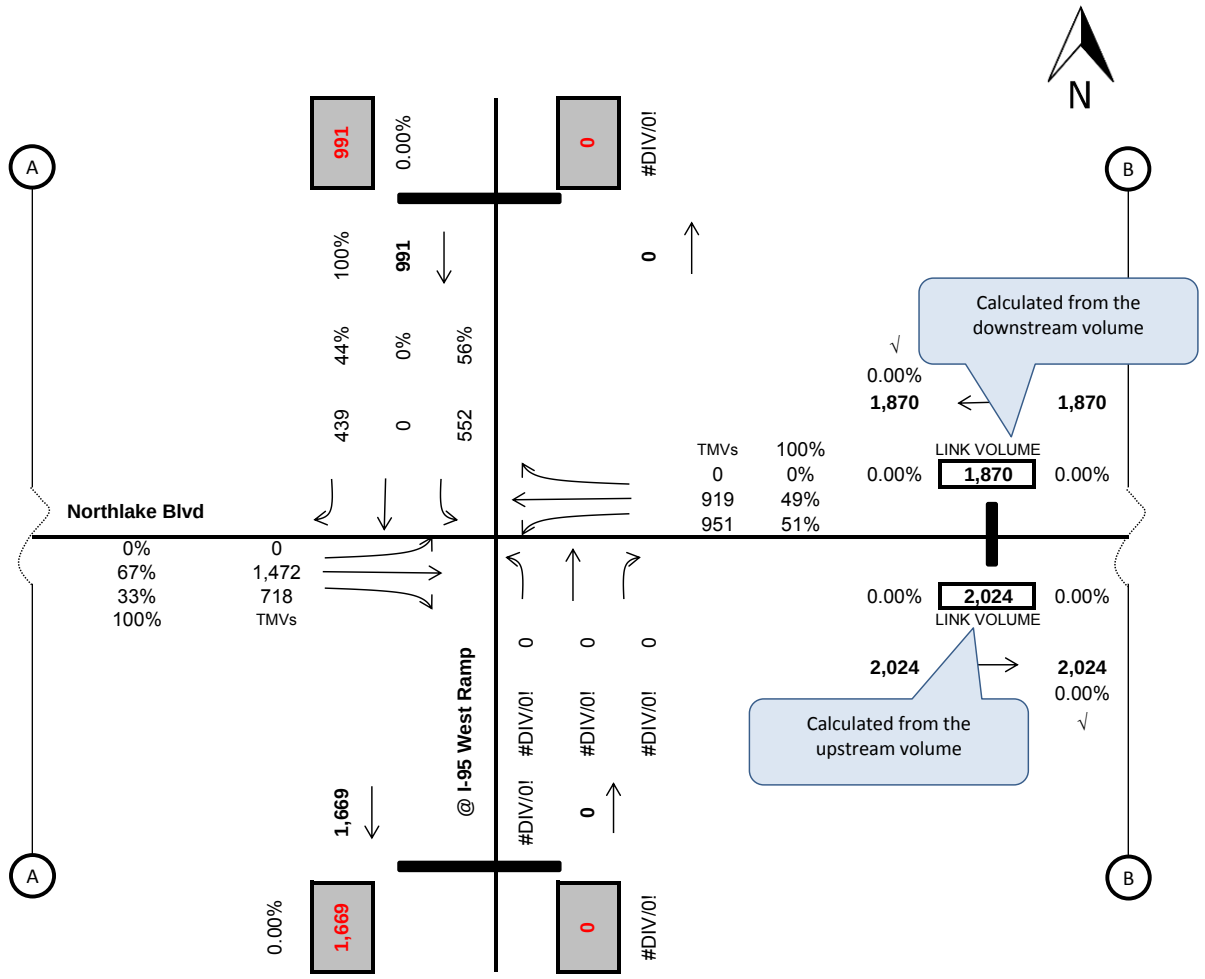
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Northlake Boulevard** **Turning Movement Volume Development** **2020 No Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **1 of 5** *Date:* 9/24/15

@ I-95 West Ramp



Turning Movement Volumes
@ I-95 West Ramp

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,870**			**0**			**2,189**			**991**	
TM Pk Hr Counts	804	843	0	0	0	0	0	1925	887	894	0	707
% Turns	49%	51%	0%	0%	0%	0%	0%	68%	32%	56%	0%	44%
Calc. Pk Hr Volumes	913	957	0	0	0	0	0	1499	690	553	0	438
Adjustments	38	-38						-27	28	-1	0	1
Bal Pk Hr Volumes	**951**	**919**	**0**	**0**	**0**	**0**	**0**	**1472**	**718**	**552**	**0**	**439**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 → — Turning Movement Volumes (Balanced)

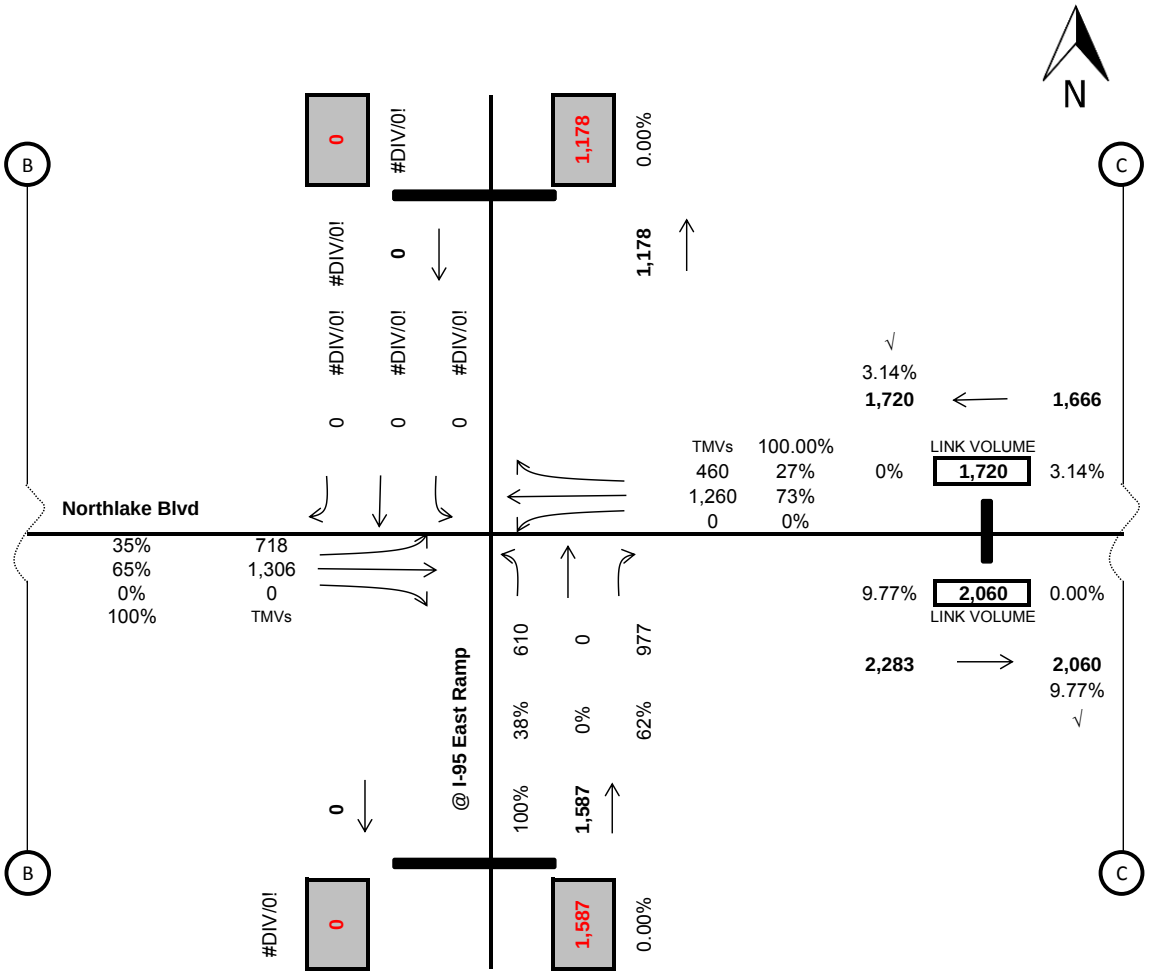
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Northlake Boulevard** **Turning Movement Volume Development** **2020 No Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **2 of 5** *Date:* 9/24/15

@ I-95 East Ramp



Turning Movement Volumes
@ I-95 East Ramp

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,720**			**1,587**			**2,024**			**0**	
TM Pk Hr Counts	0	1157	411	489	0	867	981	1837	0	0	0	0
% Turns	0%	74%	26%	36%	0%	64%	35%	65%	0%	0%	0%	0%
Calc. Pk Hr Volumes	0	1269	451	572	0	1015	705	1319	0	0	0	0
Adjustments		-9	9	38	0	-38	13	-13				
Bal Pk Hr Volumes	**0**	**1260**	**460**	**610**	**0**	**977**	**718**	**1306**	**0**	**0**	**0**	**0**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

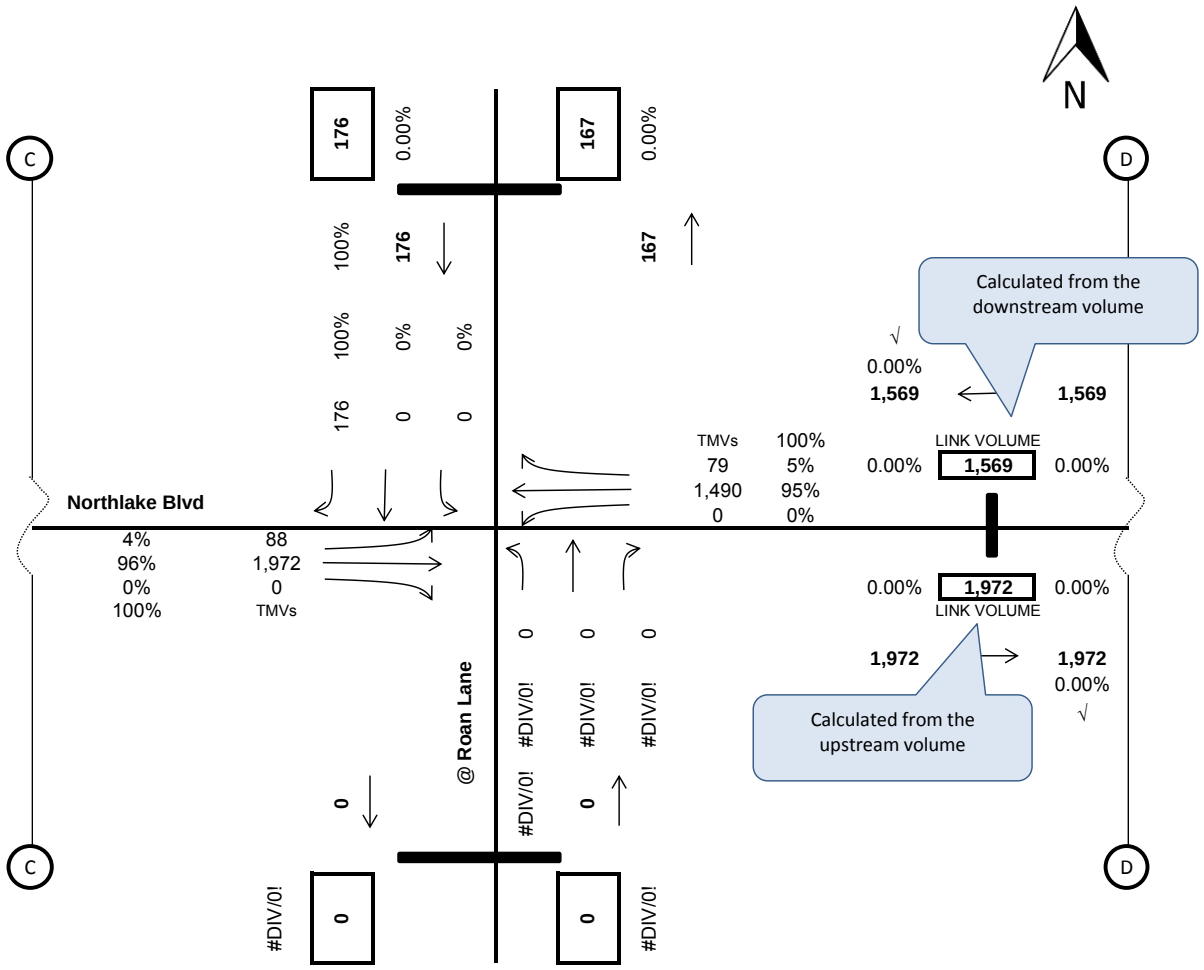
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Northlake Boulevard** **Turning Movement Volume Development** **2020 No Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **3 of 5** *Date:* 9/24/15

@ Roan Lane



Turning Movement Volumes
@ Roan Lane

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,569**			**0**			**2,060**			**176**	
TM Pk Hr Counts	0	1508	80	0	0	0	118	2660	0	0	0	176
% Turns	0%	95%	5%	0%	0%	0%	4%	96%	0%	0%	0%	100%
Calc. Pk Hr Volumes	0	1490	79	0	0	0	88	1972	0	0	0	176
Adjustments												
Bal Pk Hr Volumes	**0**	**1490**	**79**	**0**	**0**	**0**	**88**	**1972**	**0**	**0**	**0**	**176**

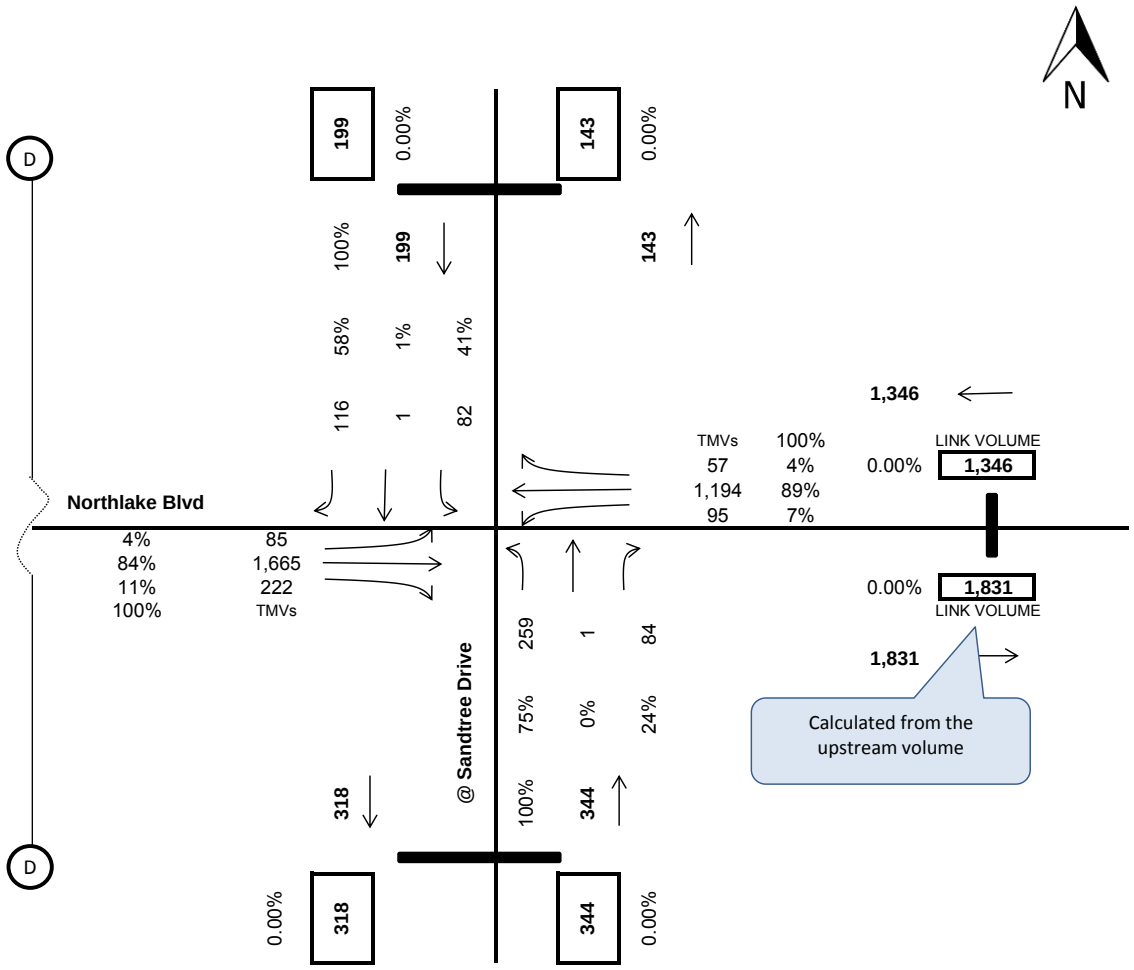
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A … A	Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Northlake Boulevard Turning Movement Volume Development 2020 No Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **4 of 5** *Date:* 9/24/15

@ Sandtree Drive



Turning Movement Volumes
@ Sandtree Drive

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,346**			**344**			**1,972**			**199**	
TM Pk Hr Counts	95	1194	57	259	1	84	117	2283	304	82	1	116
% Turns	7%	89%	4%	75%	0%	24%	4%	84%	11%	41%	1%	58%
Calc. Pk Hr Volumes	95	1194	57	259	1	84	85	1665	222	82	1	116
Adjustments												
Bal Pk Hr Volumes	**95**	**1194**	**57**	**259**	**1**	**84**	**85**	**1665**	**222**	**82**	**1**	**116**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

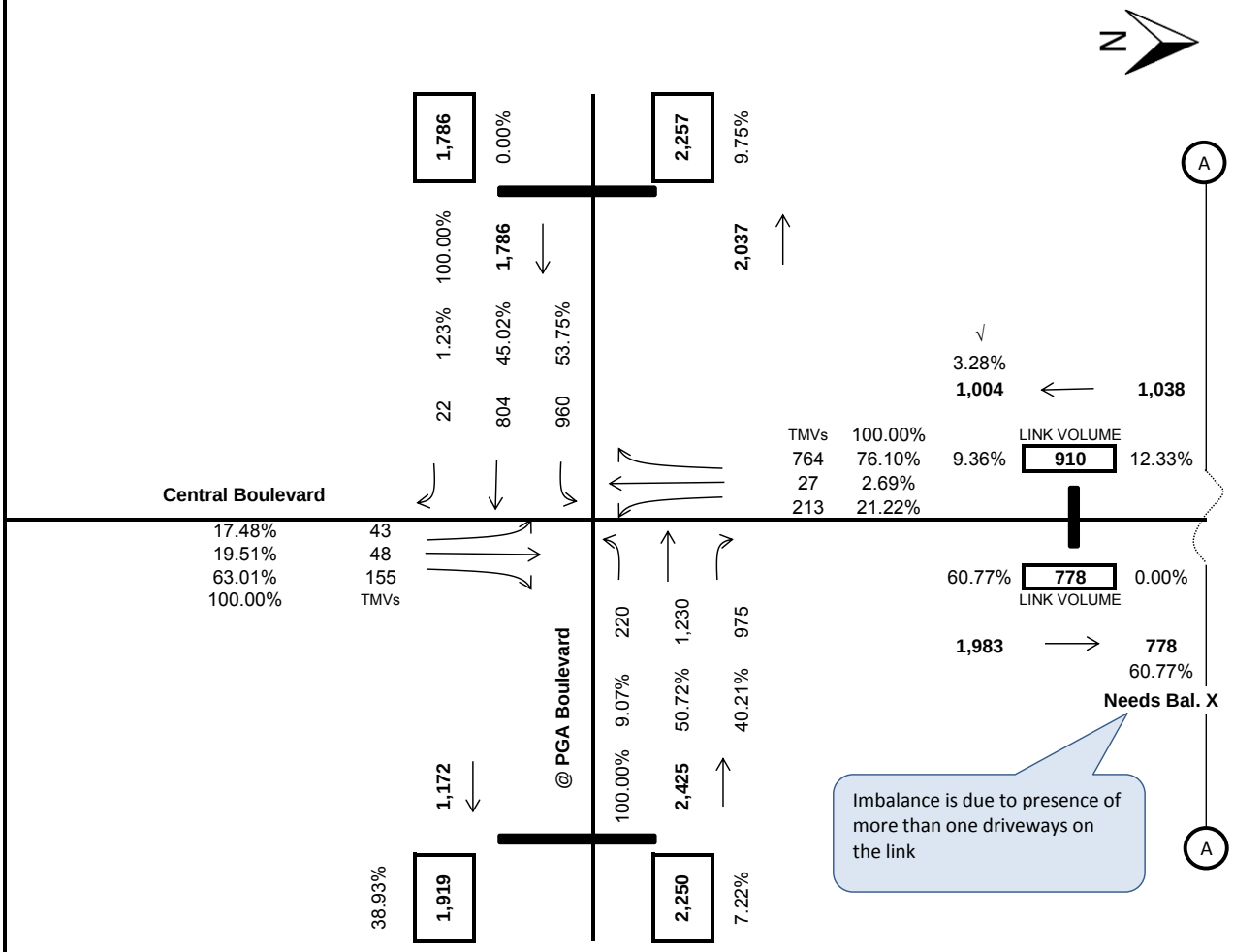
Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Northlake Boulevard Turning Movement Volume Development 2020 No Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **5 of 5** *Date:* 9/24/15

APPENDIX X

BALANCED TURNING MOVEMENT DEVELOPMENT SHEETS

2020 NO BUILD PM PEAK HOUR

@ PGA Boulevard



Turning Movement Volumes
@ PGA Boulevard

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes												
TM Pk Hr Counts												
% Turns												
Calc. Pk Hr Volumes												
Adjustments												
Bal Pk Hr Volumes	**213**	**27**	**764**	**220**	**1230**	**975**	**43**	**48**	**155**	**960**	**804**	**22**

LEGEND

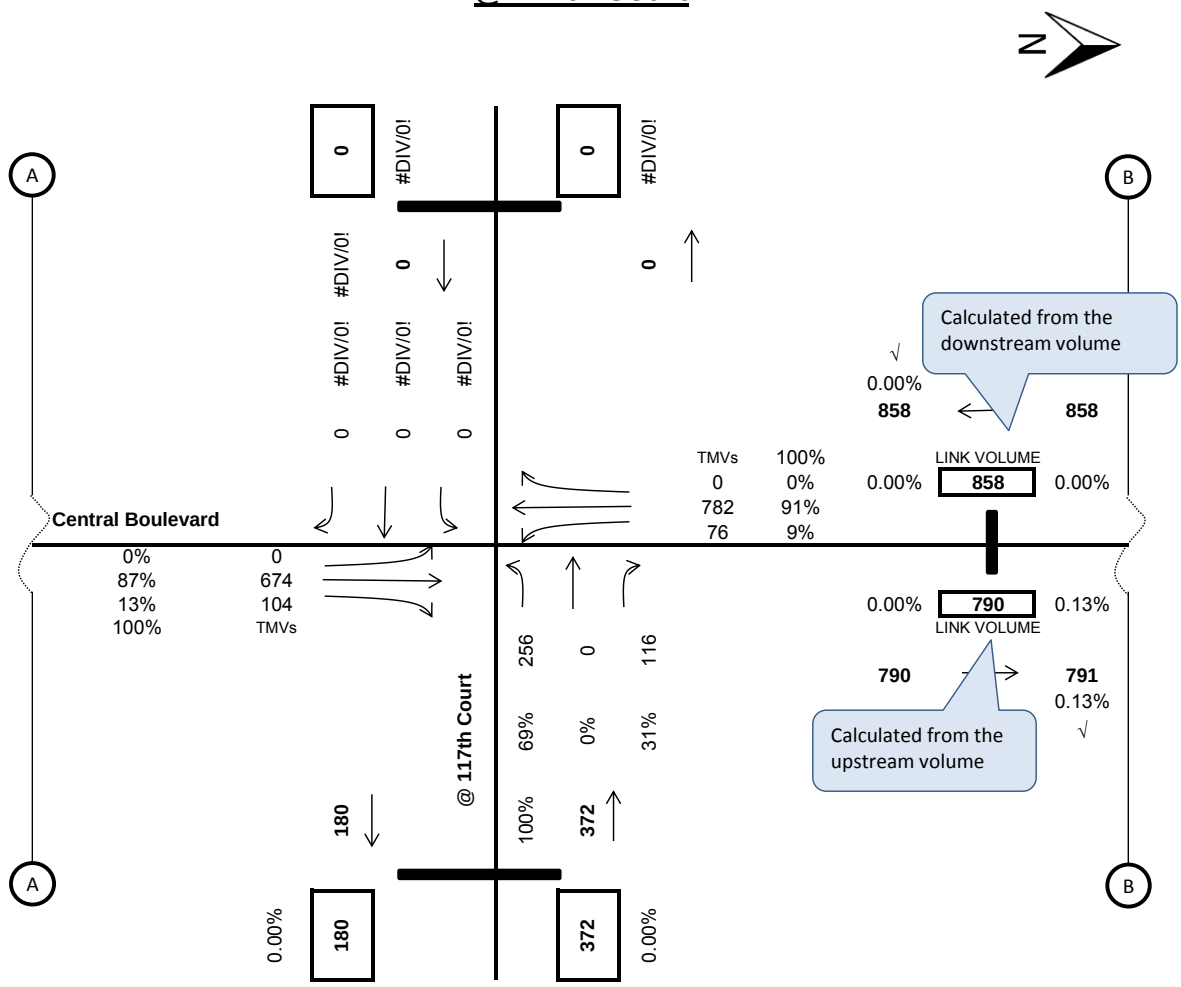
1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

For consistency, balanced peak hour volumes from major street arterial (aka PGA Boulevard) were used. See PGA Boulevard Arterial for details

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Central Boulevard Turning Movement Volume Development 2020 No Build PM Peak Hour**	*Exhibit No:* **TBD**
		Page No: **1 of 5**
		Date: 9/24/15

@ 117th Court



Turning Movement Volumes
@ 117th Court

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**858**			**372**			**778**			**0**	
TM Pk Hr Counts	131	1356	0	256	0	116	0	1700	262	0	0	0
% Turns	9%	91%	0%	69%	0%	31%	0%	87%	13%	0%	0%	0%
Calc. Pk Hr Volumes	76	782	0	256	0	116	0	674	104	0	0	0
Adjustments												
Bal Pk Hr Volumes	**76**	**782**	**0**	**256**	**0**	**116**	**0**	**674**	**104**	**0**	**0**	**0**

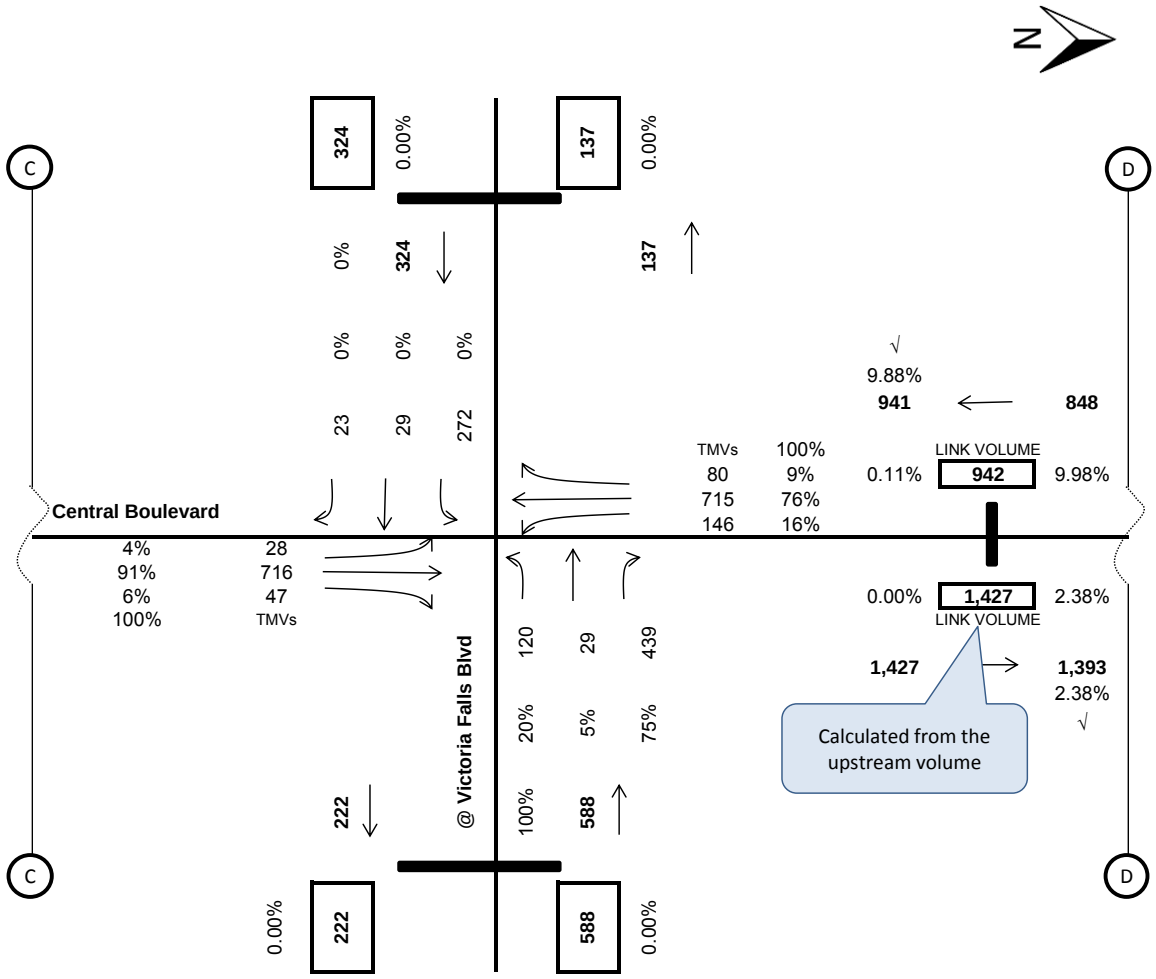
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Central Boulevard Turning Movement Volume Development 2020 No Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **2 of 5** *Date:* 9/24/15

@ Victoria Falls Blvd



Turning Movement Volumes
@ Victoria Falls Blvd

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**942**			**588**			**790**			**324**	
TM Pk Hr Counts	290	1418	159	120	29	439	67	1733	113	272	30	22
% Turns	16%	76%	9%	20%	5%	75%	4%	91%	6%	84%	9%	7%
Calc. Pk Hr Volumes	146	715	80	120	29	439	28	716	47	272	29	23
Adjustments												
Bal Pk Hr Volumes	**146**	**715**	**80**	**120**	**29**	**439**	**28**	**716**	**47**	**272**	**29**	**23**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

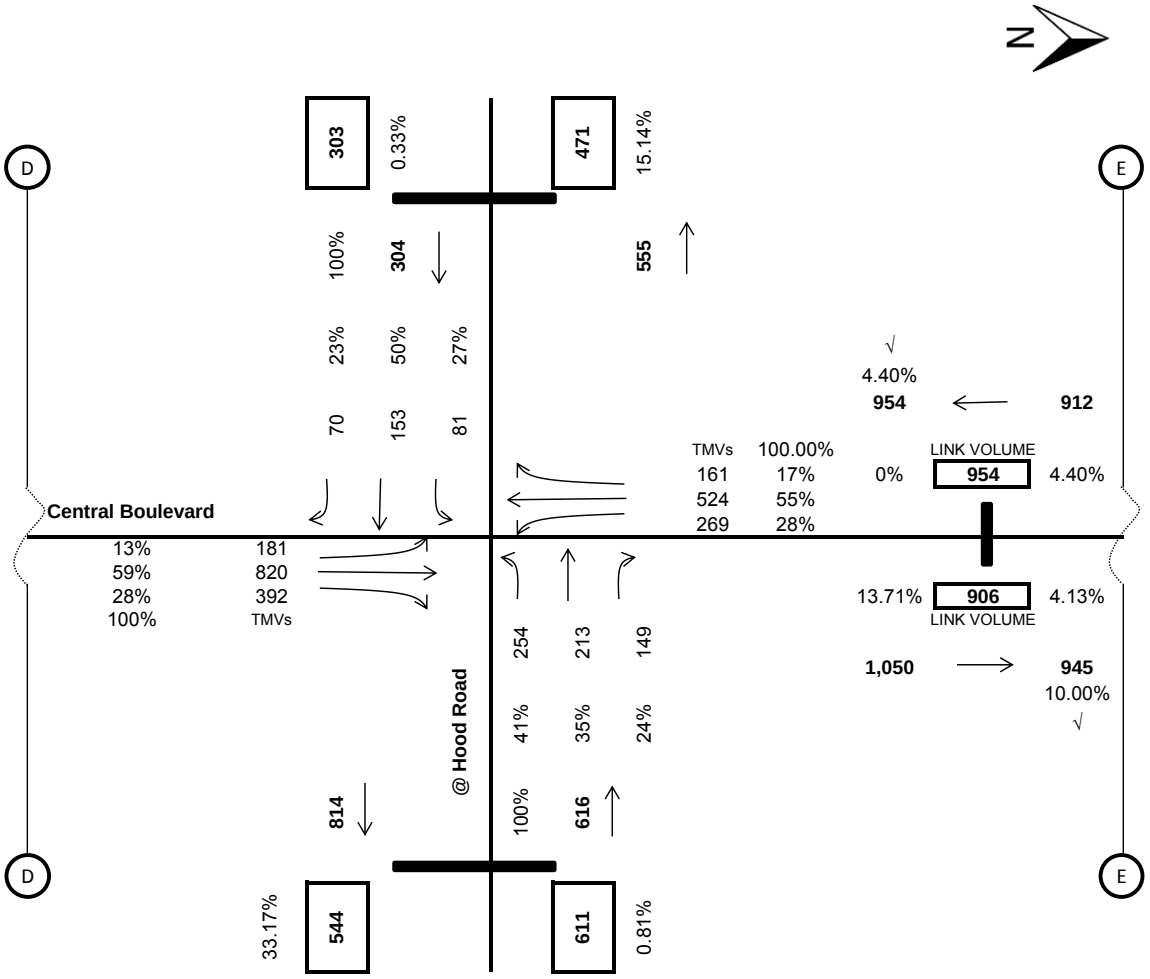
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Central Boulevard** **Turning Movement Volume Development** **2020 No Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **3 of 5** *Date:* 9/24/15

@ Hood Road



Turning Movement Volumes
@ Hood Road

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**954**			**611**			**1,427**			**303**		
TM Pk Hr Counts	497	913	286	637	550	383	275	1271	627	186	351	156
% Turns	29%	54%	17%	41%	35%	24%	13%	58%	29%	27%	51%	23%
Calc. Pk Hr Volumes	280	514	161	248	214	149	181	835	412	81	153	68
Adjustments	-11	10		6	-1			-15	-20			2
Bal Pk Hr Volumes	**269**	**524**	**161**	**254**	**213**	**149**	**181**	**820**	**392**	**81**	**153**	**70**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

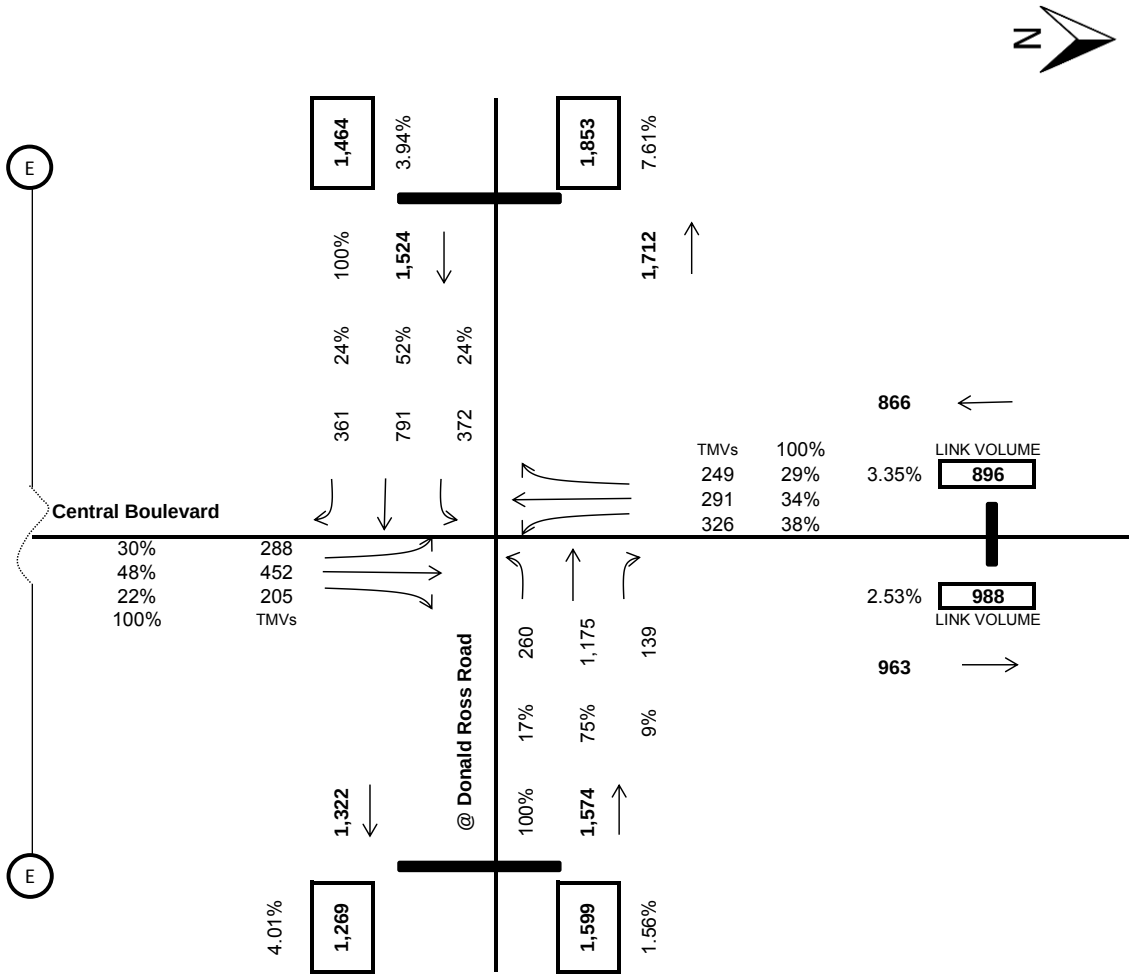
66 → — Turning Movement Volumes (Balanced)

A … A — Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Central Boulevard Turning Movement Volume Development 2020 No Build PM Peak Hour**	*Exhibit No:* **TBD**
		Page No: **4 of 5**
		Date: 9/24/15

@ Donald Ross Road



Turning Movement Volumes
@ Donald Ross Road

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**896**			**1,599**			**906**			**1,464**		
TM Pk Hr Counts	194	243	150	296	1219	144	197	332	136	523	944	593
% Turns	33%	41%	26%	18%	73%	9%	30%	50%	20%	25%	46%	29%
Calc. Pk Hr Volumes	296	371	229	285	1175	139	268	452	185	372	671	421
Adjustments	30	-80	20	-25			20		20		120	-60
Bal Pk Hr Volumes	**326**	**291**	**249**	**260**	**1175**	**139**	**288**	**452**	**205**	**372**	**791**	**361**

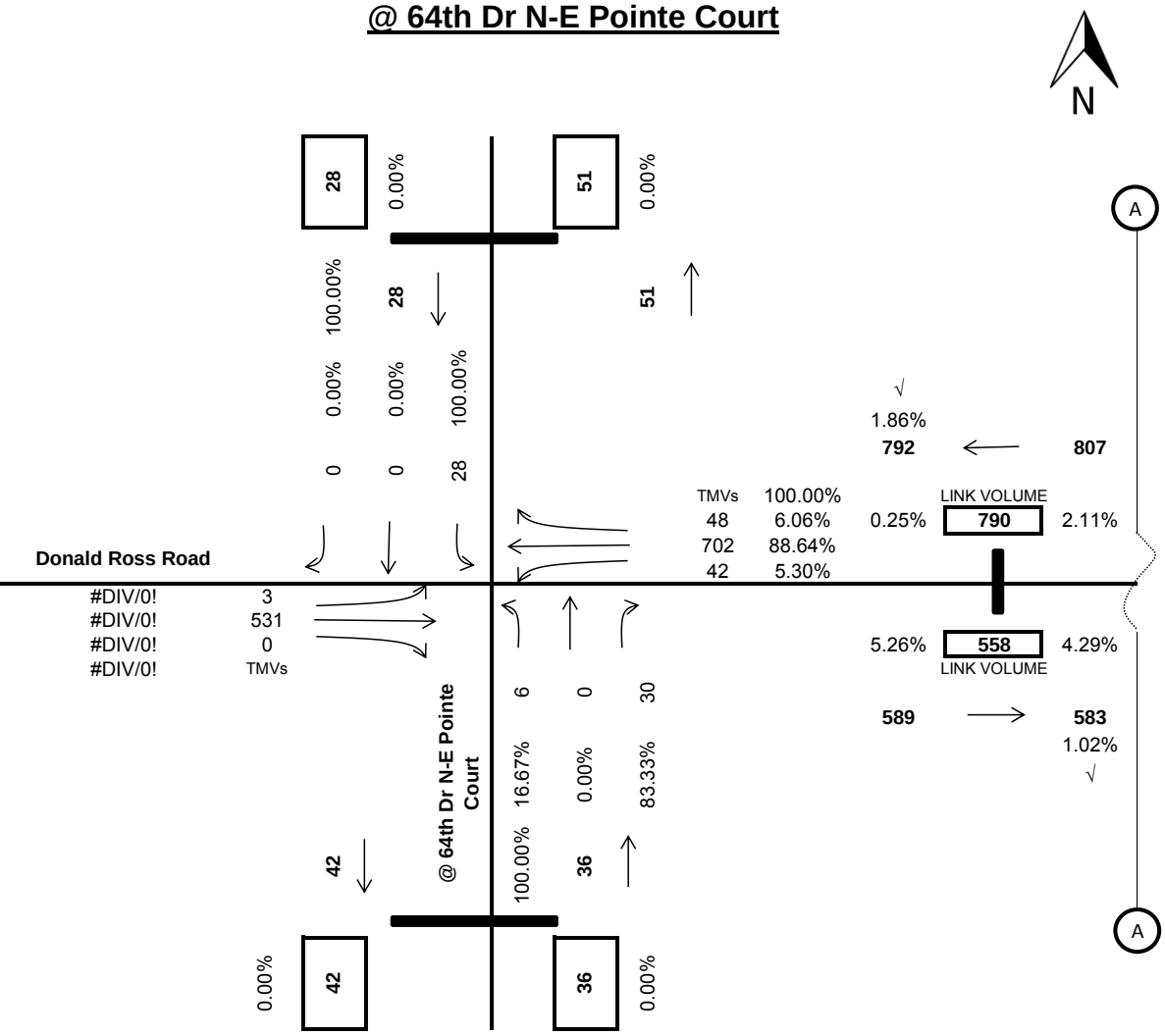
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Central Boulevard Turning Movement Volume Development 2020 No Build PM Peak Hour**	*Exhibit No:* **TBD**
		Page No: **5 of 5**
		Date: 9/24/15

@ 64th Dr N-E Pointe Court



Turning Movement Volumes
@ 64th Dr N-E Pointe Court

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**790**			**36**			**534**			**28**	
TM Pk Hr Counts	39	695	48	6	0	30	3	531	0	28	0	0
% Turns	5%	89%	6%	17%	0%	83%	1%	99%	0%	100%	0%	0%
Calc. Pk Hr Volumes	42	702	48	6	0	30	3	531	0	28	0	0
Adjustments												
Bal Pk Hr Volumes	**42**	**702**	**48**	**6**	**0**	**30**	**3**	**531**	**0**	**28**	**0**	**0**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 → — Turning Movement Volumes (Balanced)

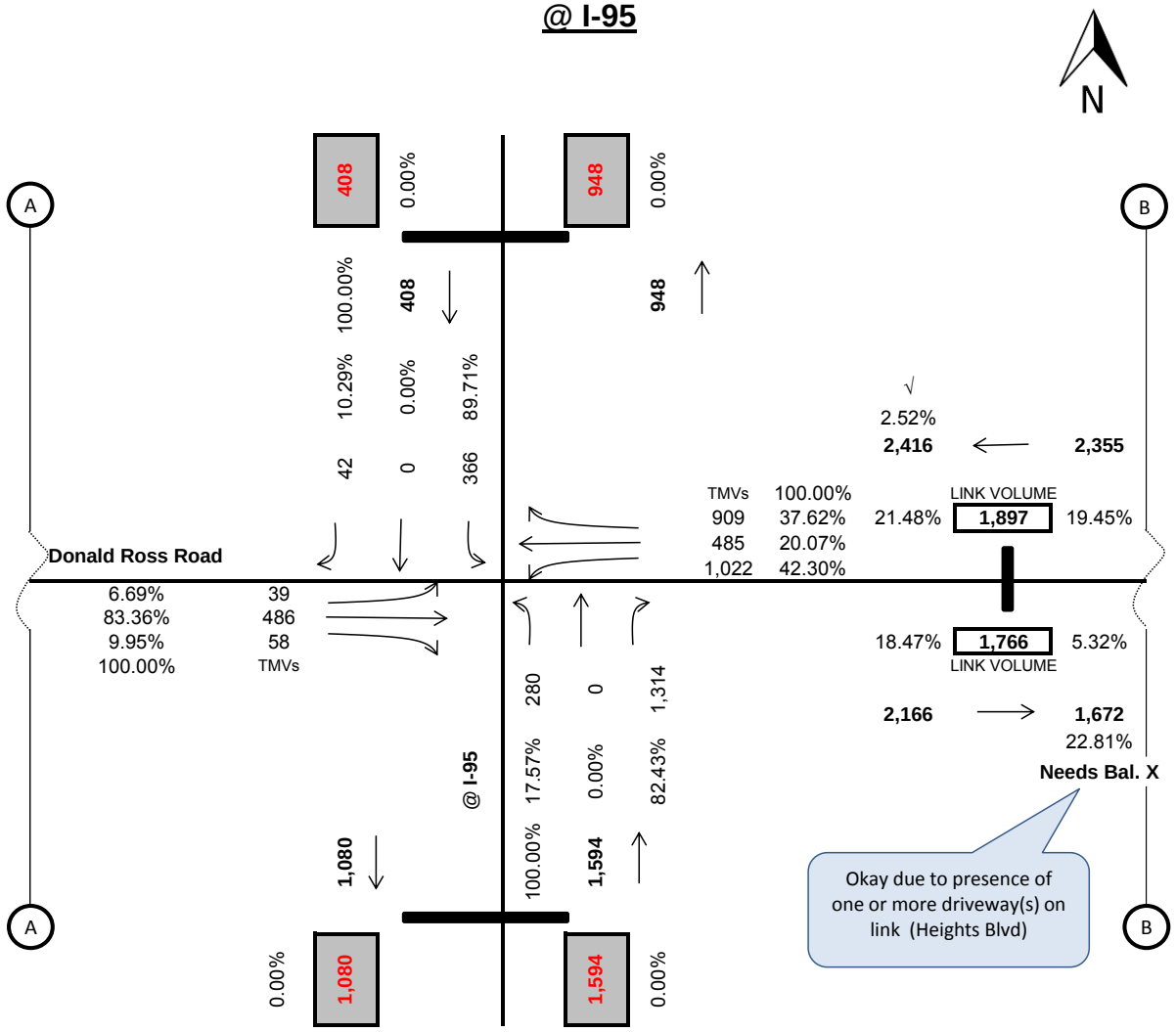
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413765-1-22-01	*Exhibit Name:* **Donald Ross Road** **Turning Movement Volume Development** **2020 No Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **1 of 5** *Date:* 9/24/15

@ I-95



Turning Movement Volumes
@ I-95

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,897**			**1,594**			**558**			**408**	
TM Pk Hr Counts	1484	743	681	298	0	1401	38	998	109	632	0	72
% Turns	51%	26%	23%	18%	0%	82%	3%	87%	10%	90%	0%	10%
Calc. Pk Hr Volumes	968	485	444	280	0	1314	19	486	53	366	0	42
Adjustments	54		465		0		20		5			
Bal Pk Hr Volumes	**1022**	**485**	**909**	**280**	**0**	**1314**	**39**	**486**	**58**	**366**	**0**	**42**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

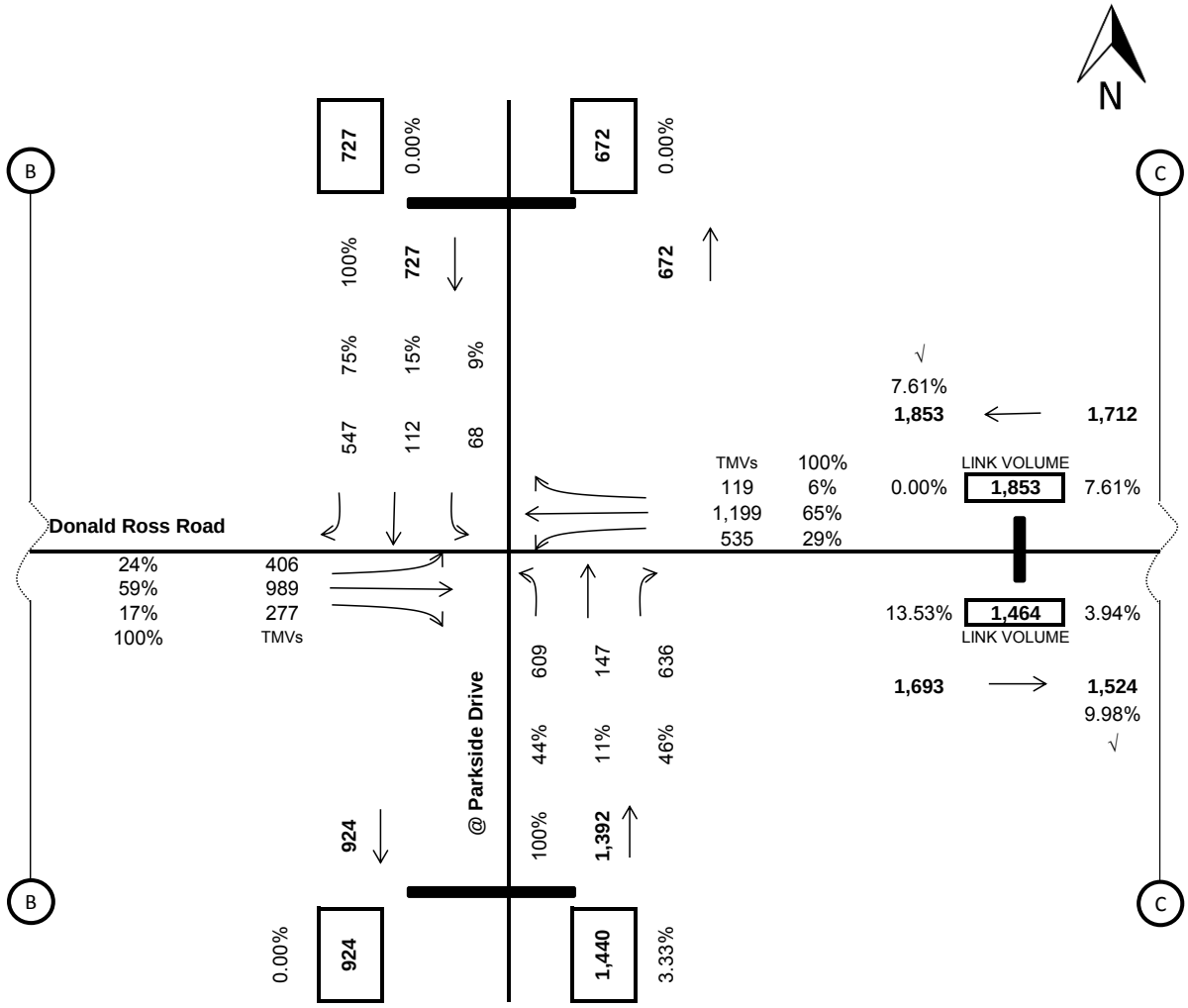
66 — Turning Movement Volumes (Balanced)

A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

@ Parkside Drive



Turning Movement Volumes
@ Parkside Drive

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,853**			**1,440**			**1,766**			**727**	
TM Pk Hr Counts	561	1257	125	609	147	684	515	1374	351	68	112	547
% Turns	29%	65%	6%	42%	10%	48%	23%	61%	16%	9%	15%	75%
Calc. Pk Hr Volumes	535	1199	119	609	147	684	406	1083	277	68	112	547
Adjustments						-48		-94				
Bal Pk Hr Volumes	**535**	**1199**	**119**	**609**	**147**	**636**	**406**	**989**	**277**	**68**	**112**	**547**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

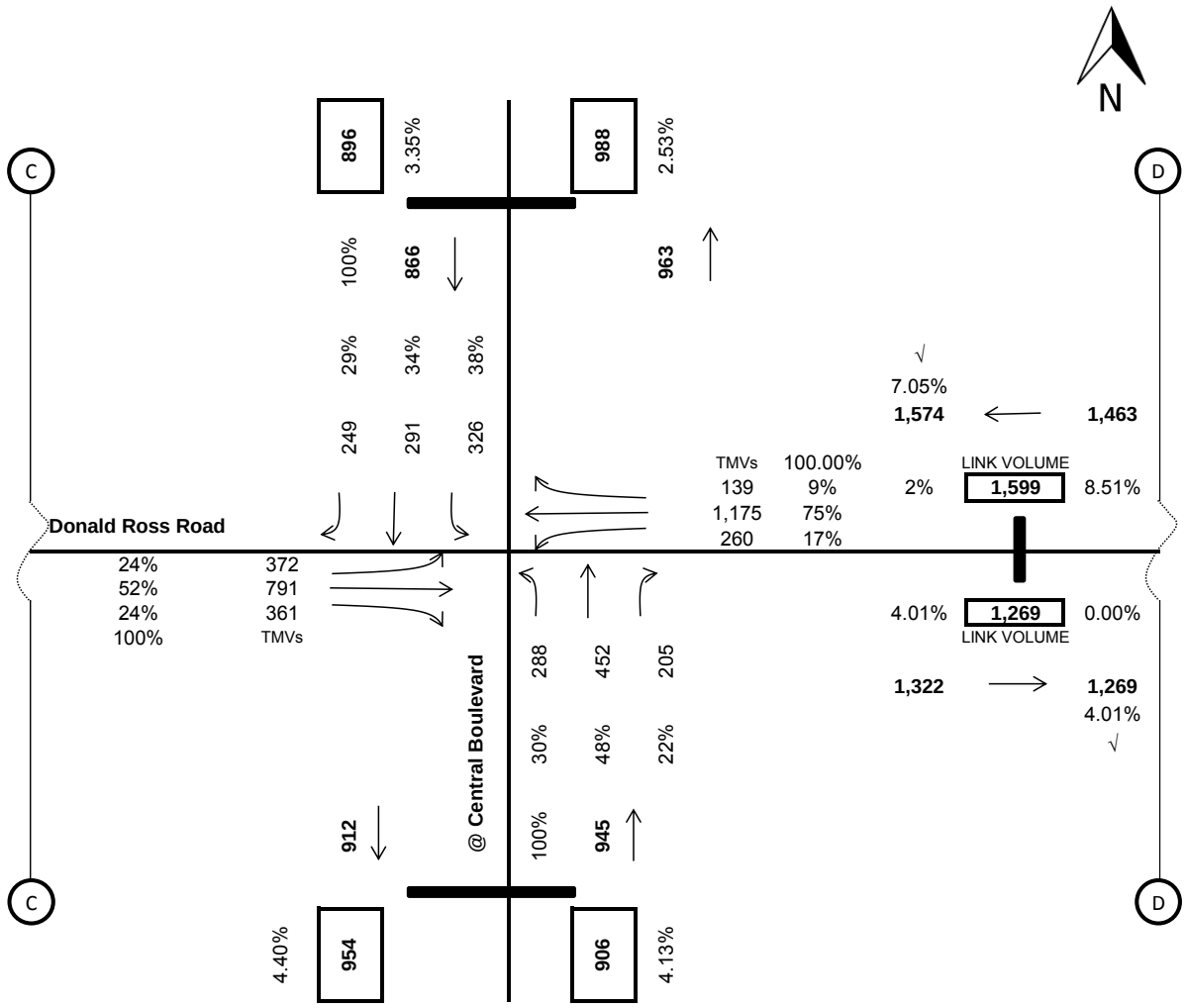
66 — Turning Movement Volumes (Balanced)

A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

@ Central Boulevard



Turning Movement Volumes
@ Central Boulevard

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes												
TM Pk Hr Counts												
% Turns												
Calc. Pk Hr Volumes												
Adjustments												
Bal Pk Hr Volumes	**260**	**1175**	**139**	**288**	**452**	**205**	**372**	**791**	**361**	**326**	**291**	**249**

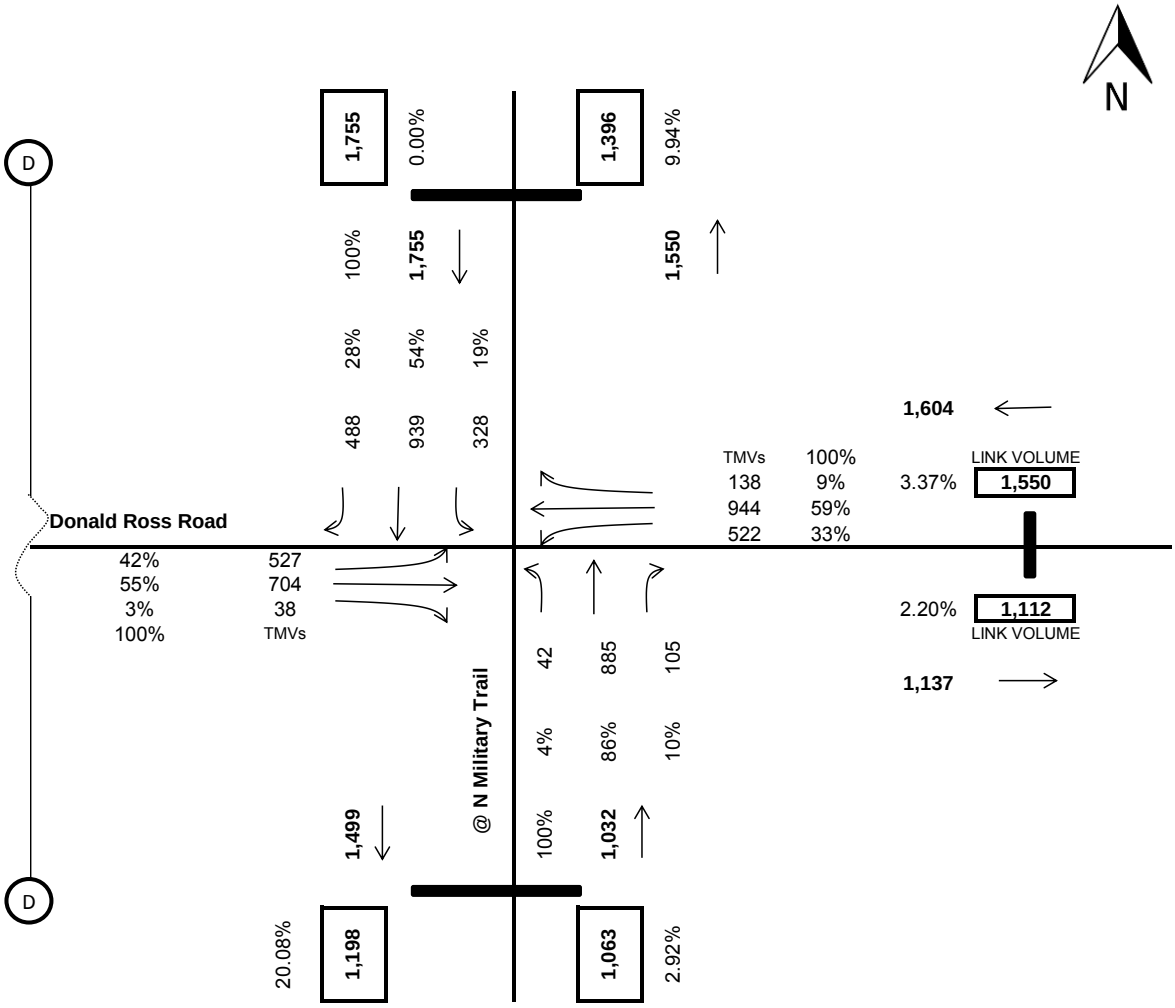
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

For consistency, balanced peak hour volumes from major street arterial (aka Central Boulevard) were used. See Central Boulevard Arterial for details

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

@ N Military Trail



Turning Movement Volumes
@ N Military Trail

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes												
TM Pk Hr Counts												
% Turns												
Calc. Pk Hr Volumes												
Adjustments												
Bal Pk Hr Volumes	**522**	**944**	**138**	**42**	**885**	**105**	**527**	**704**	**38**	**328**	**939**	**488**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

A — Match Line

A

For consistency, balanced peak hour volumes from major street arterial (aka N Military Trail) were used. See N Military Trail Arterial for details

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name:	Exhibit Name:	Exhibit No:	TBD
SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FPID No. 435651-22-01	**Donald Ross Road** **Turning Movement Volume Development** **2020 No Build PM Peak Hour**	Page No:	5 of 5
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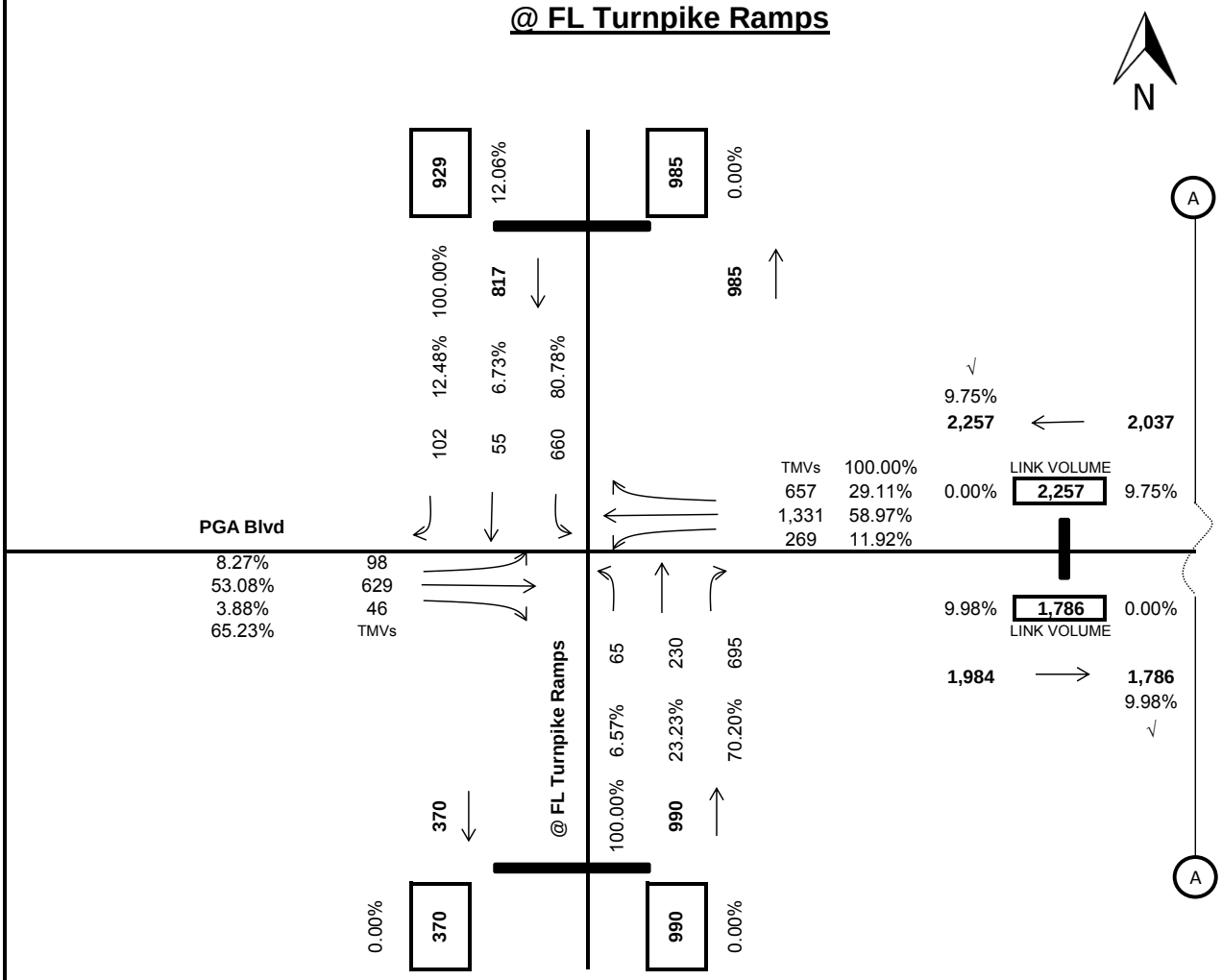
@ FL Turnpike Ramps



Turning Movement Volumes
@ FL Turnpike Ramps

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**2,257**			**1,100**			**873**			**929**		
TM Pk Hr Counts	389	1921	948	65	230	805	207	1548	97	772	55	102
% Turns	12%	59%	29%	6%	21%	73%	11%	84%	5%	83%	6%	11%
Calc. Pk Hr Volumes	269	1331	657	65	230	805	98	730	46	772	55	102
Adjustments						-110		-101		-112		
Bal Pk Hr Volumes	**269**	**1331**	**657**	**65**	**230**	**695**	**98**	**629**	**46**	**660**	**55**	**102**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

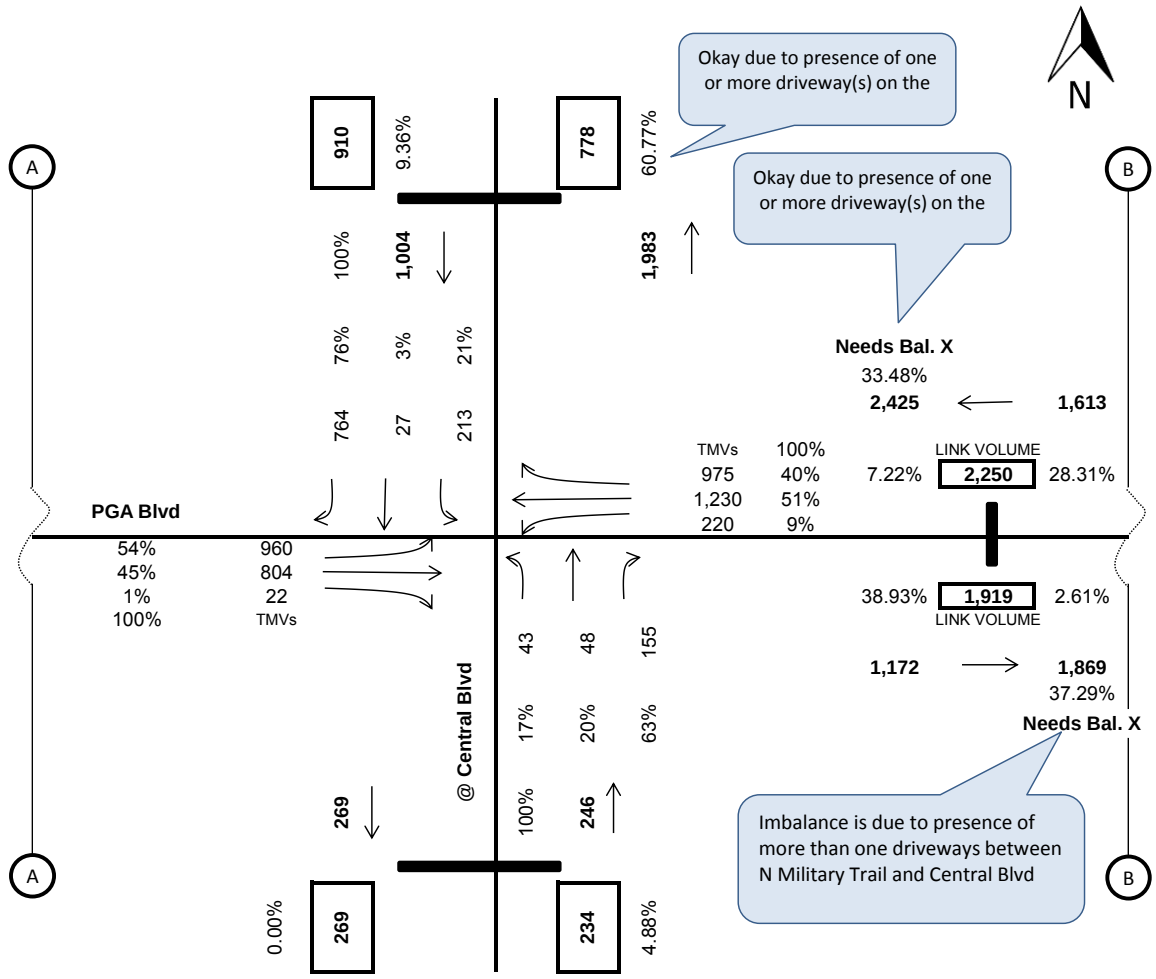
66 → — Turning Movement Volumes (Balanced)

A … A — Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard** **Turning Movement Volume Development** **2020 No Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **1 of 8** *Date:* 9/24/15

@ Central Blvd



Turning Movement Volumes
@ Central Blvd

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**2,250**			**234**			**1,786**			**910**	
TM Pk Hr Counts	219	1052	972	43	48	143	1307	1094	30	365	50	1254
% Turns	10%	47%	43%	18%	21%	61%	54%	45%	1%	22%	3%	75%
Calc. Pk Hr Volumes	220	1055	975	43	48	143	960	804	22	199	27	684
Adjustments		175				12				14		80
Bal Pk Hr Volumes	**220**	**1230**	**975**	**43**	**48**	**155**	**960**	**804**	**22**	**213**	**27**	**764**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

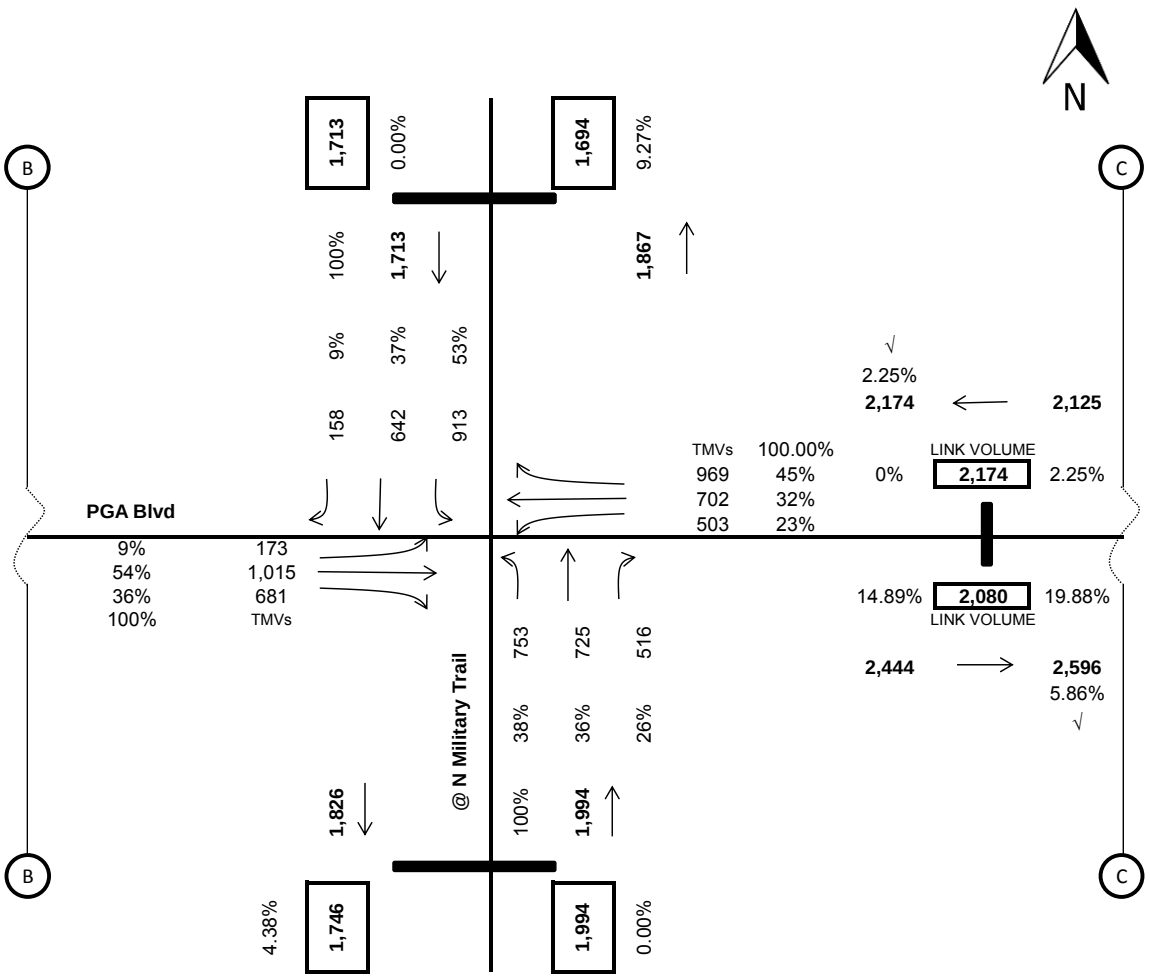
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard Turning Movement Volume Development 2020 No Build PM Peak Hour**	*Exhibit No:* **TBD**
		Page No: **2 of 8**
		Date: 9/24/15

@ N Military Trail



Turning Movement Volumes
@ N Military Trail

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**2,174**			**1,994**			**1,919**			**1,713**		
TM Pk Hr Counts	667	930	1285	674	649	462	146	812	657	1491	1049	258
% Turns	23%	32%	45%	38%	36%	26%	9%	50%	41%	53%	37%	9%
Calc. Pk Hr Volumes	503	702	969	753	725	516	173	965	781	913	642	158
Adjustments								50	-100			
Bal Pk Hr Volumes	**503**	**702**	**969**	**753**	**725**	**516**	**173**	**1015**	**681**	**913**	**642**	**158**

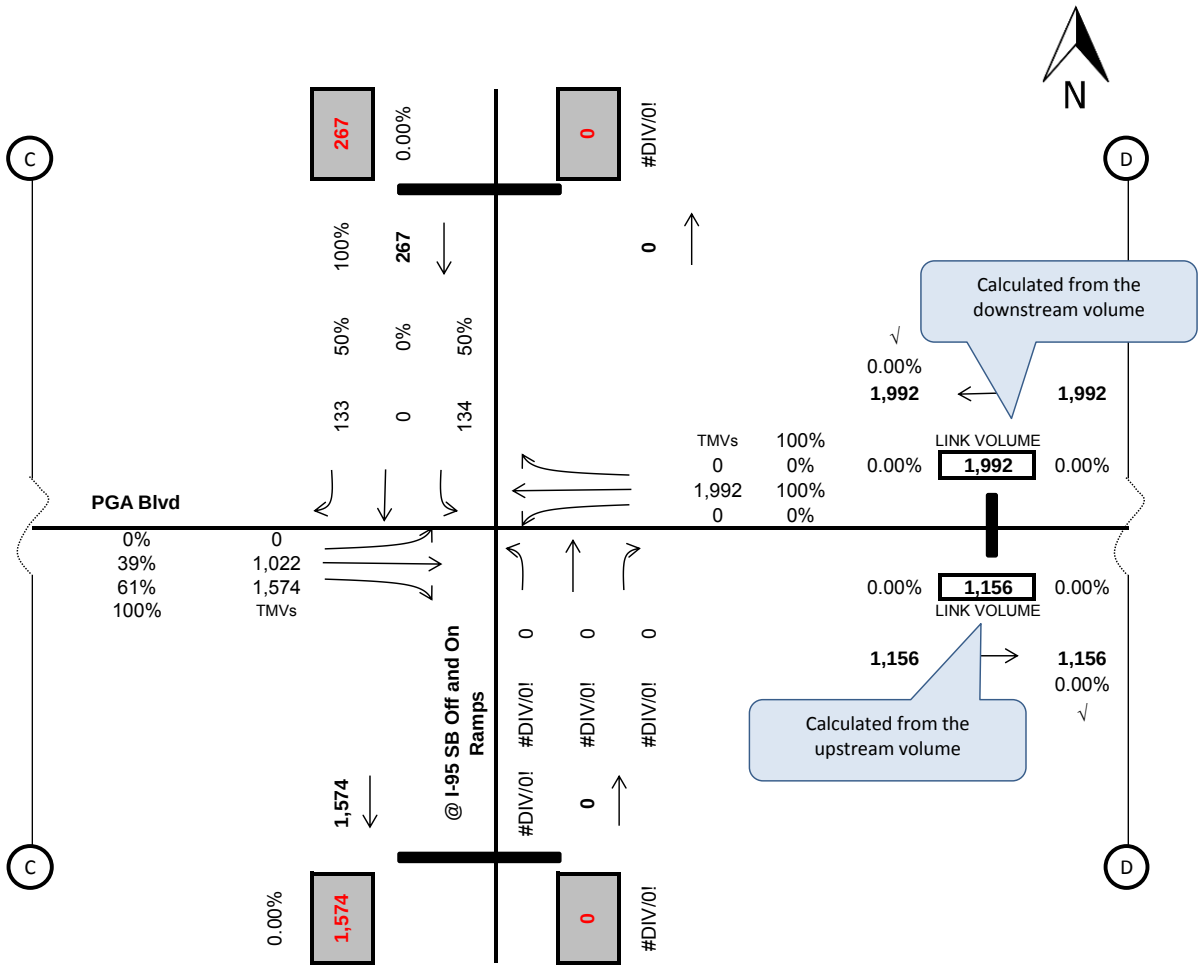
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A … A	Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard** **Turning Movement Volume Development** **2020 No Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **3 of 8** *Date:* 9/24/15

@ I-95 SB Off and On Ramps



Turning Movement Volumes
@ I-95 SB Off and On Ramps

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,992**			**0**			**2,080**			**267**	
TM Pk Hr Counts	0	2735	0	0	0	0	0	624	1696	149	0	148
% Turns	0%	100%	0%	0%	0%	0%	0%	27%	73%	50%	0%	50%
Calc. Pk Hr Volumes	0	1992	0	0	0	0	0	559	1521	134	0	133
Adjustments								463	53			
Bal Pk Hr Volumes	**0**	**1992**	**0**	**0**	**0**	**0**	**0**	**1022**	**1574**	**134**	**0**	**133**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

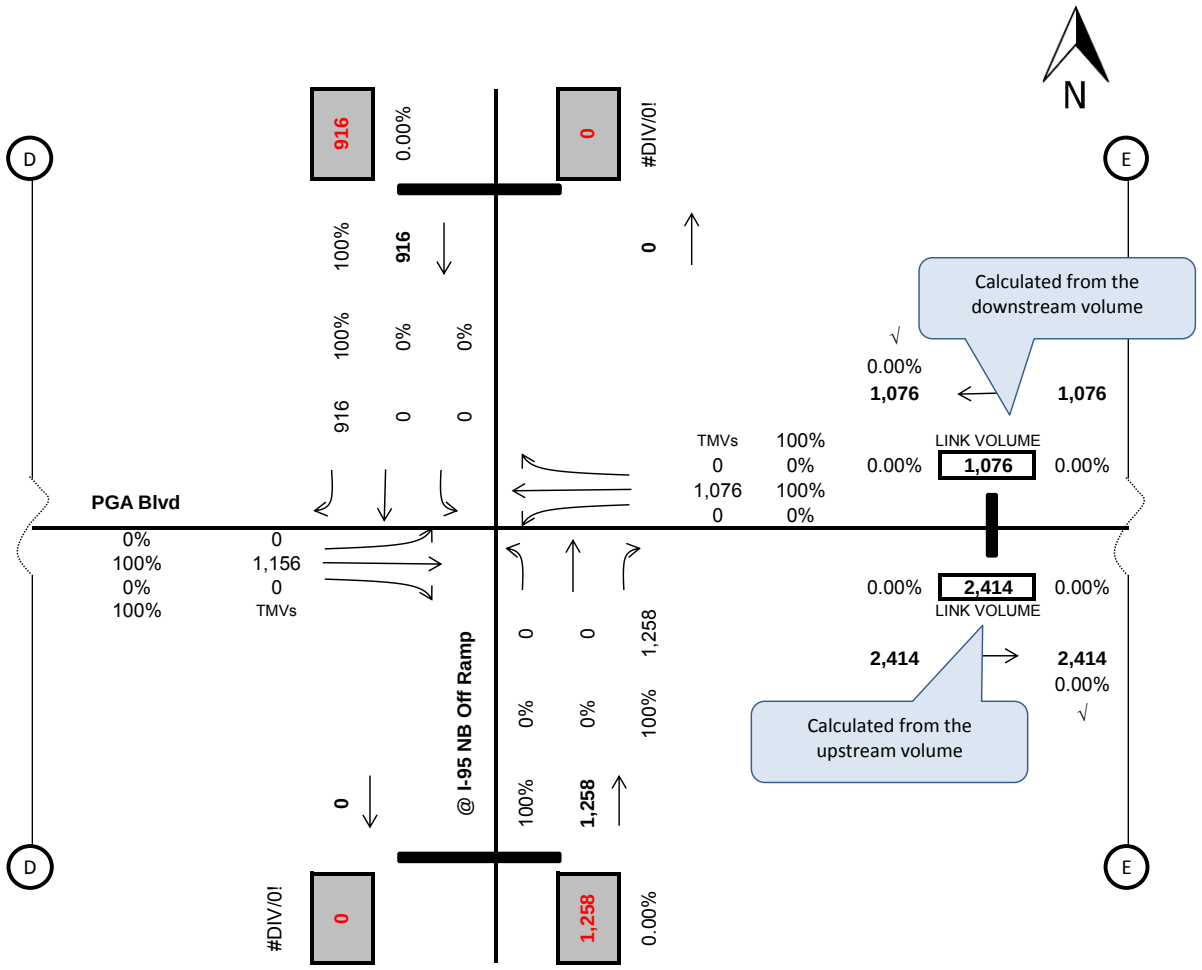
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name:	Exhibit Name:		
SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	**PGA Boulevard** **Turning Movement Volume Development** **2020 No Build PM Peak Hour**	*Exhibit No:*	**TBD**
		Page No:	**4 of 8**
		Date:	9/24/15

@ I-95 NB Off Ramp



Turning Movement Volumes
@ I-95 NB Off Ramp

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,076**			**1,258**			**1,156**			**916**	
TM Pk Hr Counts	0	2735	0	0	0	2017	0	773	0	0	0	1547
% Turns	0%	100%	0%	0%	0%	100%	0%	100%	0%	0%	0%	100%
Calc. Pk Hr Volumes	0	1076	0	0	0	1258	0	1156	0	0	0	916
Adjustments												
Bal Pk Hr Volumes	**0**	**1076**	**0**	**0**	**0**	**1258**	**0**	**1156**	**0**	**0**	**0**	**916**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 → Turning Movement Volumes (Balanced)

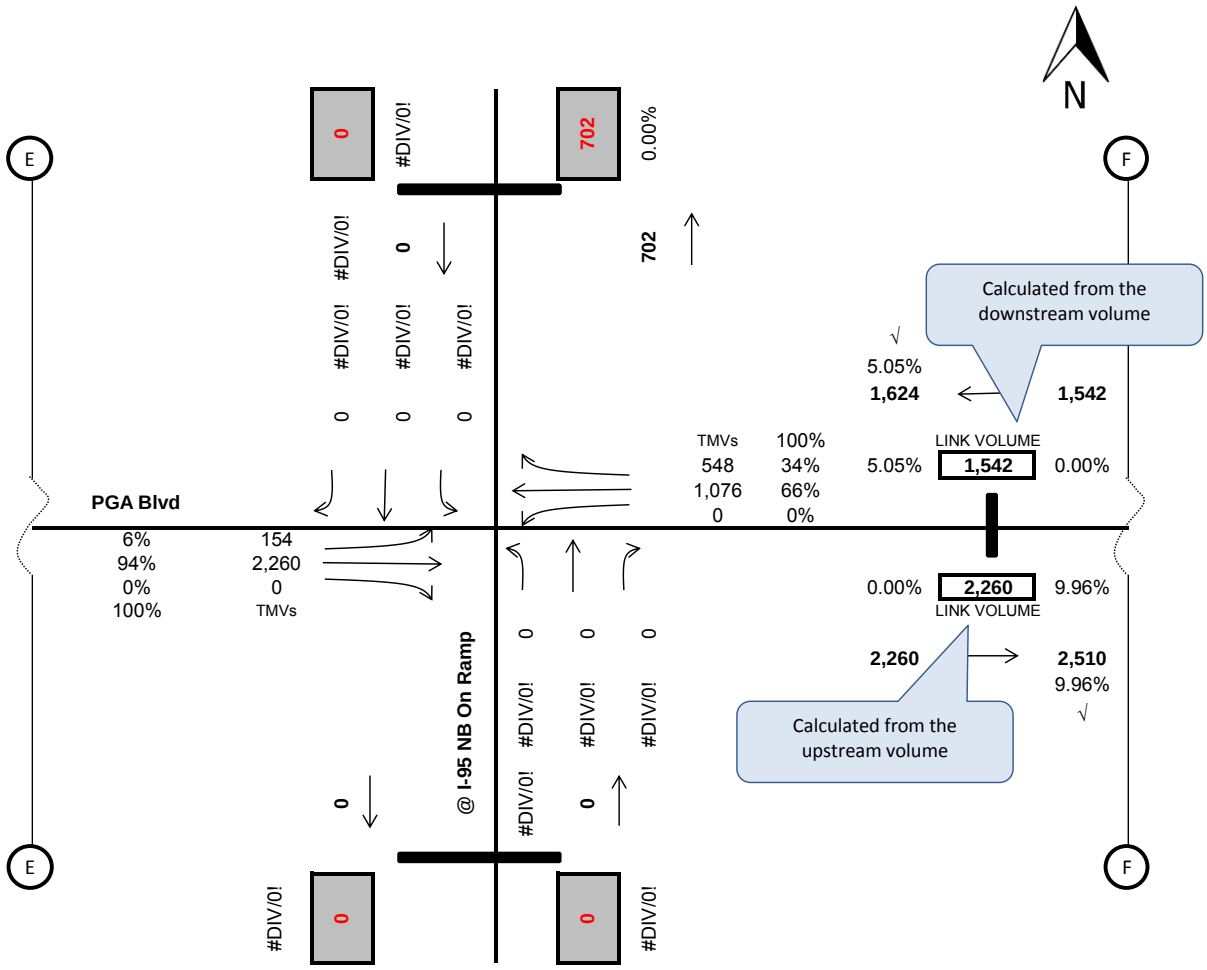
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard** **Turning Movement Volume Development** **2020 No Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **5 of 8** *Date:* 9/24/15

@ I-95 NB On Ramp



Turning Movement Volumes
@ I-95 NB On Ramp

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,542**			**0**			**2,414**			**0**	
TM Pk Hr Counts	0	1189	515	0	0	0	151	2639	0	0	0	0
% Turns	0%	70%	30%	0%	0%	0%	5%	95%	0%	0%	0%	0%
Calc. Pk Hr Volumes	0	1076	466	0	0	0	131	2283	0	0	0	0
Adjustments			82		0		23	-23				
Bal Pk Hr Volumes	**0**	**1076**	**548**	**0**	**0**	**0**	**154**	**2260**	**0**	**0**	**0**	**0**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

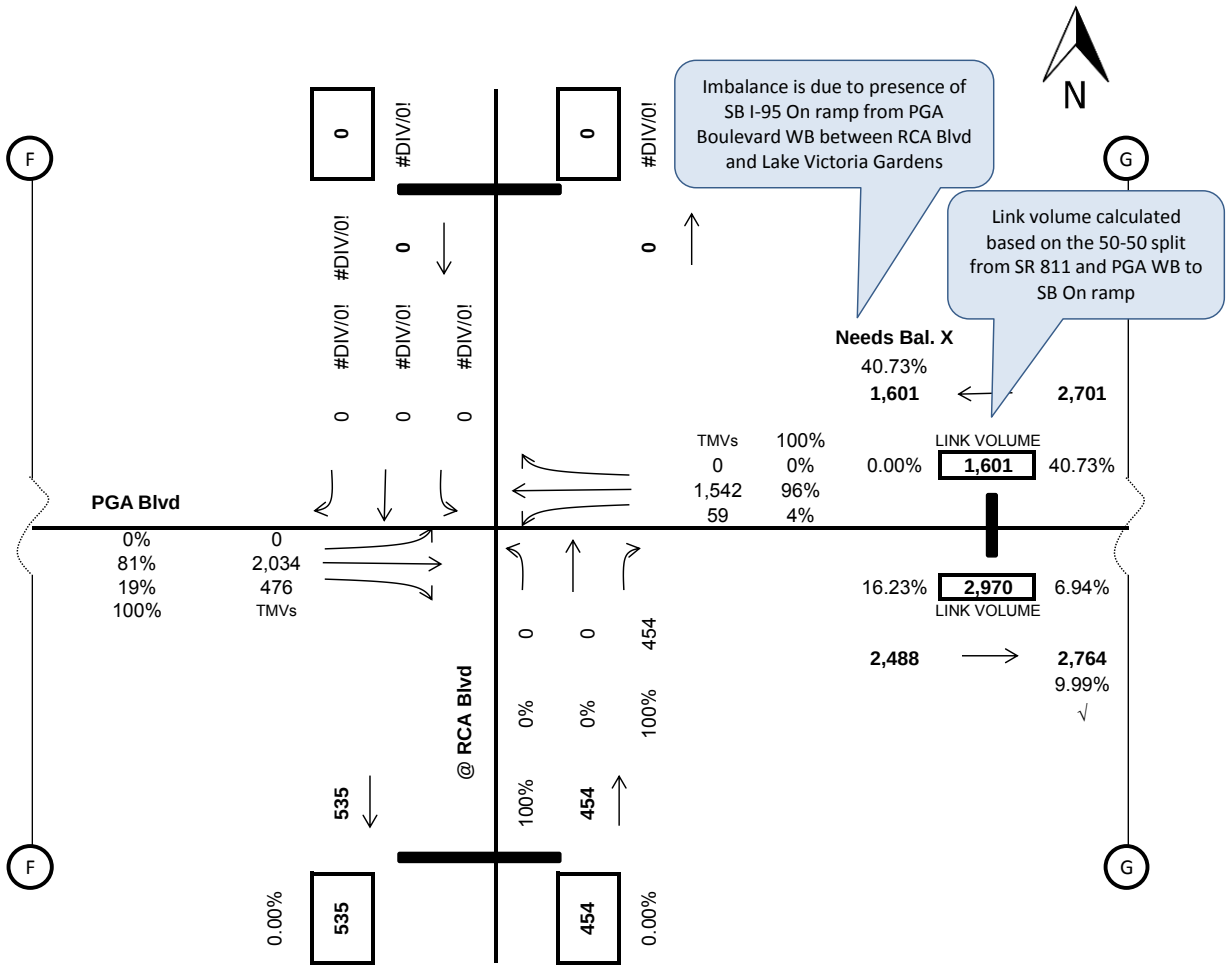
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name:	Exhibit Name:		
SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	**PGA Boulevard** **Turning Movement Volume Development** **2020 No Build PM Peak Hour**	Exhibit No:	**TBD**
		Page No:	**6 of 8**
		Date:	9/24/15

@ RCA Blvd



Turning Movement Volumes
@ RCA Blvd

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,601**			**454**			**2,260**			**0**	
TM Pk Hr Counts	65	1704	0	0	0	454	0	1697	941	0	0	0
% Turns	4%	96%	0%	0%	0%	100%	0%	64%	36%	0%	0%	0%
Calc. Pk Hr Volumes	59	1542	0	0	0	454	0	1454	806	0	0	0
Adjustments								580	-330			
Bal Pk Hr Volumes	**59**	**1542**	**0**	**0**	**0**	**454**	**0**	**2034**	**476**	**0**	**0**	**0**

To achieve the existing counts, those adjustments are done

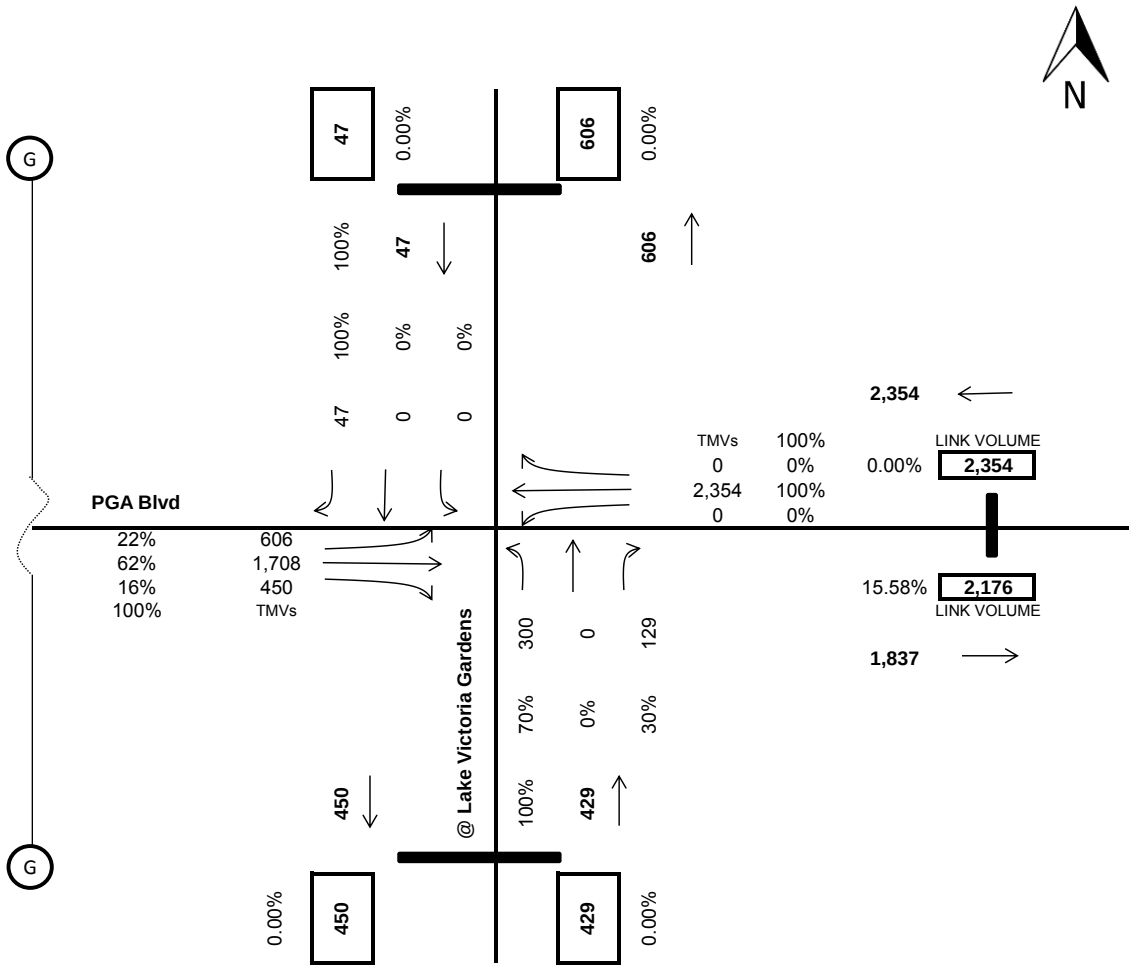
LEGEND

- 1,500 — Control Volumes (Peak Hour)*
- 1,300 — Link Volumes (Peak Hour)
- 66 → Turning Movement Volumes (Balanced)
- A … A — Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard** **Turning Movement Volume Development** **2020 No Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **7 of 8** *Date:* 9/24/15

@ Lake Victoria Gardens



Turning Movement Volumes
@ Lake Victoria Gardens

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**2,354**			**429**			**2,970**			**47**	
TM Pk Hr Counts	0	2516	0	300	0	129	507	1444	373	0	0	47
% Turns	0%	100%	0%	70%	0%	30%	22%	62%	16%	0%	0%	100%
Calc. Pk Hr Volumes	0	2354	0	300	0	129	648	1845	477	0	0	47
Adjustments							-42	-137	-27			
Bal Pk Hr Volumes	**0**	**2354**	**0**	**300**	**0**	**129**	**606**	**1708**	**450**	**0**	**0**	**47**

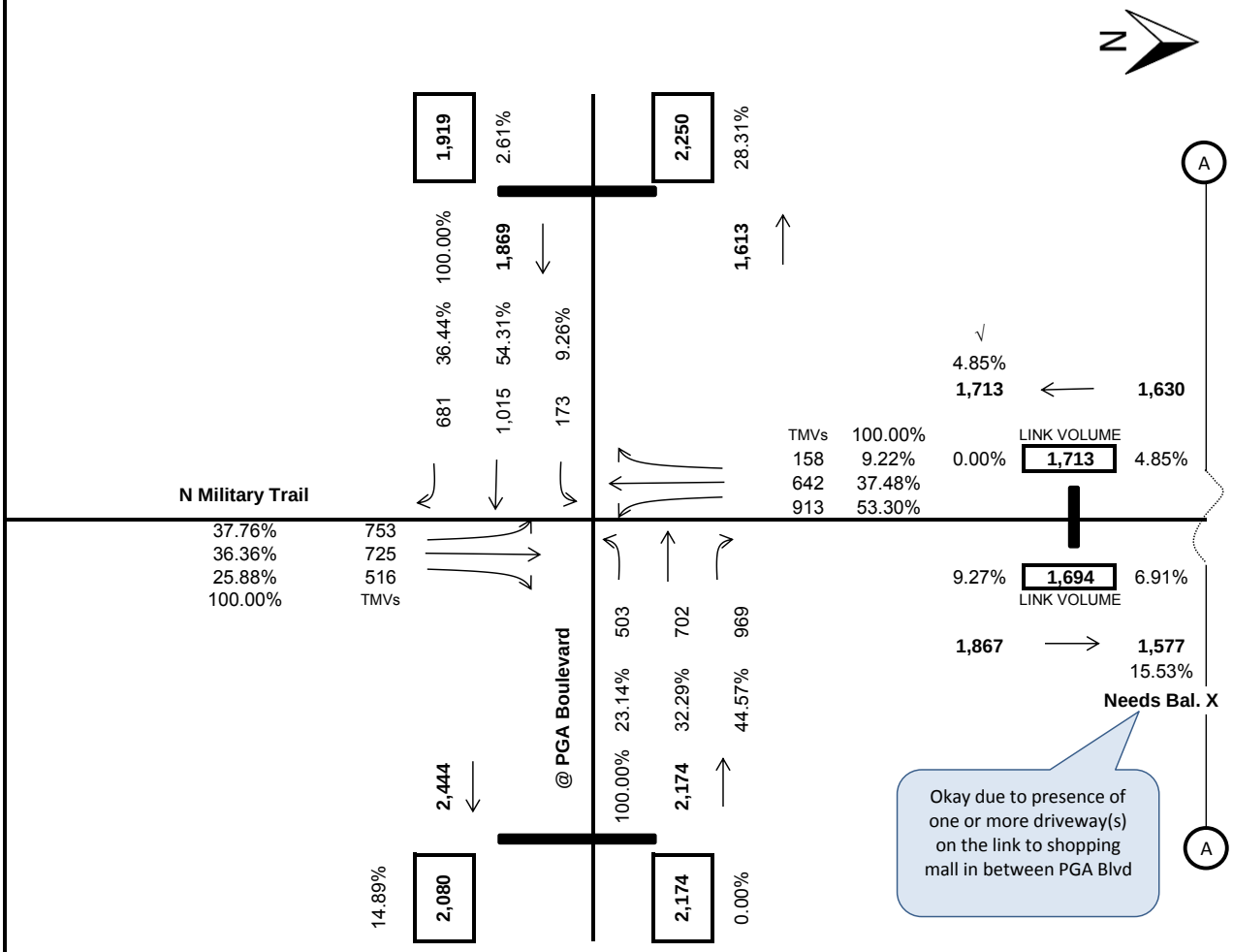
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A … A	Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard** **Turning Movement Volume Development** **2020 No Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **8 of 8** *Date:* 9/24/15

@ PGA Boulevard



Turning Movement Volumes
@ PGA Boulevard

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes												
TM Pk Hr Counts												
% Turns												
Calc. Pk Hr Volumes												
Adjustments												
Bal Pk Hr Volumes	**913**	**642**	**158**	**503**	**702**	**969**	**753**	**725**	**516**	**173**	**1015**	**681**

LEGEND

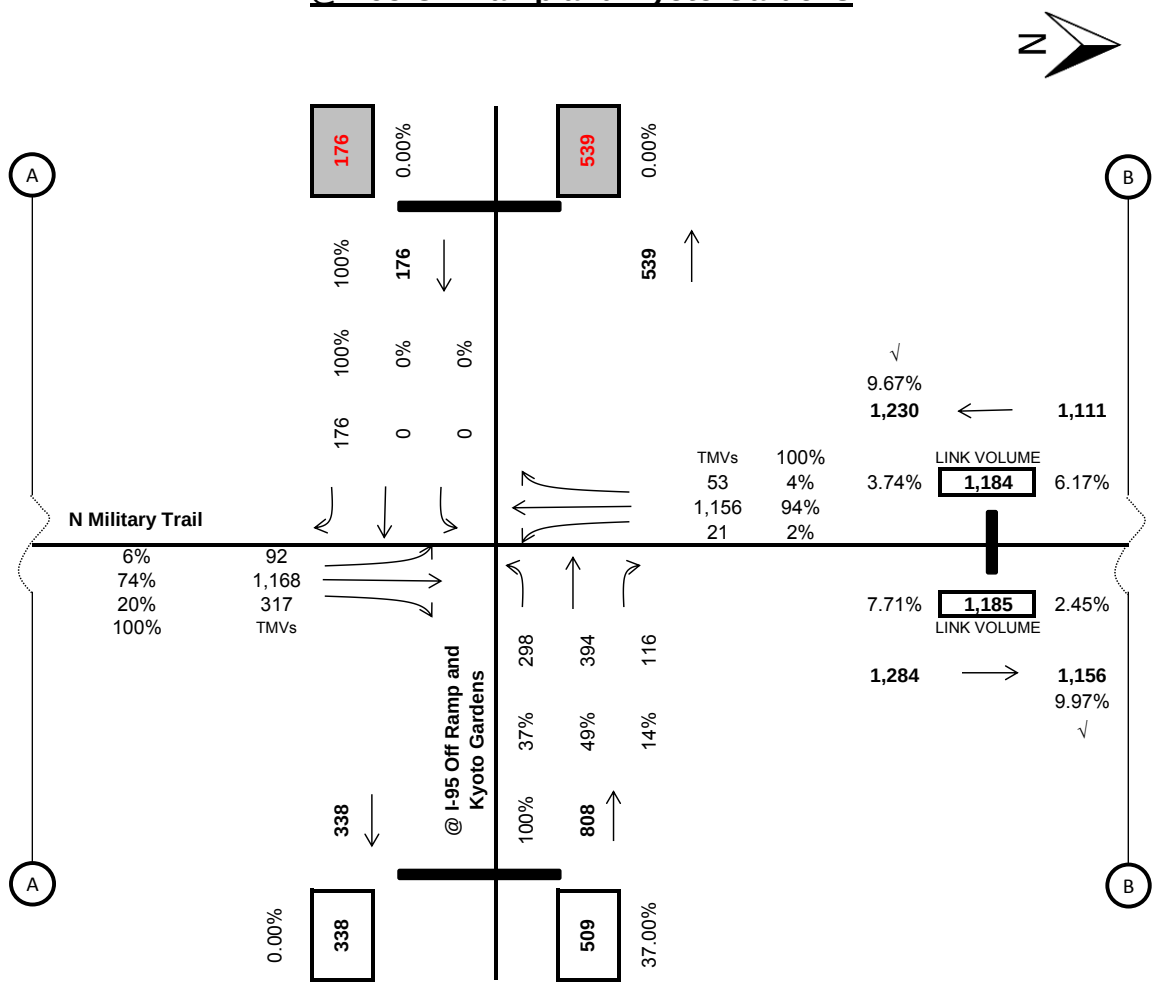
1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

For consistency, balanced peak hour volumes from major street arterial (aka PGA Boulevard) were used. See PGA Boulevard Arterial for details

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **N Military Trail** **Turning Movement Volume Development** **2020 No Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **1 of 4** *Date:* 9/24/15

@ I-95 Off Ramp and Kyoto Gardens



Turning Movement Volumes
@ I-95 Off Ramp and Kyoto

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,184**			**509**			**1,694**			**176**	
TM Pk Hr Counts	40	2240	15	298	60	151	25	2517	585	0	0	63
% Turns	2%	98%	1%	59%	12%	30%	1%	80%	19%	0%	0%	100%
Calc. Pk Hr Volumes	21	1156	8	298	60	151	14	1364	317	0	0	176
Adjustments			45		334	-35	78	-196				
Bal Pk Hr Volumes	**21**	**1156**	**53**	**298**	**394**	**116**	**92**	**1168**	**317**	**0**	**0**	**176**

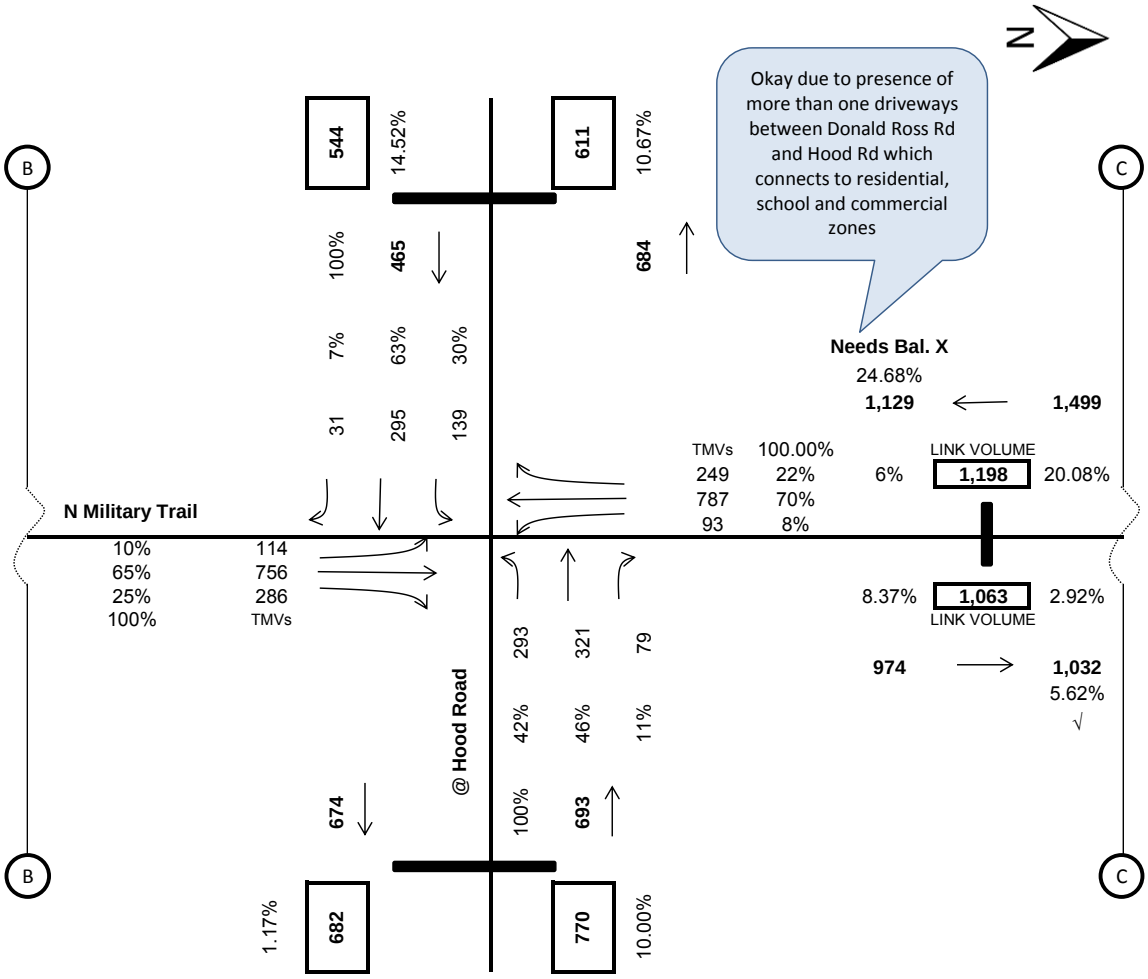
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66 →	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **N Military Trail** **Turning Movement Volume Development** **2020 No Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **2 of 4** *Date:* 9/24/15

@ Hood Road



Turning Movement Volumes
@ Hood Road

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**1,198**			**770**			**1,185**			**544**		
TM Pk Hr Counts	173	1214	462	635	862	172	246	1405	624	376	1017	83
% Turns	9%	66%	25%	38%	52%	10%	11%	62%	27%	25%	69%	6%
Calc. Pk Hr Volumes	112	787	299	293	398	79	128	732	325	139	375	31
Adjustments	-19		-50		-77		-14	24	-39		-80	
Bal Pk Hr Volumes	**93**	**787**	**249**	**293**	**321**	**79**	**114**	**756**	**286**	**139**	**295**	**31**

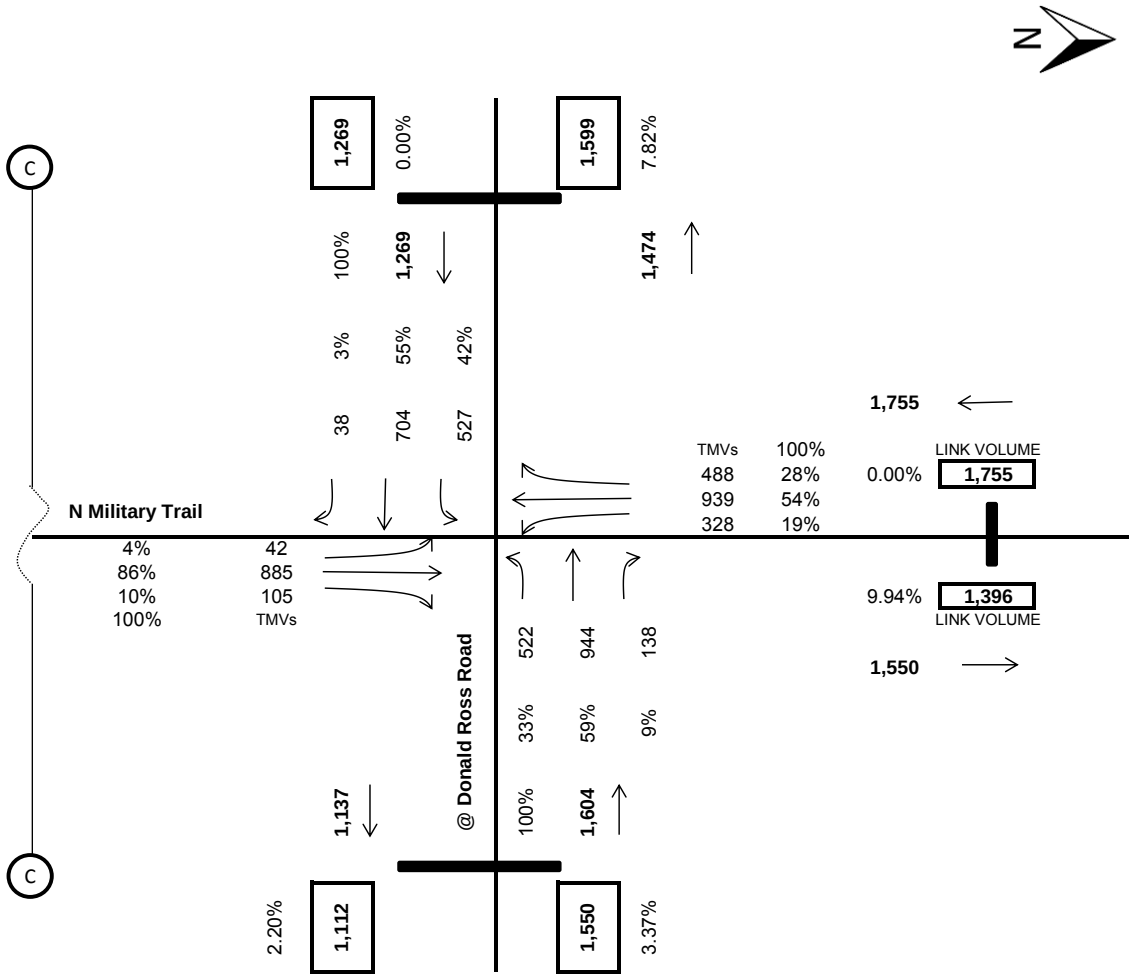
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66 →	Turning Movement Volumes (Balanced)
A … A	Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **N Military Trail** **Turning Movement Volume Development** **2020 No Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **3 of 4** *Date:* 9/24/15

@ Donald Ross Road



Turning Movement Volumes
@ Donald Ross Road

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**1,755**			**1,550**			**1,063**			**1,269**		
TM Pk Hr Counts	362	1038	539	575	980	152	67	1445	166	576	770	42
% Turns	19%	54%	28%	34%	57%	9%	4%	86%	10%	41%	55%	3%
Calc. Pk Hr Volumes	328	939	488	522	890	138	42	915	105	527	704	38
Adjustments					54			-30				
Bal Pk Hr Volumes	**328**	**939**	**488**	**522**	**944**	**138**	**42**	**885**	**105**	**527**	**704**	**38**

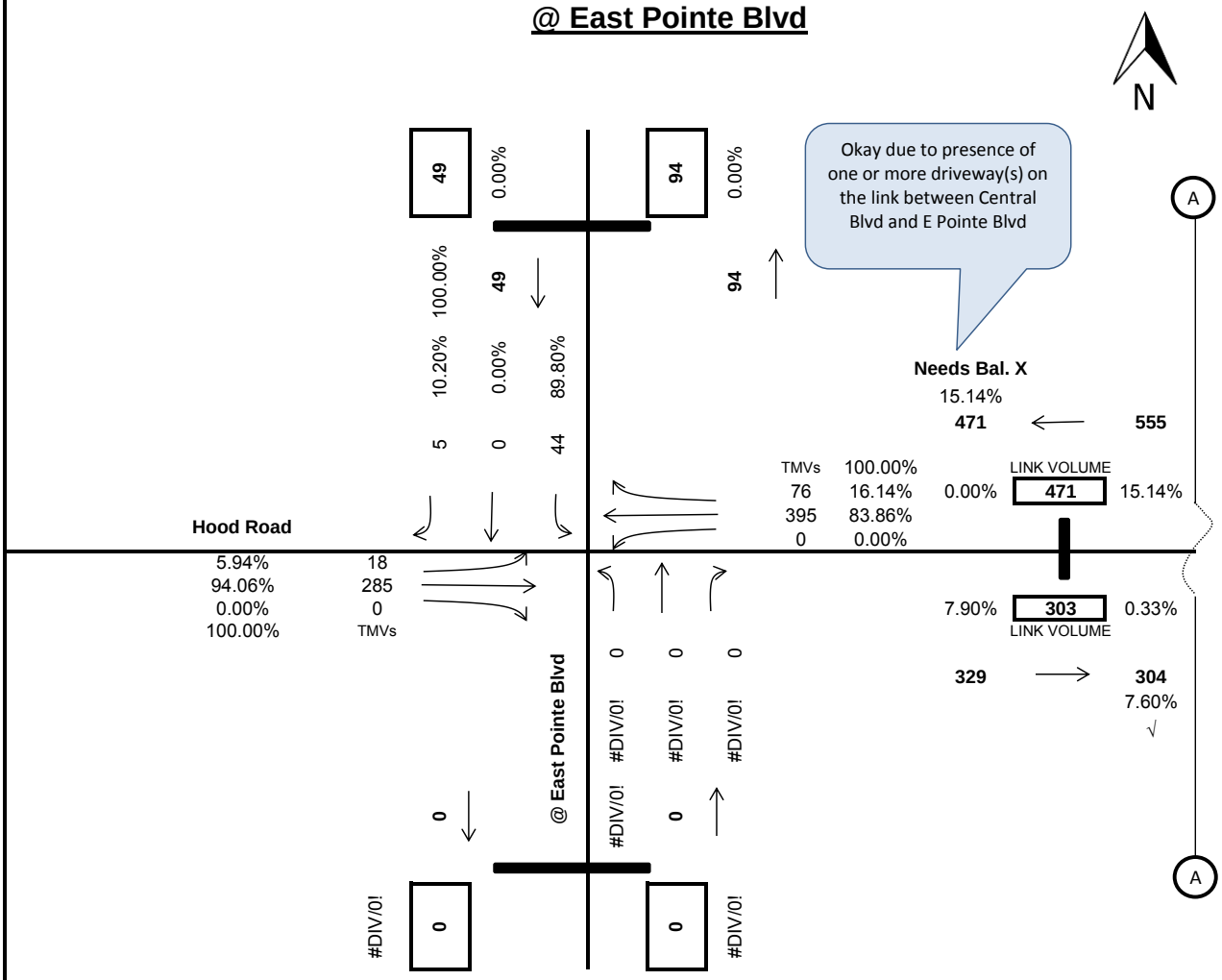
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **N Military Trail** **Turning Movement Volume Development** **2020 No Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **4 of 4** *Date:* 9/24/15

@ East Pointe Blvd



Turning Movement Volumes
@ East Pointe Blvd

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**471**			**0**			**303**			**49**	
TM Pk Hr Counts	0	267	51	0	0	0	13	201	0	44	0	5
% Turns	0%	84%	16%	0%	0%	0%	6%	94%	0%	90%	0%	10%
Calc. Pk Hr Volumes	0	395	76	0	0	0	18	285	0	44	0	5
Adjustments												
Bal Pk Hr Volumes	**0**	**395**	**76**	**0**	**0**	**0**	**18**	**285**	**0**	**44**	**0**	**5**

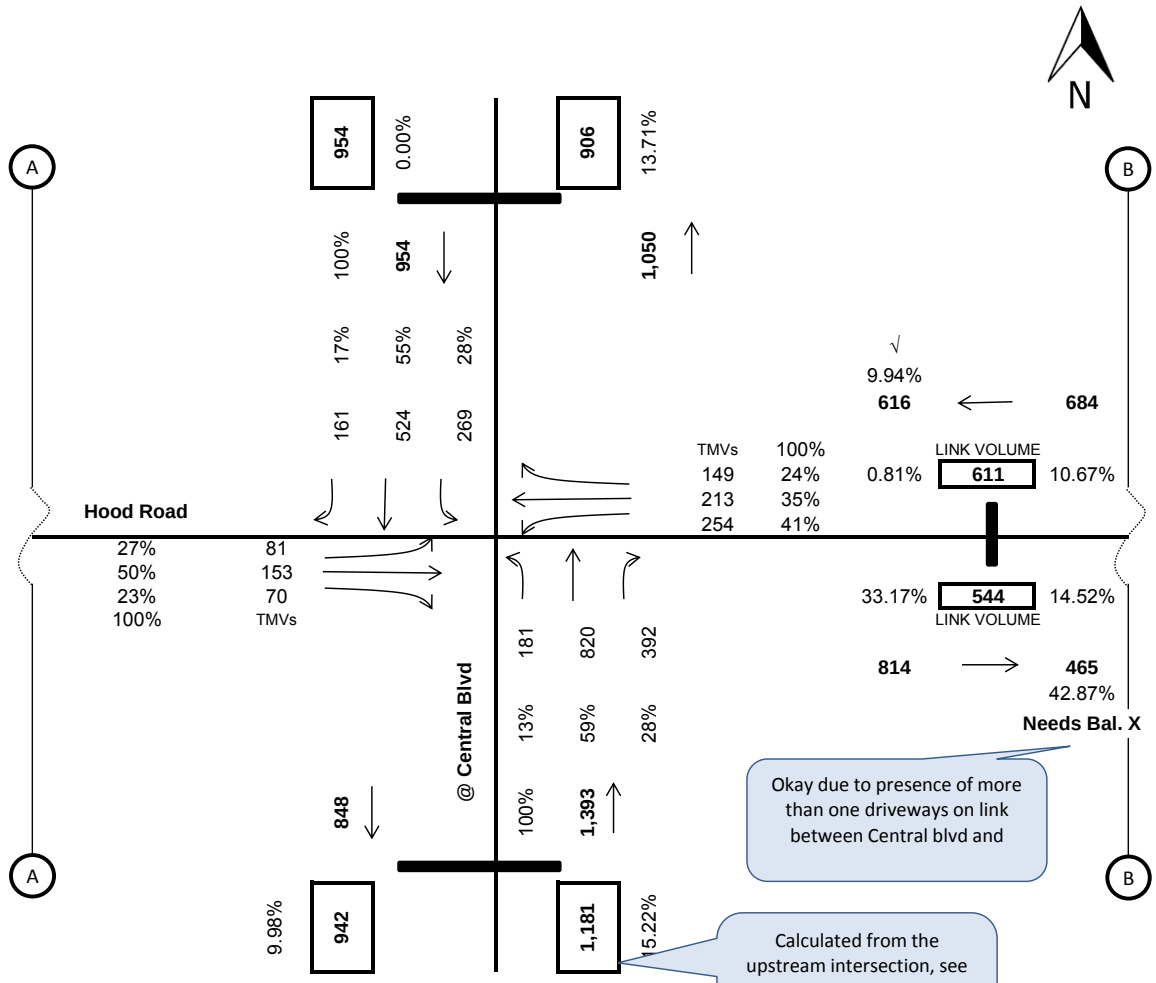
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66 →	Turning Movement Volumes (Balanced)
A … A	Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Hood Road** **Turning Movement Volume Development** **2020 No Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **1 of 3** *Date:* 9/24/15

@ Central Blvd



Okay due to presence of more than one driveways on link between Central blvd and

Calculated from the upstream intersection, see Central Boulevard corridor for upstream volume

Turning Movement Volumes
@ Central Blvd

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes												
TM Pk Hr Counts												
% Turns												
Calc. Pk Hr Volumes												
Adjustments												
Bal Pk Hr Volumes	**254**	**213**	**149**	**181**	**820**	**392**	**81**	**153**	**70**	**269**	**524**	**161**

LEGEND

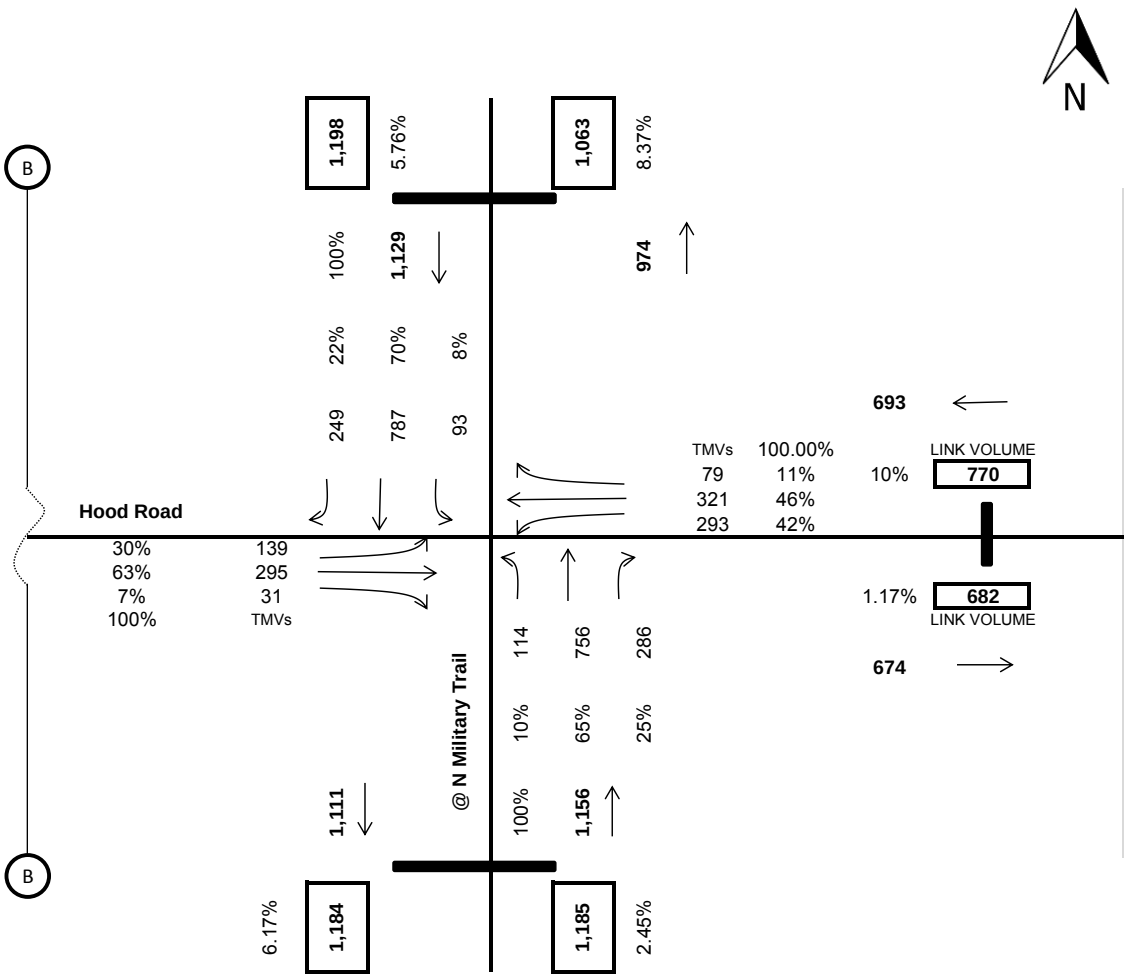
- 1,500 — Control Volumes (Peak Hour)*
- 1,300 — Link Volumes (Peak Hour)
- 66 — Turning Movement Volumes (Balanced)
- A … A — Match Line

For consistency, balanced peak hour volumes from major street arterial (aka Central Boulevard) were used. See Central Boulevard Arterial for details

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Hood Road** **Turning Movement Volume Development** **2020 No Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **2 of 3** *Date:* 9/24/15

@ N Military Trail



Turning Movement Volumes
@ N Military Trail

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes												
TM Pk Hr Counts												
% Turns												
Calc. Pk Hr Volumes												
Adjustments												
Bal Pk Hr Volumes	**293**	**321**	**79**	**114**	**756**	**286**	**139**	**295**	**31**	**93**	**787**	**249**

For consistency, balanced peak hour volumes from major street arterial (aka N Military Trail) were used. See N Military Trail Arterial for details

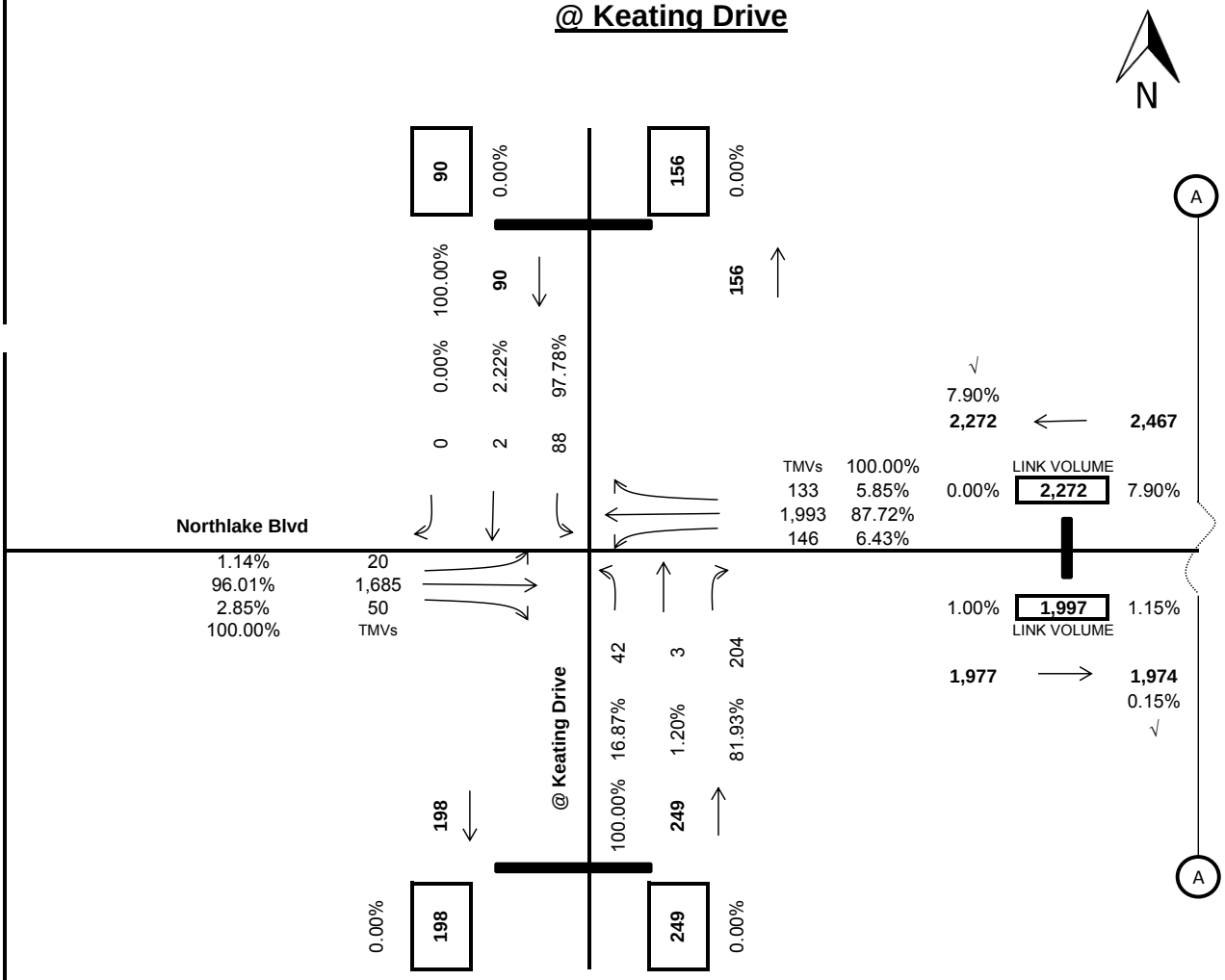
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A / A	Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard, Project Development & Environmental Study, FM No. 413265-1-22-01	*Exhibit Name:* **Hood Road, Turning Movement Volume Development, 2020 No Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **3 of 3** *Date:* 9/24/15

@ Keating Drive



Turning Movement Volumes
@ Keating Drive

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**2,272**			**249**			**1,755**			**90**		
TM Pk Hr Counts	173	2362	157	42	3	204	20	1685	50	88	2	0
% Turns	6%	88%	6%	17%	1%	82%	1%	96%	3%	98%	2%	0%
Calc. Pk Hr Volumes	146	1993	133	42	3	204	20	1685	50	88	2	0
Adjustments												
Bal Pk Hr Volumes	**146**	**1993**	**133**	**42**	**3**	**204**	**20**	**1685**	**50**	**88**	**2**	**0**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

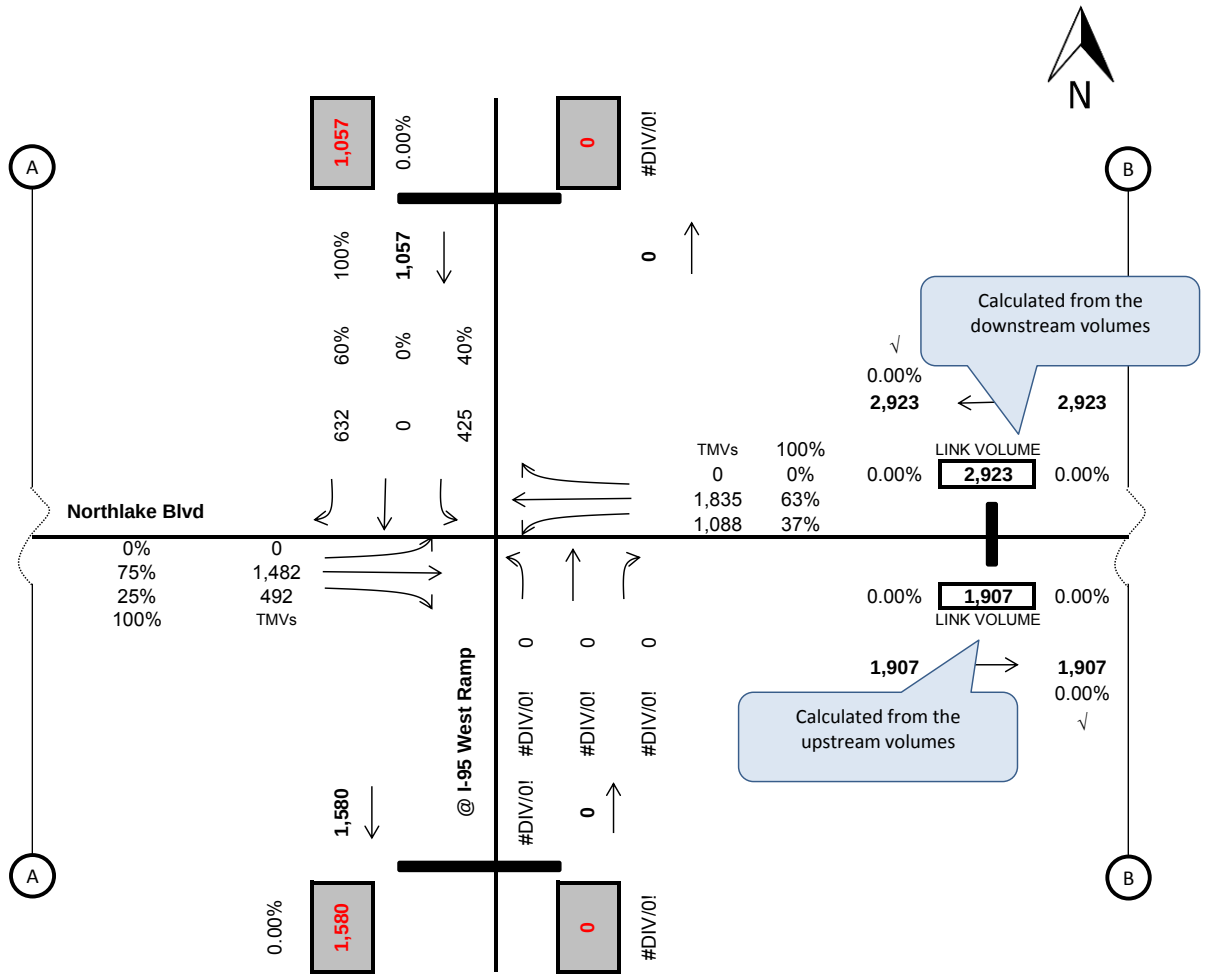
66 → Turning Movement Volumes (Balanced)

A … A — Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Northlake Boulevard** **Turning Movement Volume Development** **2020 No Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **1 of 5** *Date:* 9/24/15

@ I-95 West Ramp



Turning Movement Volumes
@ I-95 West Ramp

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**2,923**			**0**			**1,997**			**1,057**		
TM Pk Hr Counts	1119	1756	0	0	0	0	0	1466	509	627	0	934
% Turns	39%	61%	0%	0%	0%	0%	0%	74%	26%	40%	0%	60%
Calc. Pk Hr Volumes	1138	1785	0	0	0	0	0	1482	515	425	0	632
Adjustments	-50	50							-23		0	
Bal Pk Hr Volumes	**1088**	**1835**	**0**	**0**	**0**	**0**	**0**	**1482**	**492**	**425**	**0**	**632**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

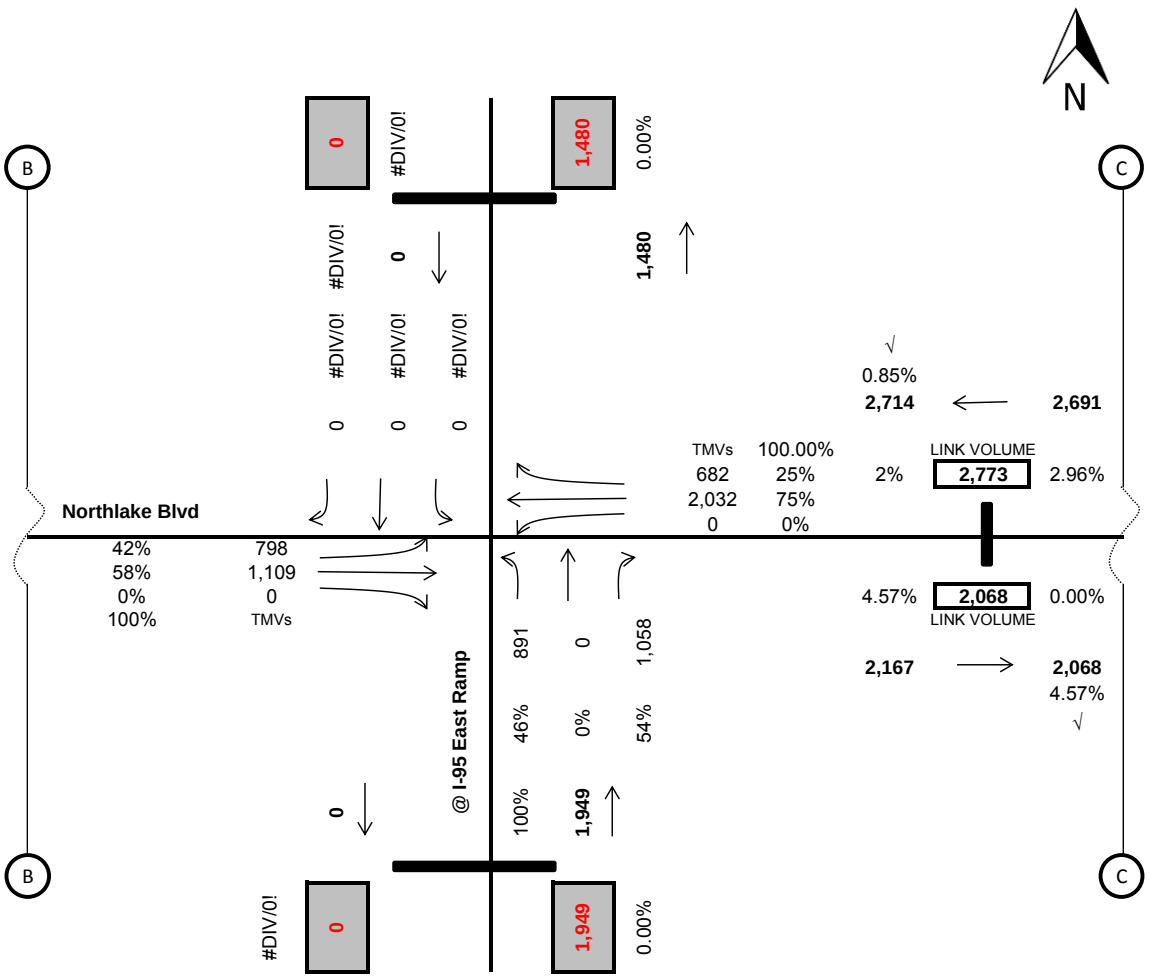
66 → Turning Movement Volumes (Balanced)

A — Match Line — A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Northlake Boulevard** **Turning Movement Volume Development** **2020 No Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **2 of 5** *Date:* 9/24/15

@ I-95 East Ramp



Turning Movement Volumes
@ I-95 East Ramp

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**2,773**			**1,949**			**1,907**			**0**	
TM Pk Hr Counts	0	1959	715	917	0	1088	953	1140	0	0	0	0
% Turns	0%	73%	27%	46%	0%	54%	46%	54%	0%	0%	0%	0%
Calc. Pk Hr Volumes	0	2032	741	891	0	1058	868	1039	0	0	0	0
Adjustments			-59		0		-70	70				
Bal Pk Hr Volumes	**0**	**2032**	**682**	**891**	**0**	**1058**	**798**	**1109**	**0**	**0**	**0**	**0**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

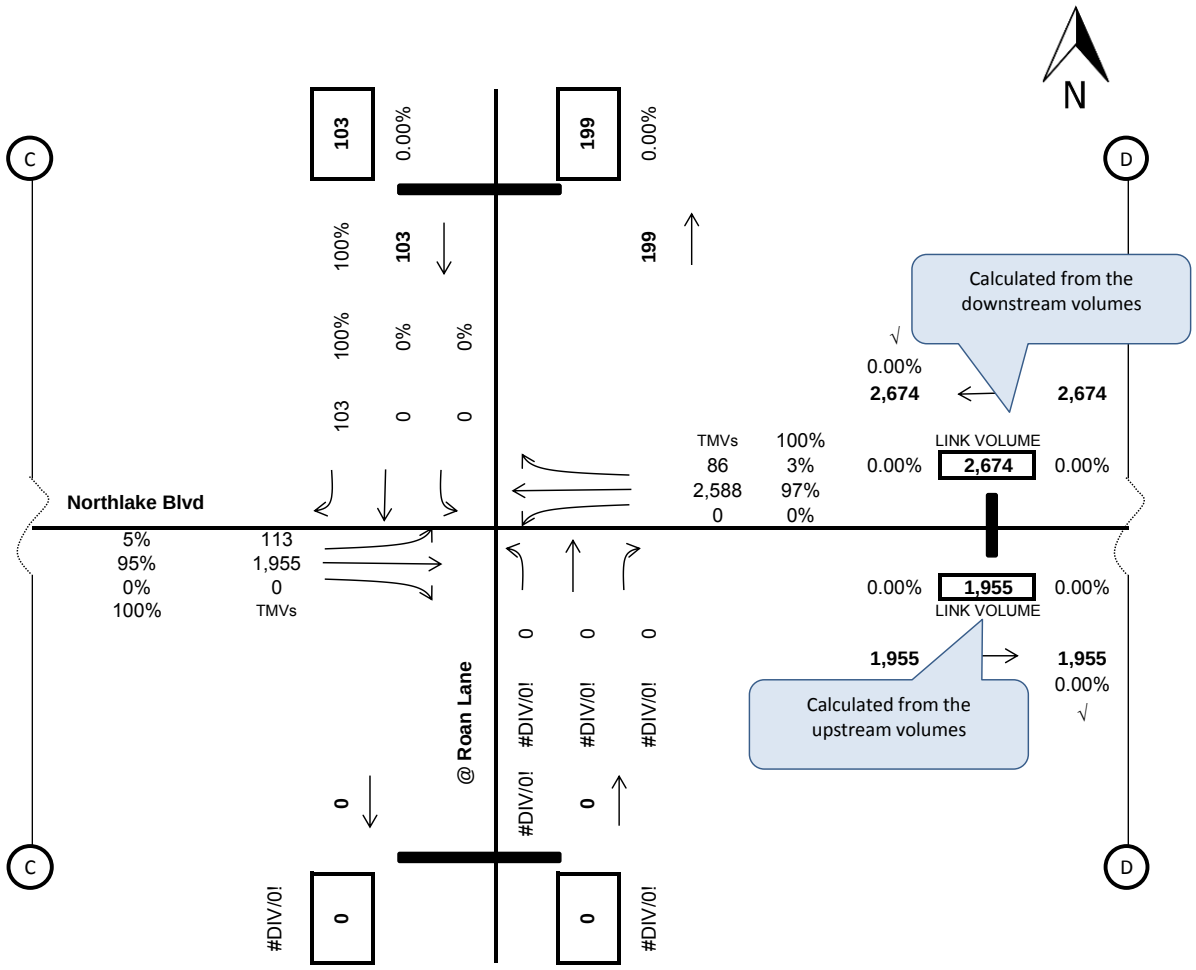
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Northlake Boulevard** **Turning Movement Volume Development** **2020 No Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **3 of 5** *Date:* 9/24/15

@ Roan Lane



Turning Movement Volumes
@ Roan Lane

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**2,674**			**0**			**2,068**			**103**	
TM Pk Hr Counts	0	2723	91	0	0	0	127	2191	0	0	0	103
% Turns	0%	97%	3%	0%	0%	0%	5%	95%	0%	0%	0%	100%
Calc. Pk Hr Volumes	0	2588	86	0	0	0	113	1955	0	0	0	103
Adjustments												
Bal Pk Hr Volumes	**0**	**2588**	**86**	**0**	**0**	**0**	**113**	**1955**	**0**	**0**	**0**	**103**

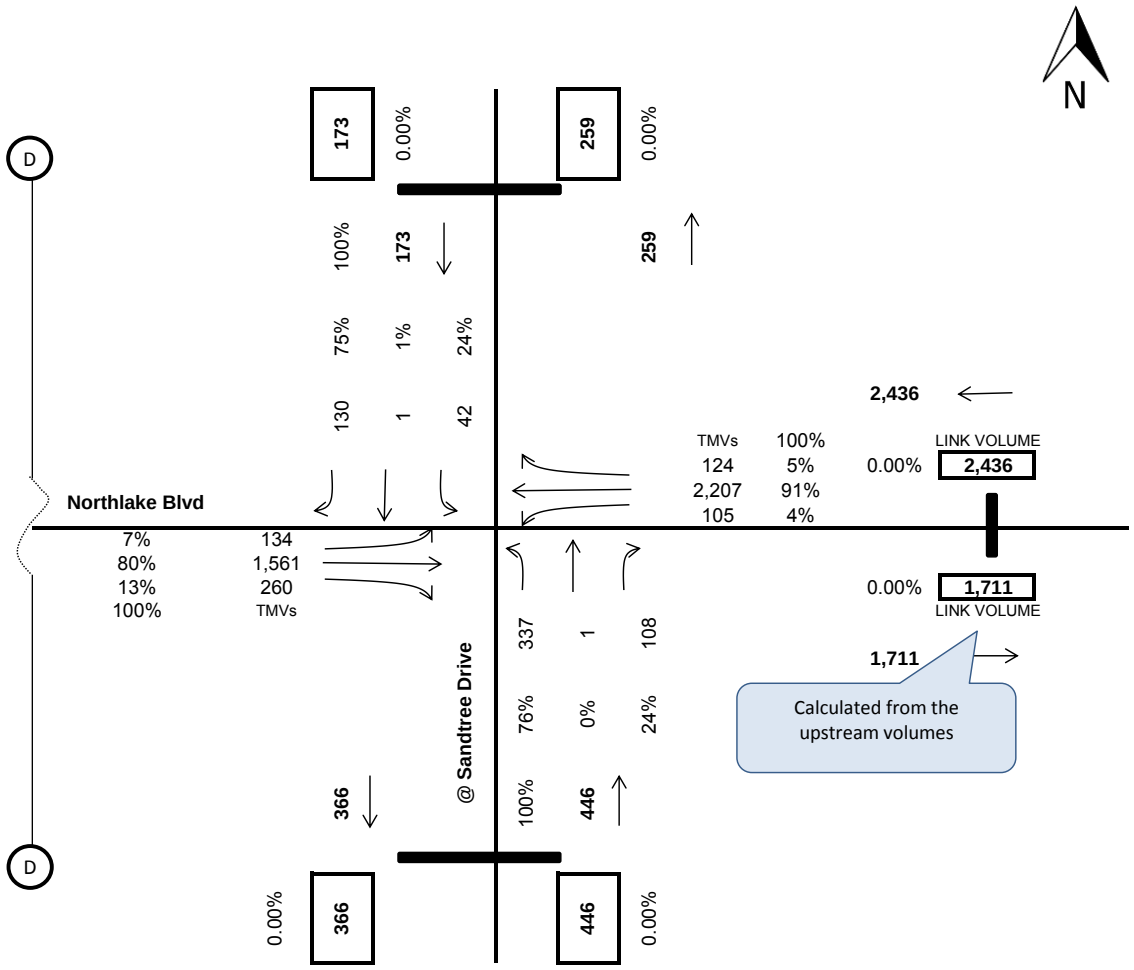
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Northlake Boulevard Turning Movement Volume Development 2020 No Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **4 of 5** *Date:* 9/24/15

@ Sandtree Drive



Turning Movement Volumes
@ Sandtree Drive

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**2,436**			**446**			**1,955**			**173**	
TM Pk Hr Counts	105	2207	124	337	1	108	153	1778	296	42	1	130
% Turns	4%	91%	5%	76%	0%	24%	7%	80%	13%	24%	1%	75%
Calc. Pk Hr Volumes	105	2207	124	337	1	108	134	1561	260	42	1	130
Adjustments												
Bal Pk Hr Volumes	**105**	**2207**	**124**	**337**	**1**	**108**	**134**	**1561**	**260**	**42**	**1**	**130**

LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

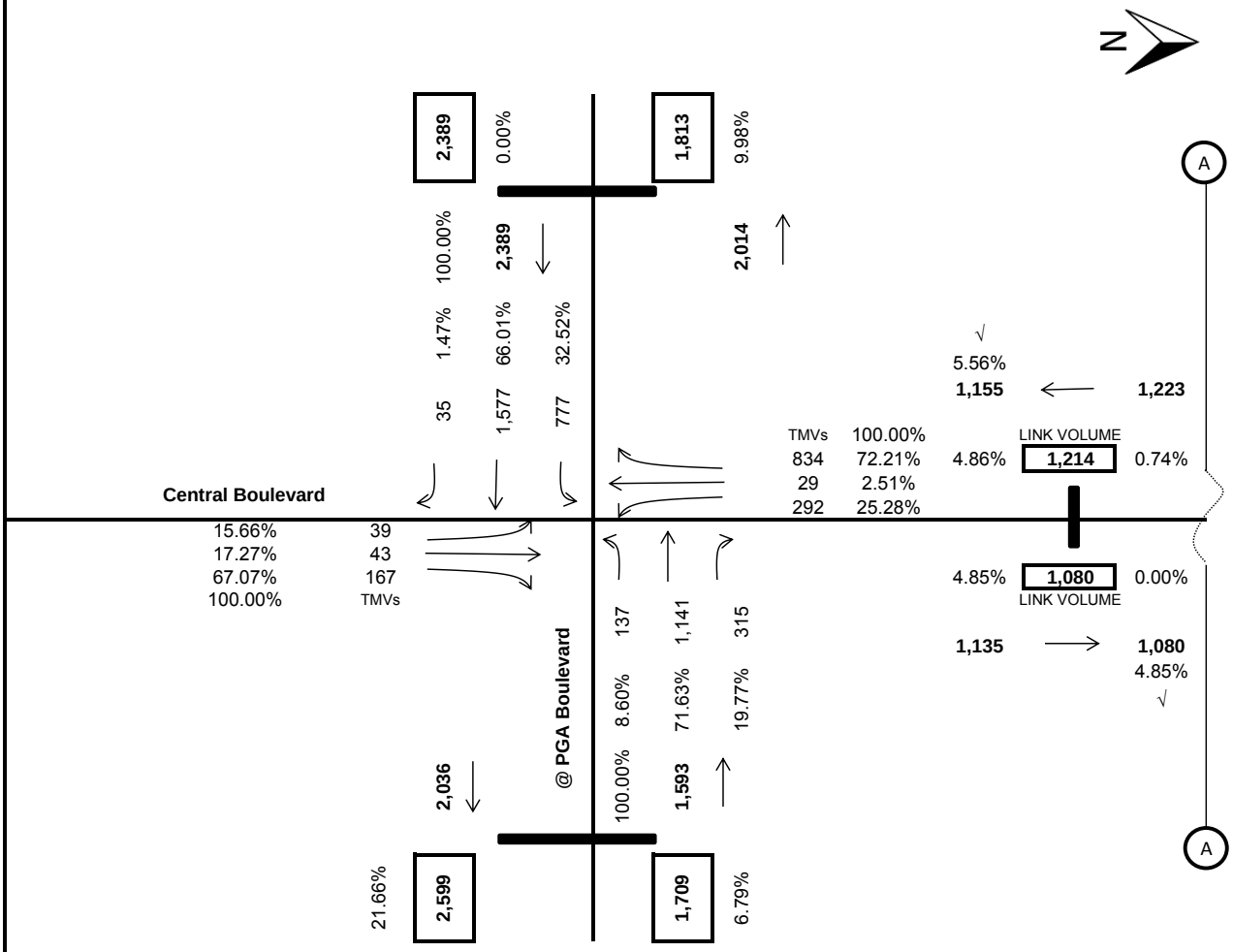
Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Northlake Boulevard Turning Movement Volume Development 2020 No Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **5 of 5** *Date:* 9/24/15

APPENDIX Y

BALANCED TURNING MOVEMENT DEVELOPMENT SHEETS

2030 NO BUILD AM PEAK HOUR

@ PGA Boulevard



Turning Movement Volumes
@ PGA Boulevard

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes												
TM Pk Hr Counts												
% Turns												
Calc. Pk Hr Volumes												
Adjustments												
Bal Pk Hr Volumes	**292**	**29**	**834**	**137**	**1141**	**315**	**39**	**43**	**167**	**777**	**1577**	**35**

LEGEND

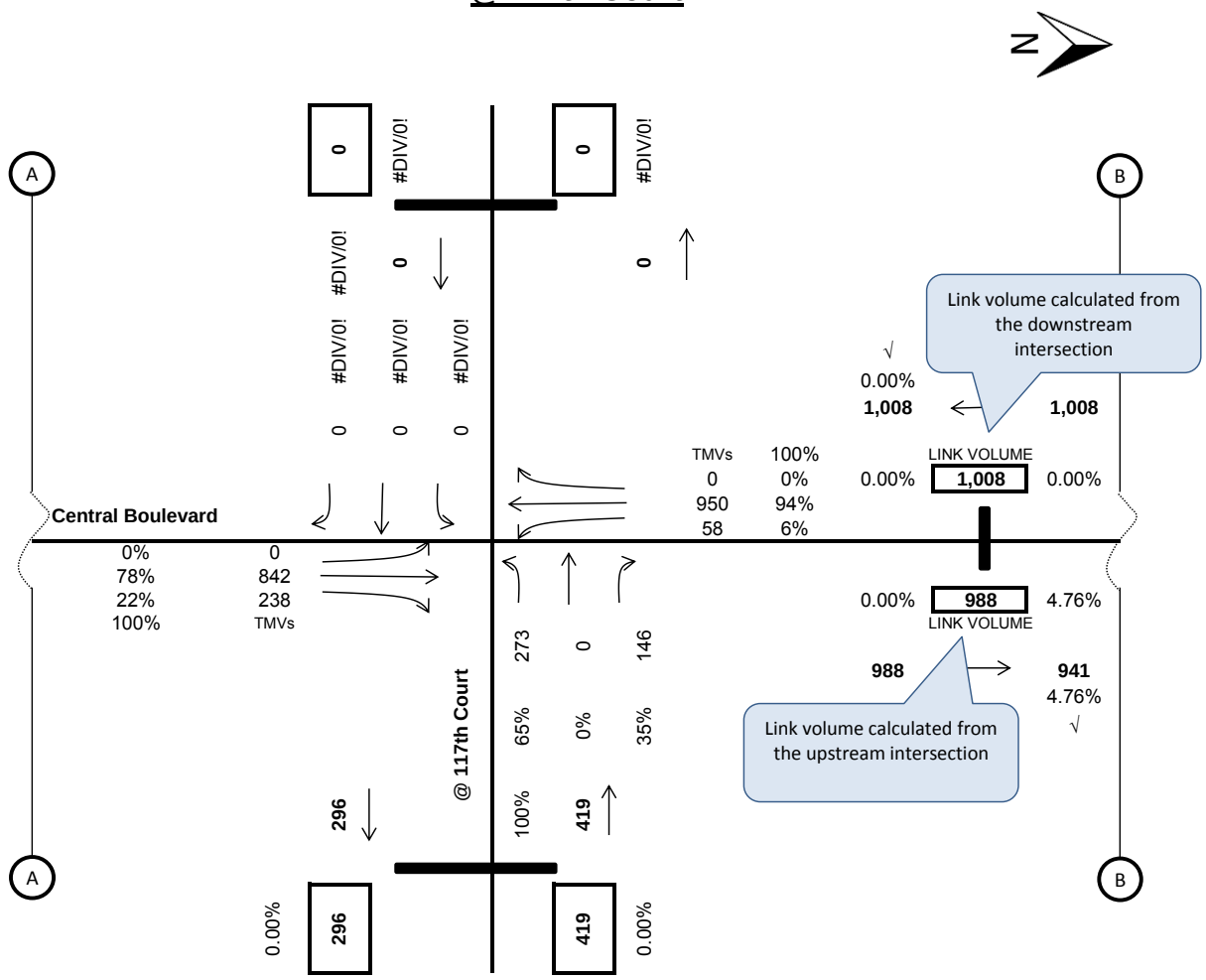
1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

For consistency, balanced peak hour volumes from major street arterial (aka PGA Boulevard) were used. See PGA Boulevard Arterial for details

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Central Boulevard** **Turning Movement Volume Development** **2030 No Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **1 of 5** *Date:* 9/24/15

@ 117th Court



Turning Movement Volumes
@ 117th Court

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,008**			**419**			**1,080**			**0**	
TM Pk Hr Counts	98	1614	0	273	0	146	0	1033	292	0	0	0
% Turns	6%	94%	0%	65%	0%	35%	0%	78%	22%	0%	0%	0%
Calc. Pk Hr Volumes	58	950	0	273	0	146	0	842	238	0	0	0
Adjustments												
Bal Pk Hr Volumes	**58**	**950**	**0**	**273**	**0**	**146**	**0**	**842**	**238**	**0**	**0**	**0**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

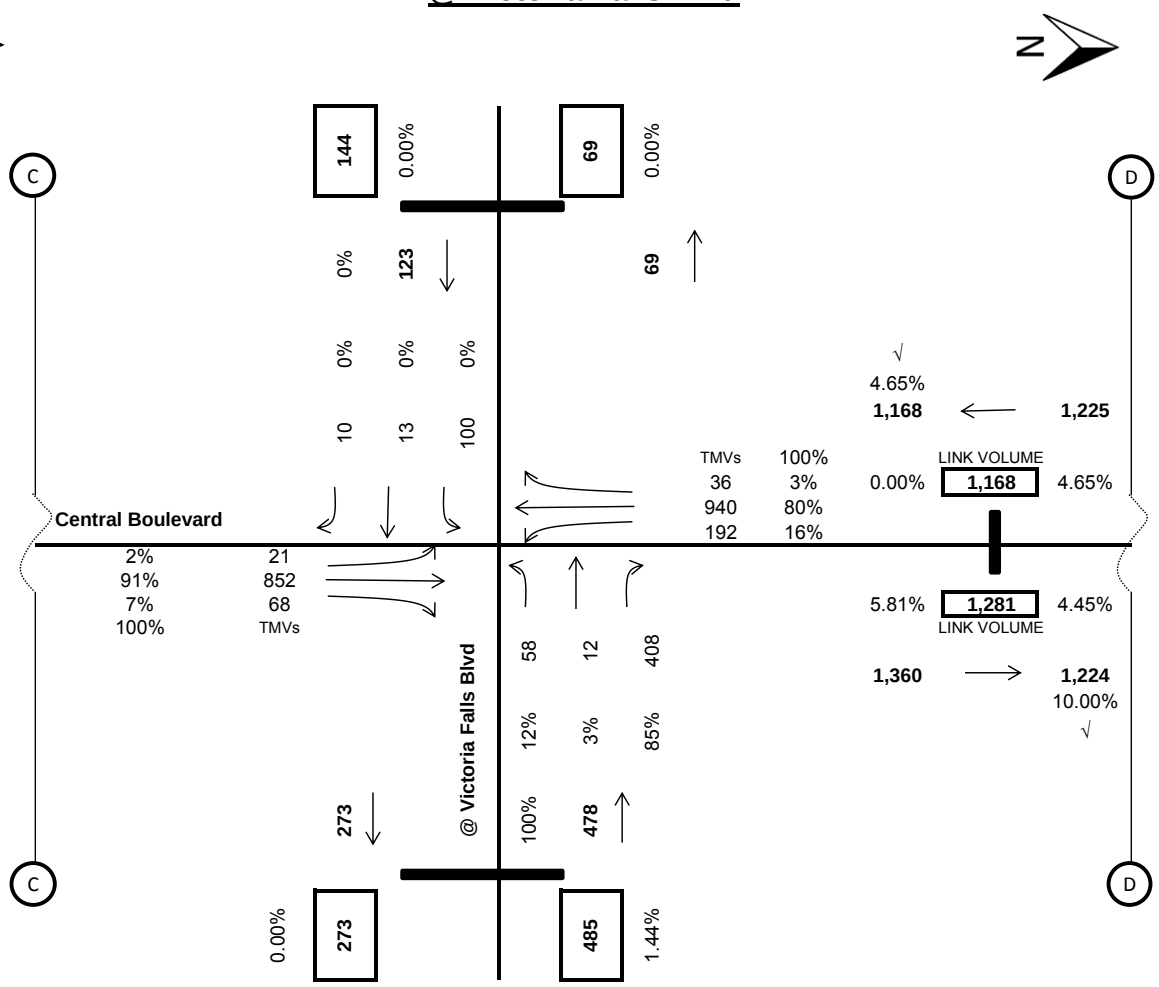
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name:	Exhibit Name:		
SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	**Central Boulevard** **Turning Movement Volume Development** **2030 No Build AM Peak Hour**	*Exhibit No:*	**TBD**
		Page No:	**2 of 5**
		Date:	9/24/15

@ Victoria Falls Blvd



Turning Movement Volumes
@ Victoria Falls Blvd

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,168**			**485**			**988**			**144**	
TM Pk Hr Counts	342	1675	65	58	12	415	27	1145	87	121	13	10
% Turns	16%	80%	3%	12%	2%	86%	2%	91%	7%	84%	9%	7%
Calc. Pk Hr Volumes	192	940	36	58	12	415	21	899	68	121	13	10
Adjustments						-7		-47		-21		
Bal Pk Hr Volumes	**192**	**940**	**36**	**58**	**12**	**408**	**21**	**852**	**68**	**100**	**13**	**10**

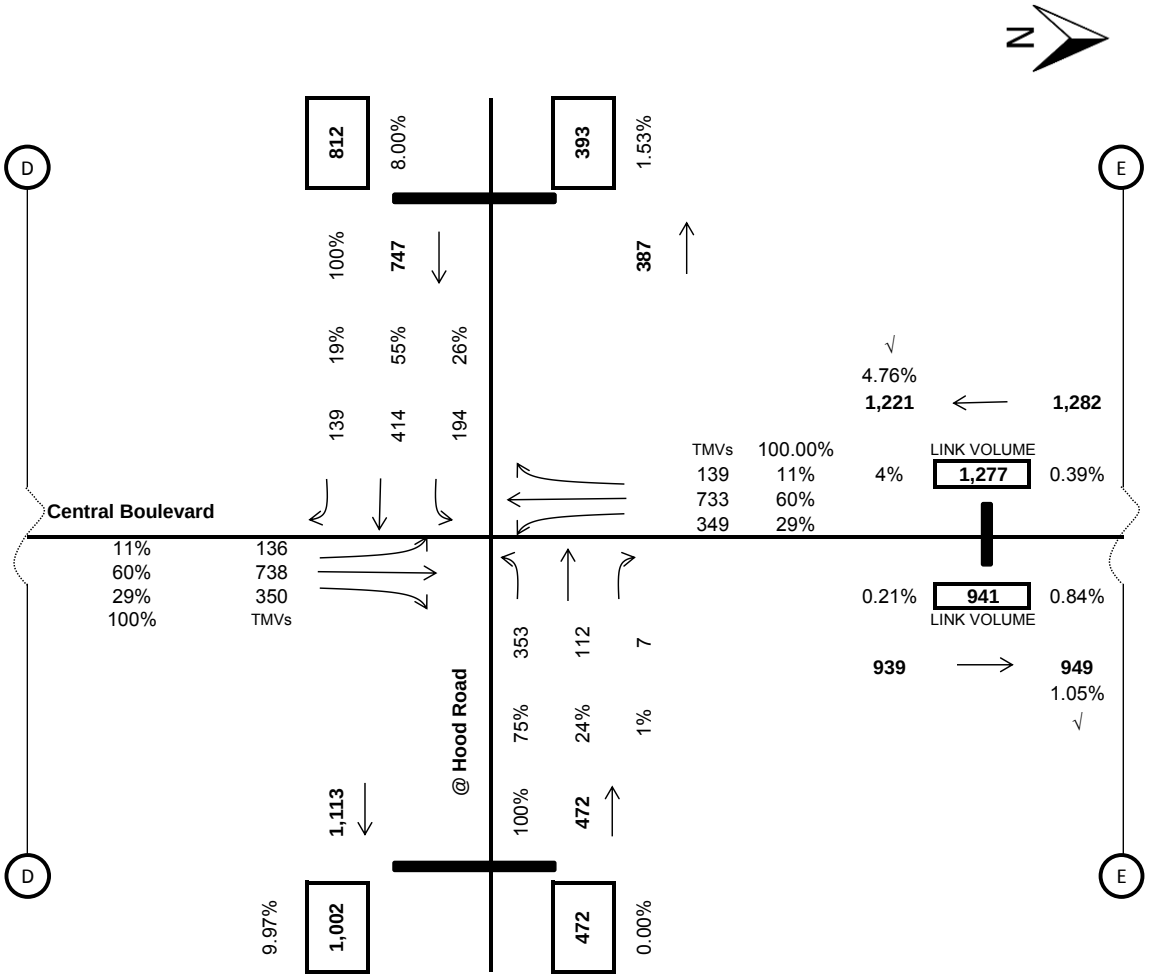
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A … A	Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Central Boulevard** **Turning Movement Volume Development** **2030 No Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **3 of 5** *Date:* 9/24/15

@ Hood Road



Turning Movement Volumes
@ Hood Road

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,277**			**472**			**1,281**			**812**	
TM Pk Hr Counts	569	1031	196	766	242	16	166	898	495	307	760	221
% Turns	32%	57%	11%	75%	24%	2%	11%	58%	32%	24%	59%	17%
Calc. Pk Hr Volumes	405	733	139	353	112	7	136	738	407	194	479	139
Adjustments	-56								-57		-65	
Bal Pk Hr Volumes	**349**	**733**	**139**	**353**	**112**	**7**	**136**	**738**	**350**	**194**	**414**	**139**

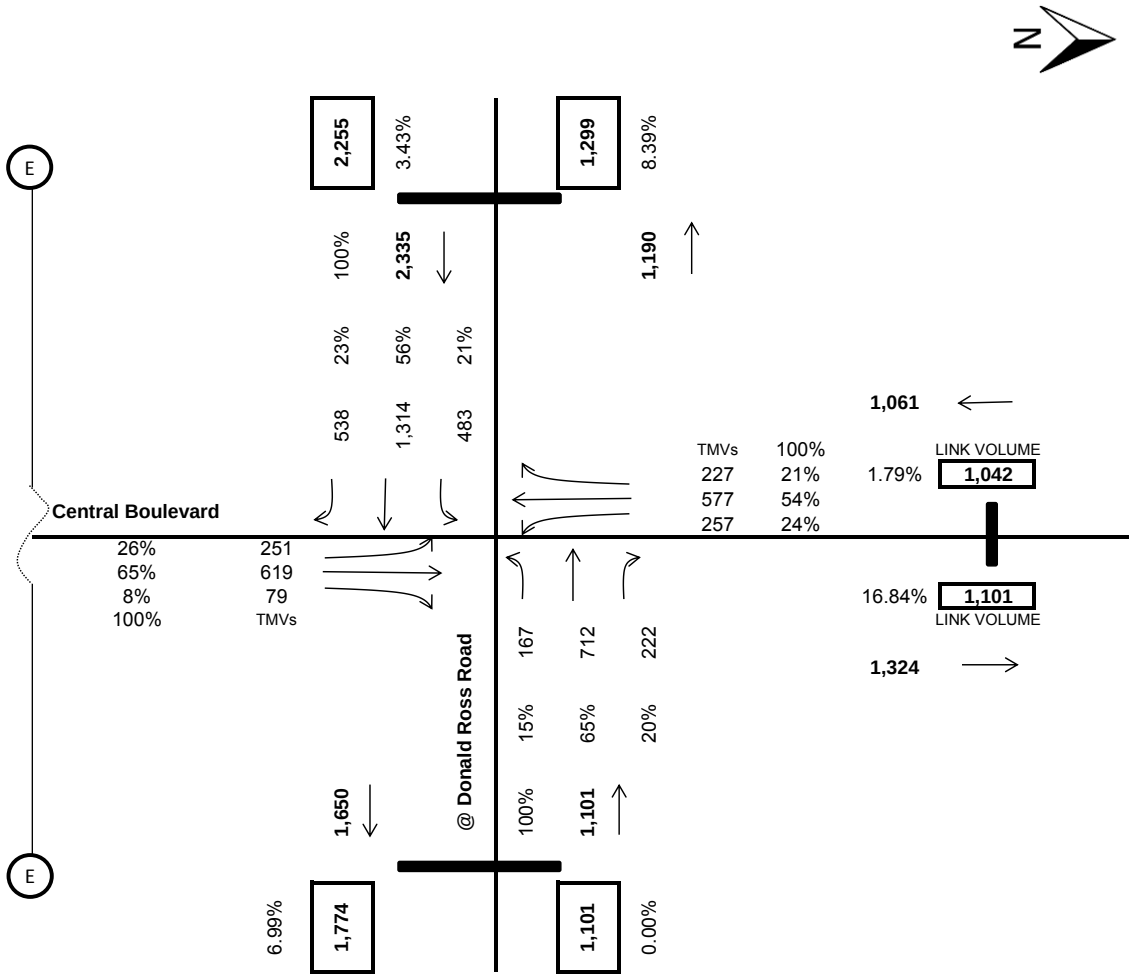
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Central Boulevard** **Turning Movement Volume Development** **2030 No Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **4 of 5** *Date:* 9/24/15

@ Donald Ross Road



Turning Movement Volumes
@ Donald Ross Road

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**1,042**			**1,101**			**941**			**2,255**		
TM Pk Hr Counts	558	1357	534	213	906	282	402	992	114	406	1038	453
% Turns	23%	55%	22%	15%	65%	20%	27%	66%	8%	21%	55%	24%
Calc. Pk Hr Volumes	237	577	227	167	712	222	251	619	71	483	1234	538
Adjustments	20								8		80	
Bal Pk Hr Volumes	**257**	**577**	**227**	**167**	**712**	**222**	**251**	**619**	**79**	**483**	**1314**	**538**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

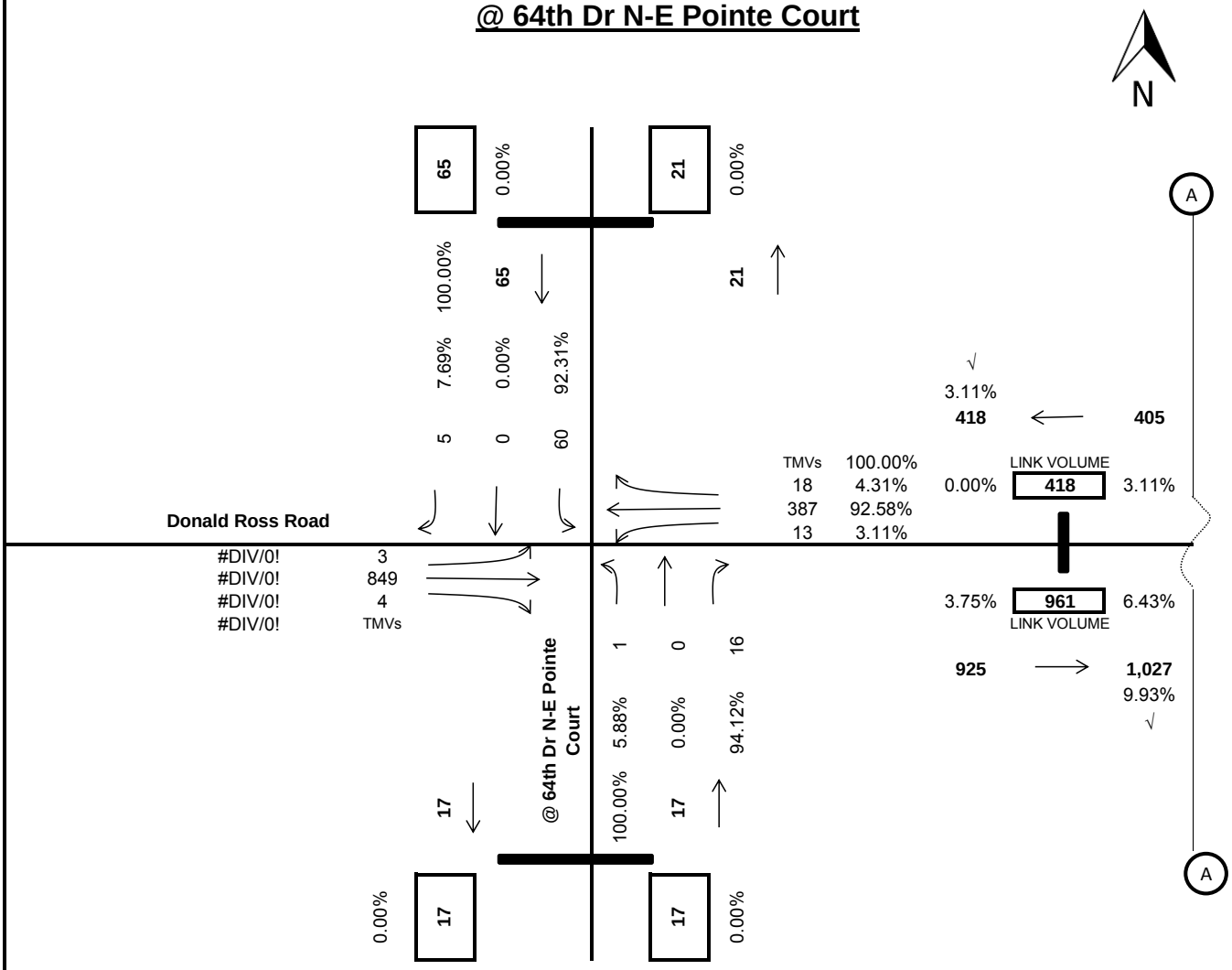
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Central Boulevard** **Turning Movement Volume Development** **2030 No Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **5 of 5** *Date:* 9/24/15

@ 64th Dr N-E Pointe Court



Turning Movement Volumes
@ 64th Dr N-E Pointe Court

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**418**			**17**			**856**			**65**	
TM Pk Hr Counts	14	411	19	1	0	16	3	849	4	60	0	5
% Turns	3%	93%	4%	6%	0%	94%	0%	99%	0%	92%	0%	8%
Calc. Pk Hr Volumes	13	387	18	1	0	16	3	849	4	60	0	5
Adjustments												
Bal Pk Hr Volumes	**13**	**387**	**18**	**1**	**0**	**16**	**3**	**849**	**4**	**60**	**0**	**5**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

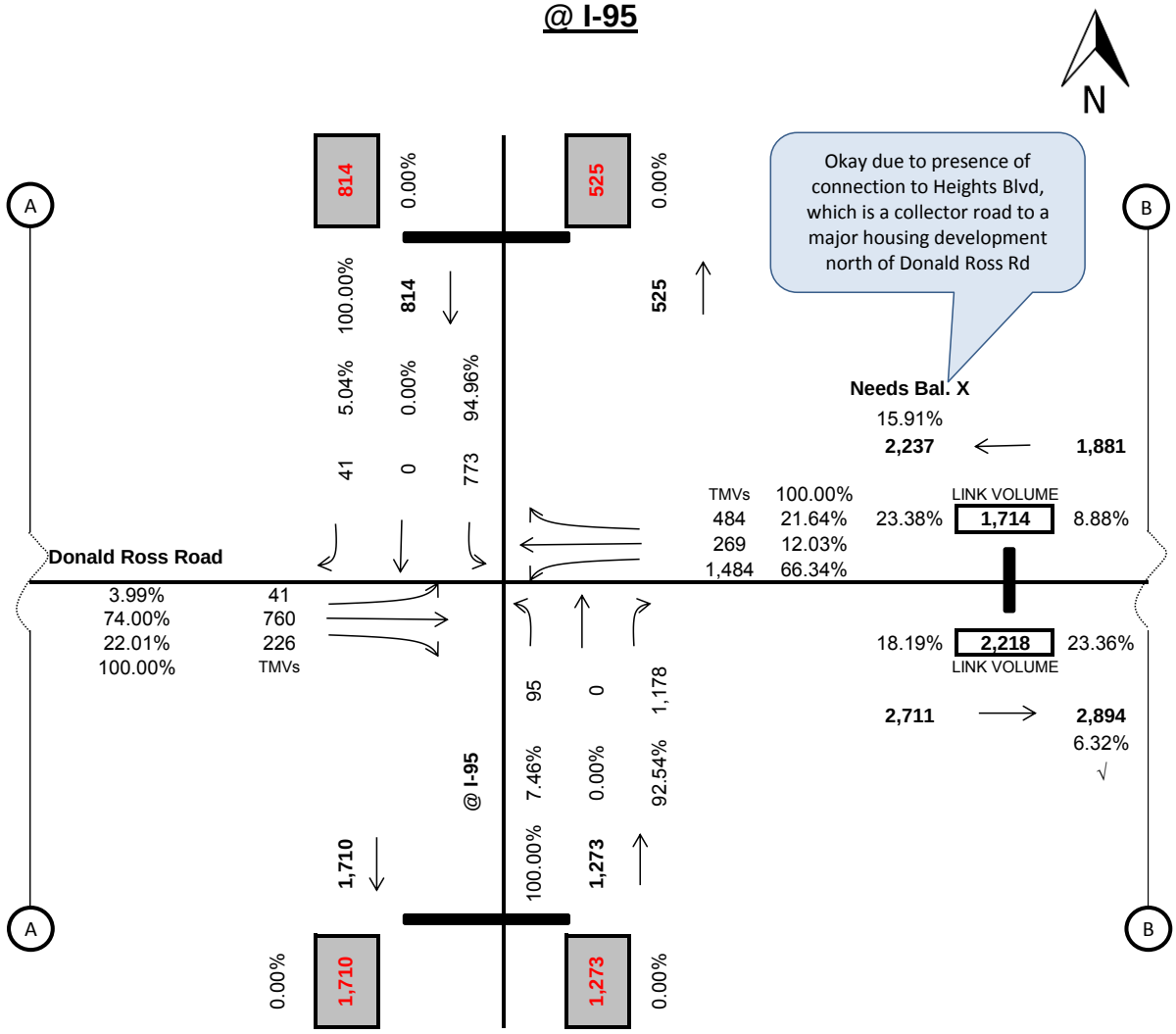
66 → — Turning Movement Volumes (Balanced)

A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

@ I-95



Turning Movement Volumes
@ I-95

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,714**			**1,273**			**961**			**814**	
TM Pk Hr Counts	1687	389	406	125	0	1549	40	1265	295	766	0	41
% Turns	68%	16%	16%	7%	0%	93%	3%	79%	18%	95%	0%	5%
Calc. Pk Hr Volumes	1165	269	280	95	0	1178	24	760	177	773	0	41
Adjustments	319		204				17		49			
Bal Pk Hr Volumes	**1484**	**269**	**484**	**95**	**0**	**1178**	**41**	**760**	**226**	**773**	**0**	**41**

LEGEND

1,500 — Control Volumes (Peak Hour)*

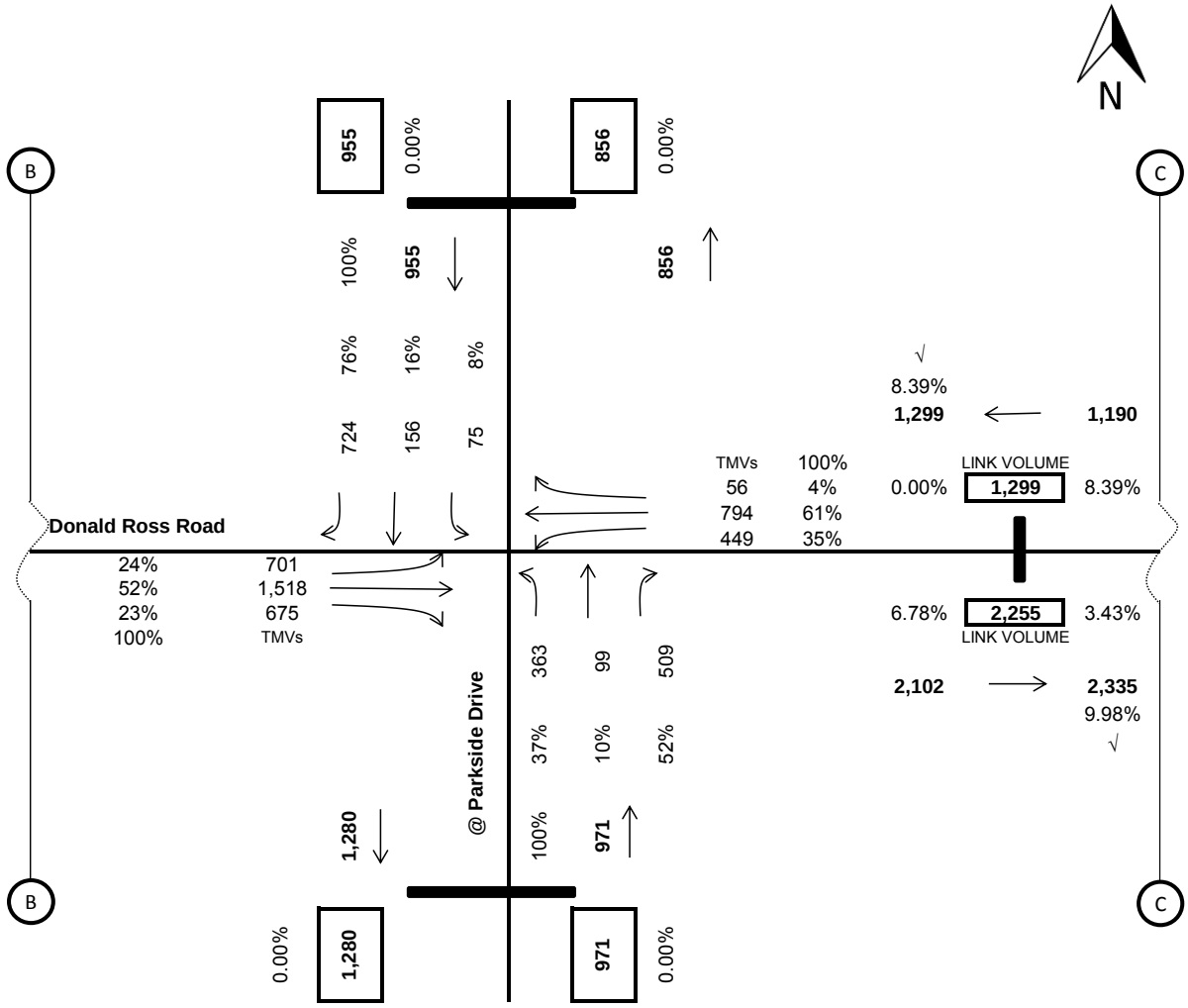
1,300 — Link Volumes (Peak Hour)

66 → Turning Movement Volumes (Balanced)

A — Match Line — A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

@ Parkside Drive



Turning Movement Volumes
@ Parkside Drive

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,299**			**971**			**2,218**			**955**	
TM Pk Hr Counts	660	1166	82	363	99	509	732	1498	704	75	156	724
% Turns	35%	61%	4%	37%	10%	52%	25%	51%	24%	8%	16%	76%
Calc. Pk Hr Volumes	449	794	56	363	99	509	553	1132	532	75	156	724
Adjustments							148	386	143			
Bal Pk Hr Volumes	**449**	**794**	**56**	**363**	**99**	**509**	**701**	**1518**	**675**	**75**	**156**	**724**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

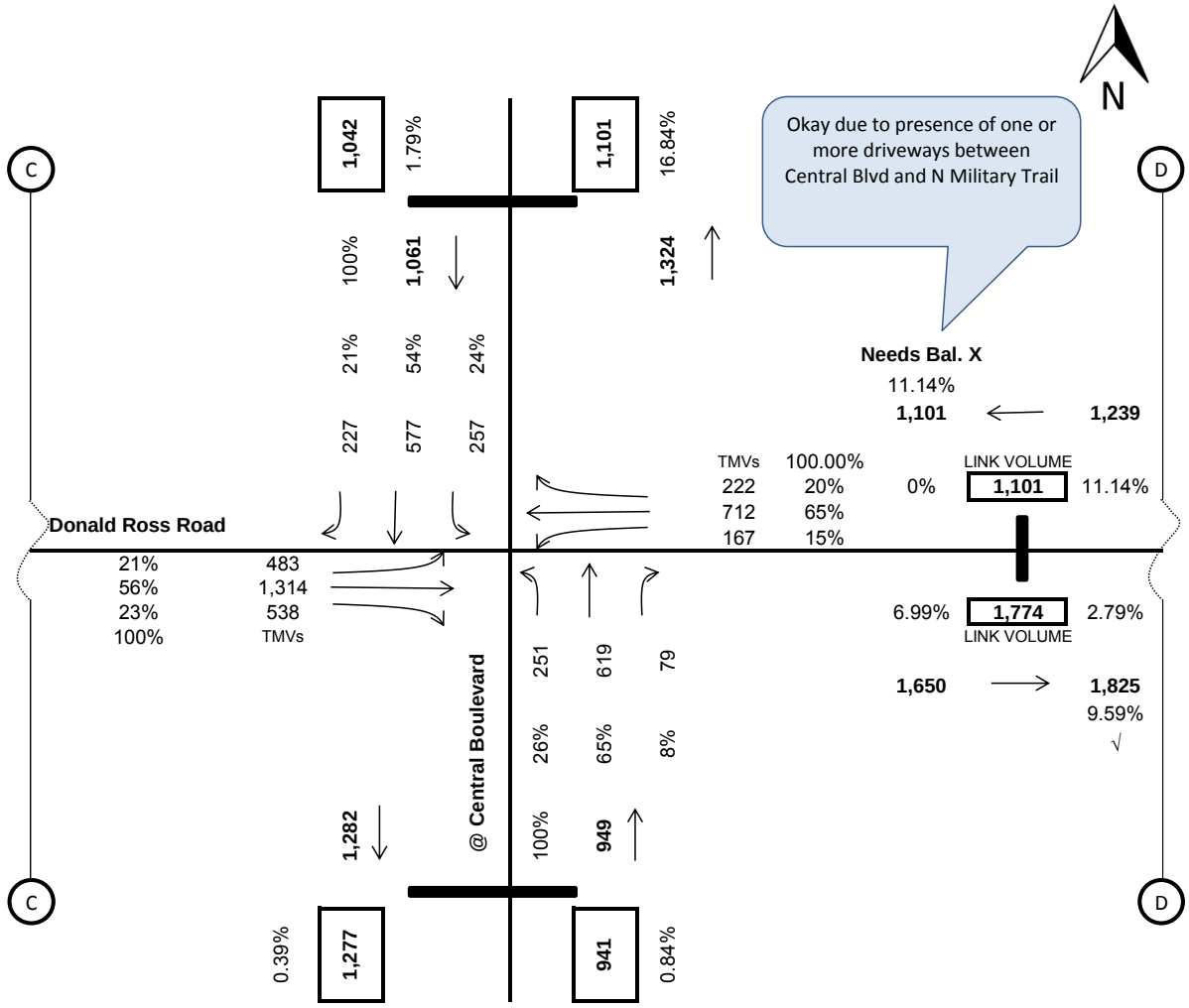
66 — Turning Movement Volumes (Balanced)

A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

@ Central Boulevard



Turning Movement Volumes
@ Central Boulevard

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes												
TM Pk Hr Counts												
% Turns												
Calc. Pk Hr Volumes												
Adjustments												
Bal Pk Hr Volumes	**167**	**712**	**222**	**251**	**619**	**79**	**483**	**1314**	**538**	**257**	**577**	**227**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 → Turning Movement Volumes (Balanced)

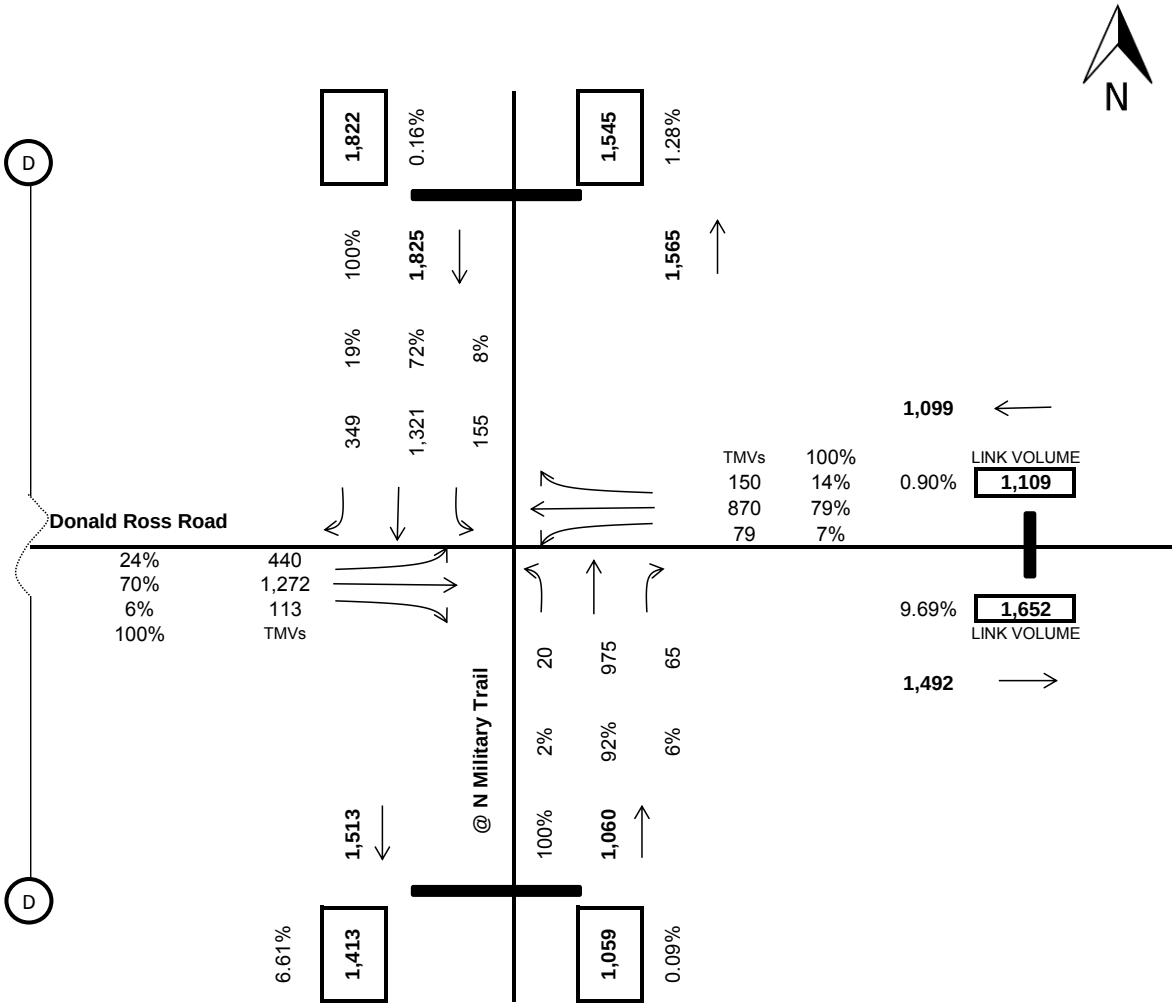
A — Match Line

A

For consistency, balanced peak hour volumes from major street arterial (aka Central Boulevard) were used. See Central Boulevard Arterial for details

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

@ N Military Trail



Turning Movement Volumes
@ N Military Trail

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes												
TM Pk Hr Counts												
% Turns												
Calc. Pk Hr Volumes												
Adjustments												
Bal Pk Hr Volumes	**79**	**870**	**150**	**20**	**975**	**65**	**440**	**1272**	**113**	**155**	**1321**	**349**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

A — Match Line

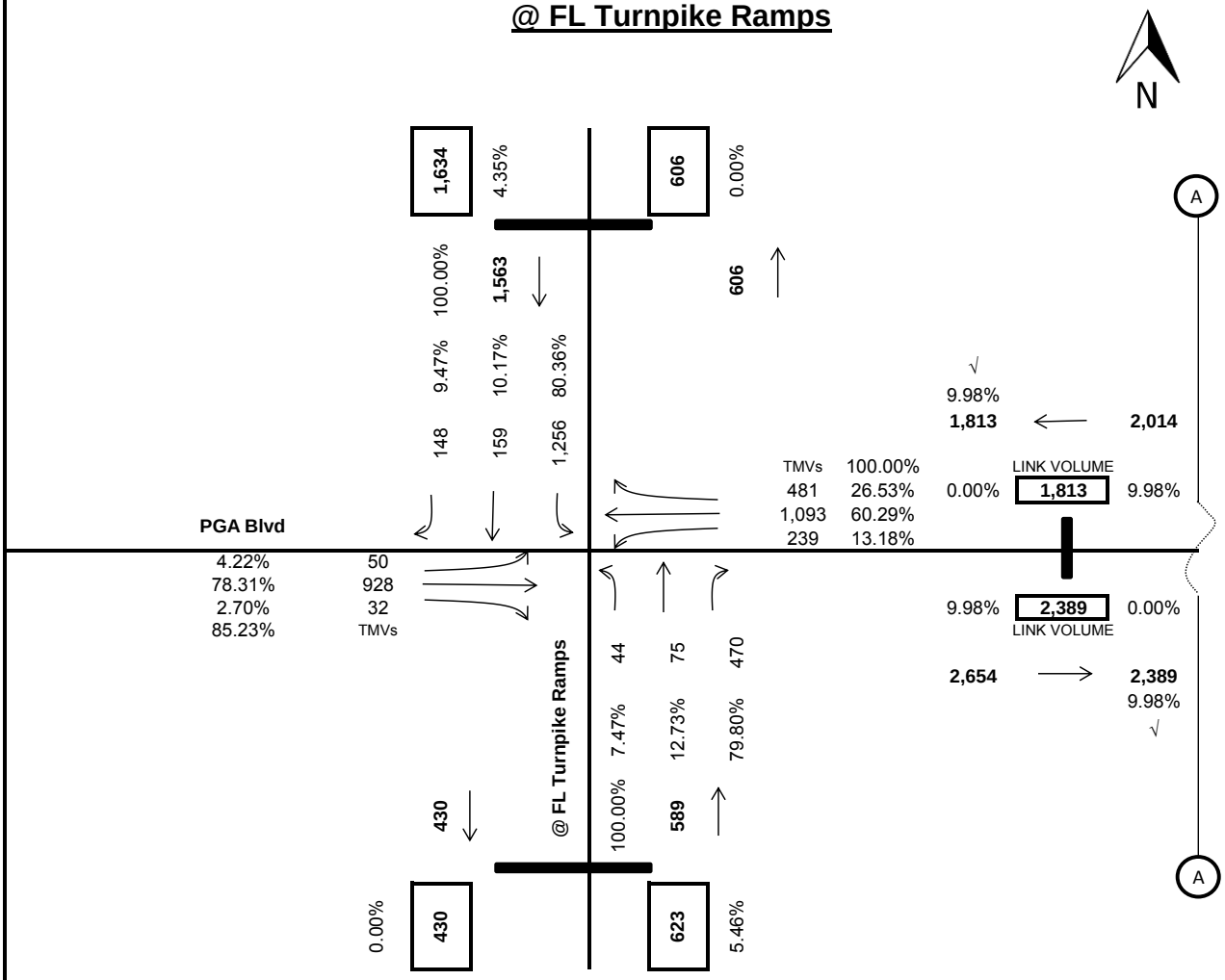
A

For consistency, balanced peak hour volumes from major street arterial (aka N Military Trail) were used. See N Military Trail Arterial for details

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FPID No. 415261-22-01	*Exhibit Name:* **Donald Ross Road** **Turning Movement Volume Development** **2030 No Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **5 of 5** *Date:* 9/24/15

@ FL Turnpike Ramps



Turning Movement Volumes
@ FL Turnpike Ramps

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,813**			**623**			**1,067**			**1,634**	
TM Pk Hr Counts	410	1873	825	45	77	501	85	1685	53	1327	159	148
% Turns	13%	60%	27%	7%	12%	80%	5%	92%	3%	81%	10%	9%
Calc. Pk Hr Volumes	239	1093	481	44	75	498	50	986	31	1327	159	148
Adjustments						-28		-58	1	-71		
Bal Pk Hr Volumes	**239**	**1093**	**481**	**44**	**75**	**470**	**50**	**928**	**32**	**1256**	**159**	**148**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

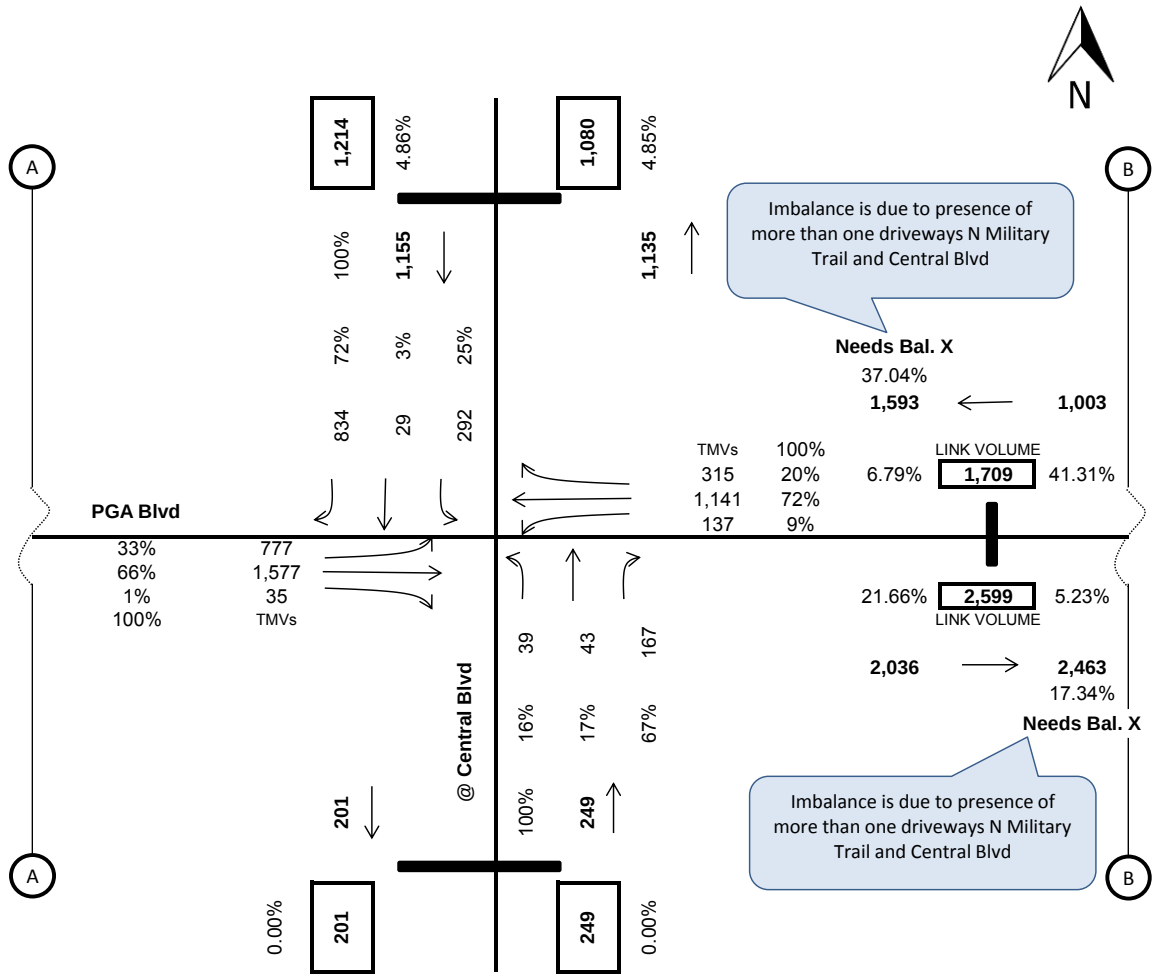
66 → Turning Movement Volumes (Balanced)

A … A — Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard** **Turning Movement Volume Development** **2030 No Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **1 of 8** *Date:* 9/24/15

@ Central Blvd



Turning Movement Volumes
@ Central Blvd

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**1,709**			**249**			**2,389**			**1,214**		
TM Pk Hr Counts	152	1265	348	39	43	167	994	2018	45	500	49	1532
% Turns	9%	72%	20%	16%	17%	67%	33%	66%	1%	24%	2%	74%
Calc. Pk Hr Volumes	147	1225	337	39	43	167	777	1577	35	292	29	894
Adjustments	-10	-84	-22									-60
Bal Pk Hr Volumes	**137**	**1141**	**315**	**39**	**43**	**167**	**777**	**1577**	**35**	**292**	**29**	**834**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

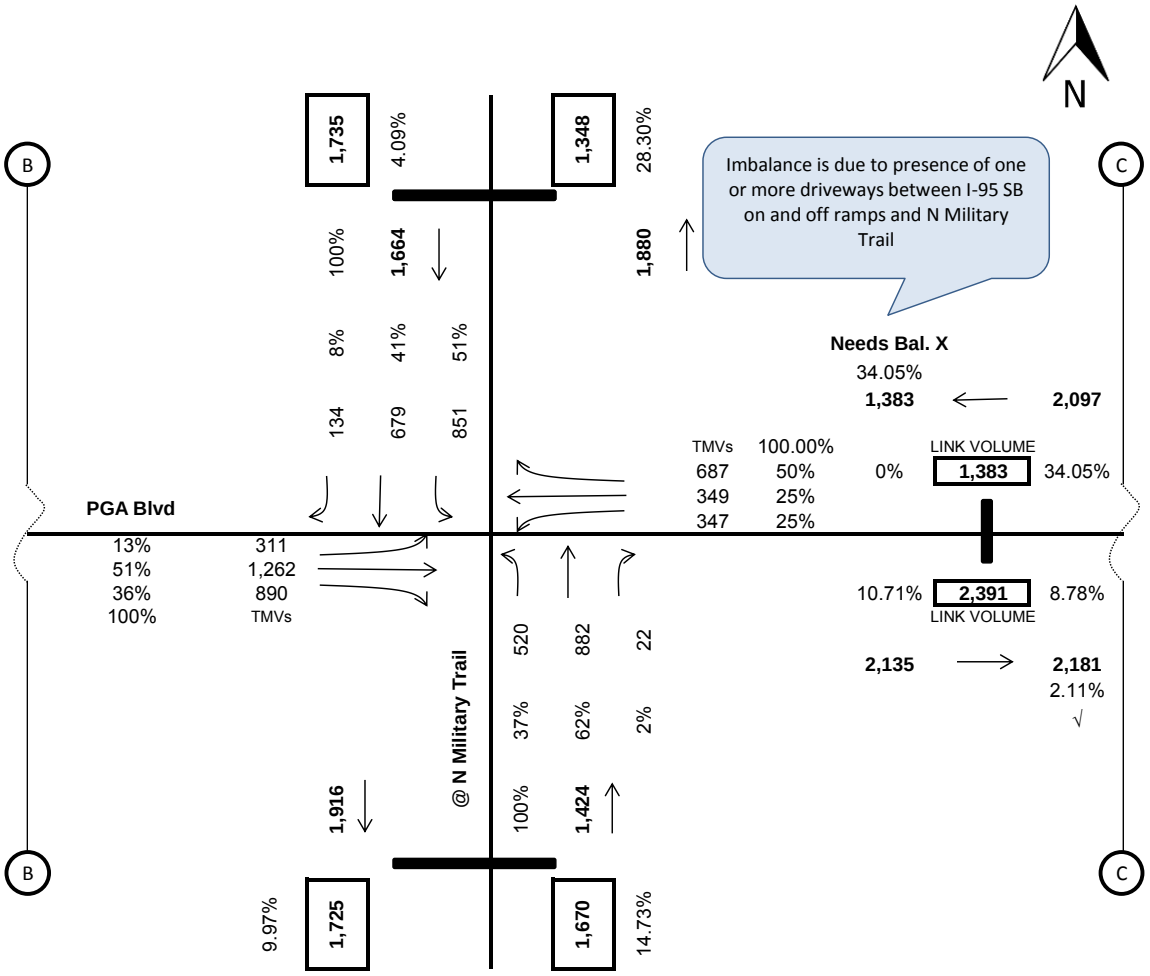
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard, Project Development & Environmental Study, FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard Turning Movement Volume Development 2030 No Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **2 of 8** *Date:* 9/24/15

@ N Military Trail



Turning Movement Volumes
@ N Military Trail

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**1,383**			**1,670**			**2,599**			**1,735**		
TM Pk Hr Counts	660	665	1308	885	1549	33	324	1365	1022	1620	1353	249
% Turns	25%	25%	50%	36%	63%	1%	12%	50%	38%	50%	42%	8%
Calc. Pk Hr Volumes	347	349	687	599	1049	22	311	1309	980	872	729	134
Adjustments				-79	-167			-47	-90	-21	-50	
Bal Pk Hr Volumes	**347**	**349**	**687**	**520**	**882**	**22**	**311**	**1262**	**890**	**851**	**679**	**134**

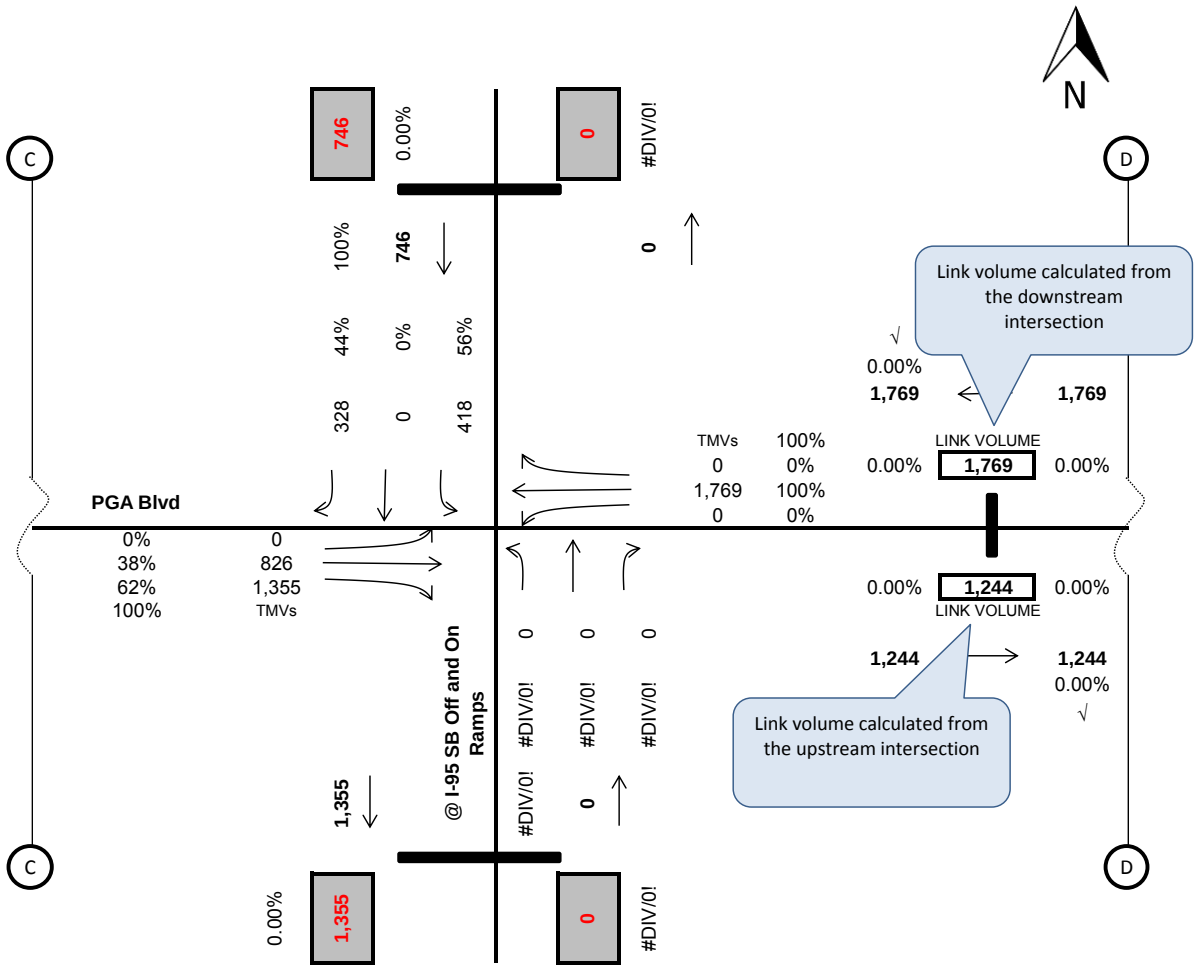
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66 →	Turning Movement Volumes (Balanced)
A … A	Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard** **Turning Movement Volume Development** **2030 No Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **3 of 8** *Date:* 9/24/15

@ I-95 SB Off and On Ramps



Turning Movement Volumes
@ I-95 SB Off and On Ramps

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,769**			**0**			**2,391**			**746**	
TM Pk Hr Counts	0	2348	0	0	0	0	0	997	1940	392	0	307
% Turns	0%	100%	0%	0%	0%	0%	0%	34%	66%	56%	0%	44%
Calc. Pk Hr Volumes	0	1769	0	0	0	0	0	812	1579	418	0	328
Adjustments								14	-224			
Bal Pk Hr Volumes	**0**	**1769**	**0**	**0**	**0**	**0**	**0**	**826**	**1355**	**418**	**0**	**328**

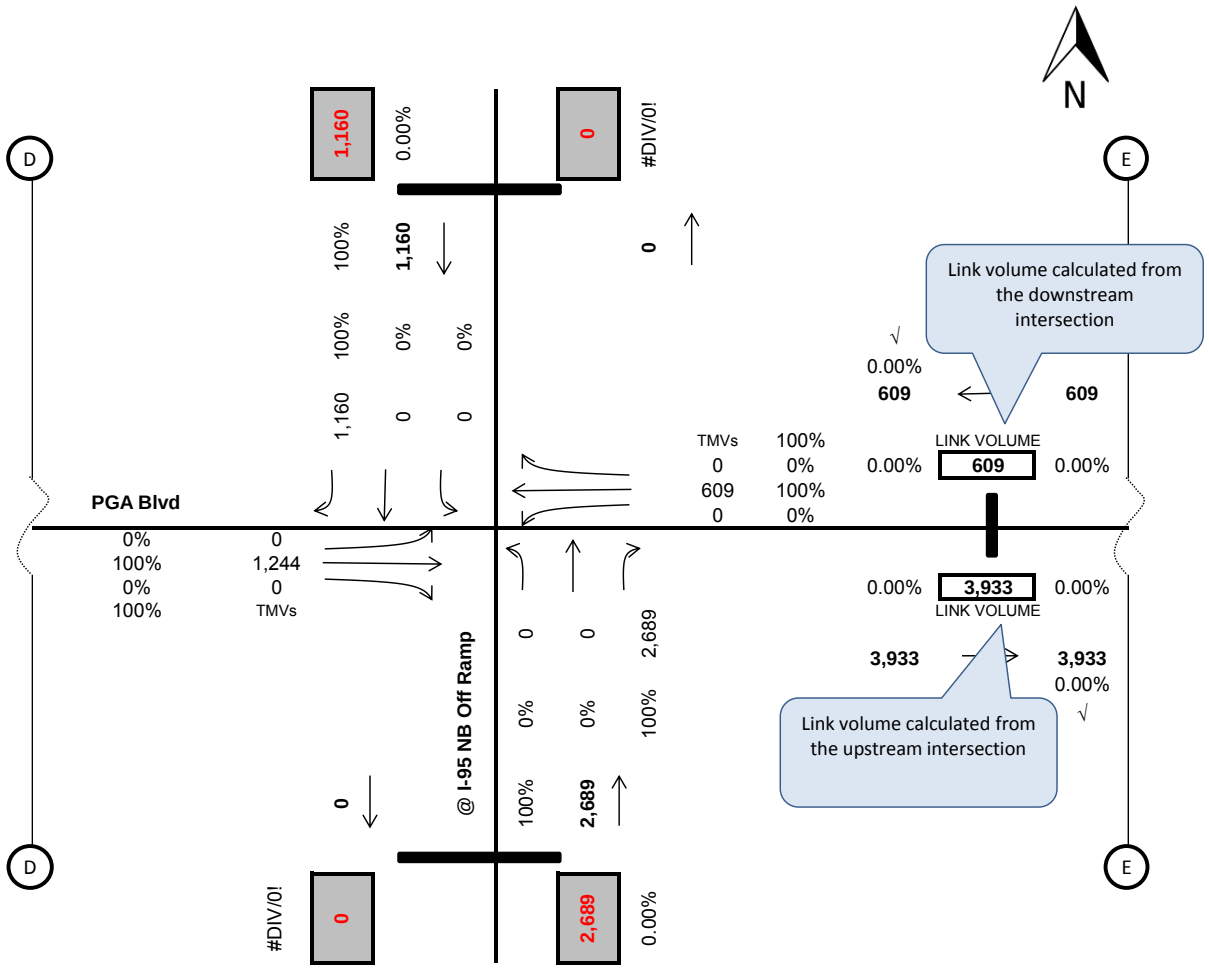
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard** **Turning Movement Volume Development** **2030 No Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **4 of 8** *Date:* 9/24/15

@ I-95 NB Off Ramp



Turning Movement Volumes
@ I-95 NB Off Ramp

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**609**			**2,689**			**1,244**			**1,160**	
TM Pk Hr Counts	0	2348	0	0	0	2420	0	1389	0	0	0	1633
% Turns	0%	100%	0%	0%	0%	100%	0%	100%	0%	0%	0%	100%
Calc. Pk Hr Volumes	0	609	0	0	0	2689	0	1244	0	0	0	1160
Adjustments												
Bal Pk Hr Volumes	**0**	**609**	**0**	**0**	**0**	**2689**	**0**	**1244**	**0**	**0**	**0**	**1160**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 → Turning Movement Volumes (Balanced)

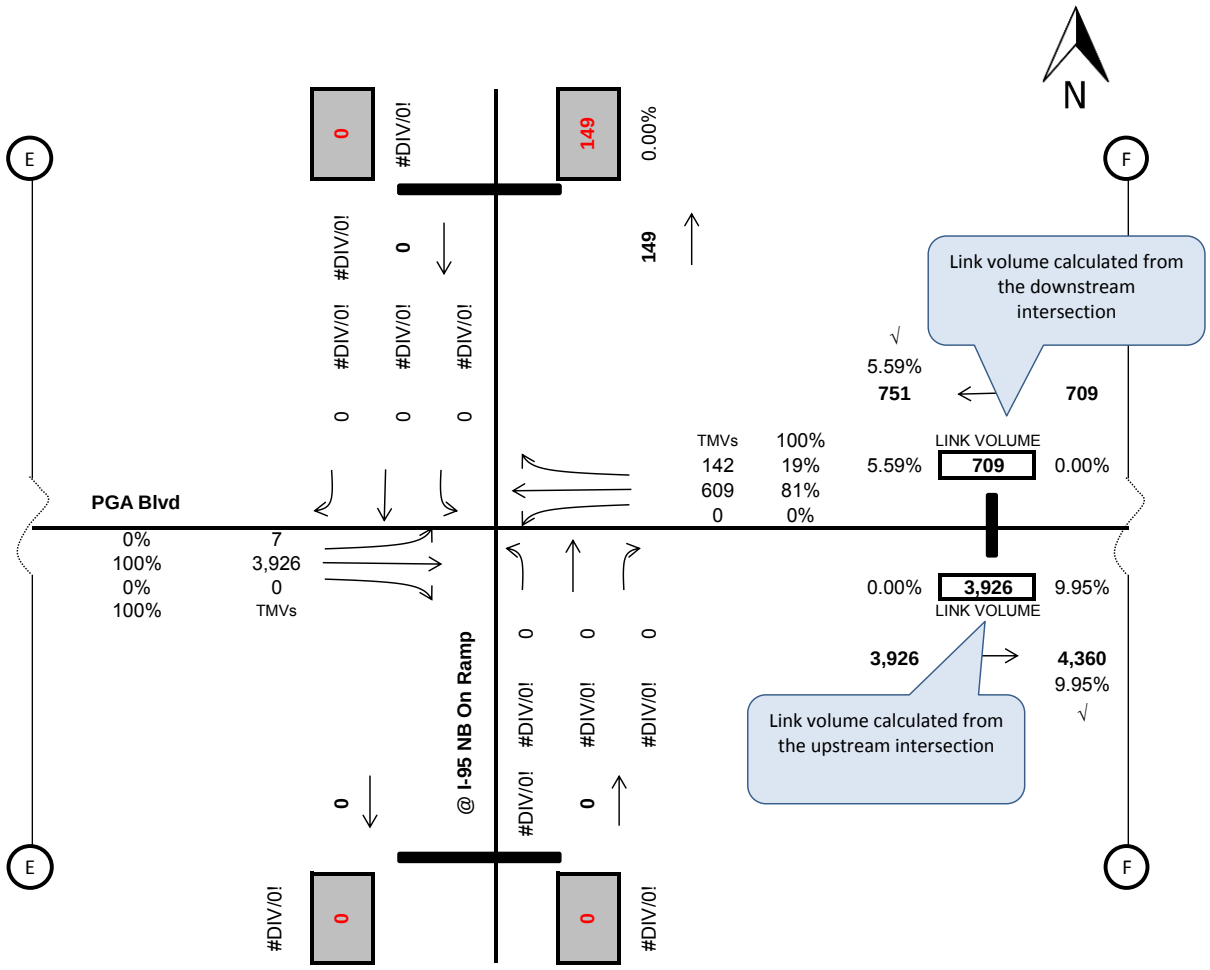
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard** **Turning Movement Volume Development** **2030 No Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **5 of 8** *Date:* 9/24/15

@ I-95 NB On Ramp



Turning Movement Volumes
@ I-95 NB On Ramp

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**709**			**0**			**3,933**			**0**	
TM Pk Hr Counts	0	715	118	0	0	0	4	3085	0	0	0	0
% Turns	0%	86%	14%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Calc. Pk Hr Volumes	0	609	100	0	0	0	5	3928	0	0	0	0
Adjustments			42				2	-2				
Bal Pk Hr Volumes	**0**	**609**	**142**	**0**	**0**	**0**	**7**	**3926**	**0**	**0**	**0**	**0**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 → Turning Movement Volumes (Balanced)

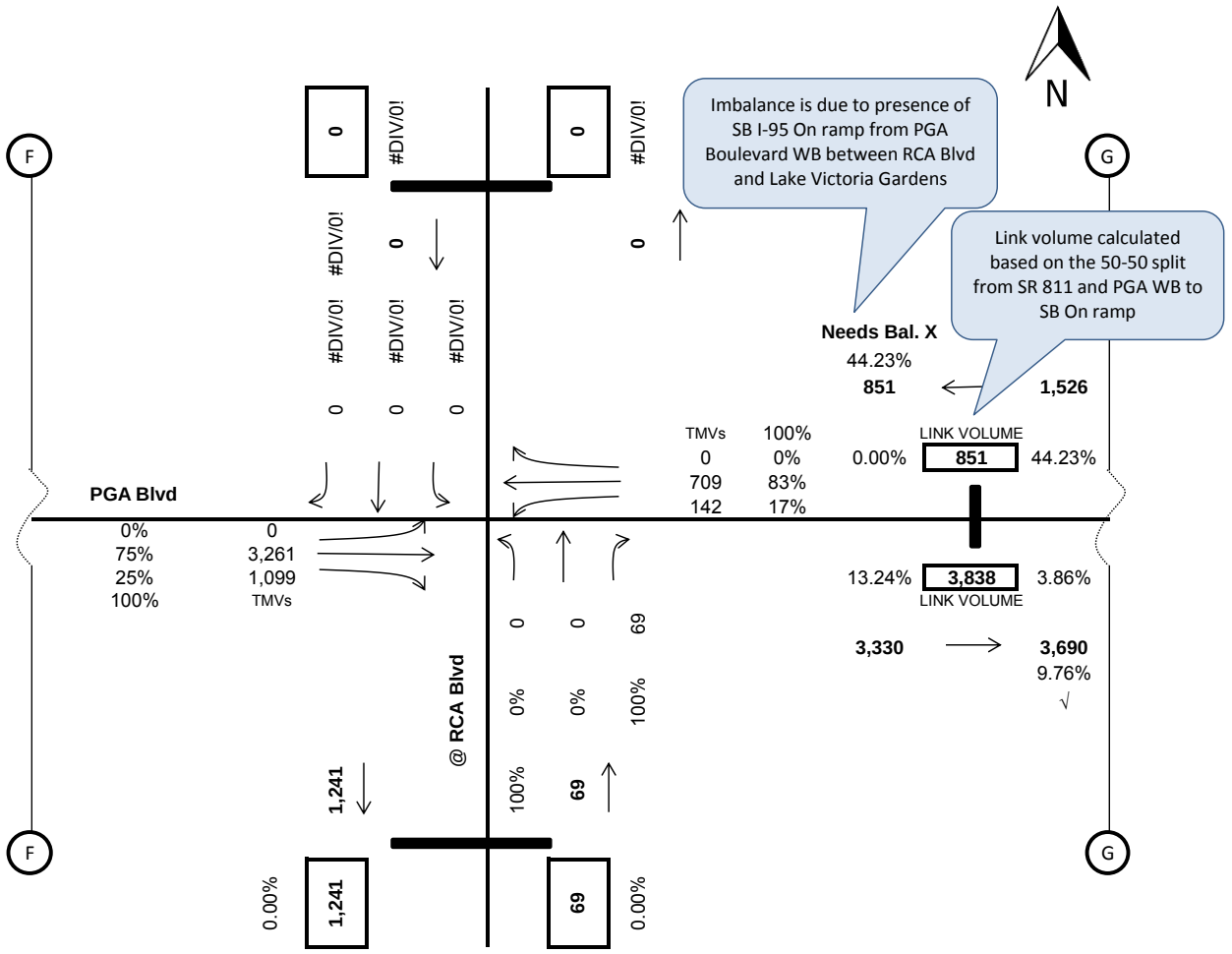
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name:	Exhibit Name:		
SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	**PGA Boulevard** **Turning Movement Volume Development** **2030 No Build AM Peak Hour**	Exhibit No:	**TBD**
		Page No:	**6 of 8**
		Date:	9/24/15

@ RCA Blvd



Turning Movement Volumes
@ RCA Blvd

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**851**			**69**			**3,926**			**0**	
TM Pk Hr Counts	167	835	0	0	0	69	0	2536	1269	0	0	0
% Turns	17%	83%	0%	0%	0%	100%	0%	67%	33%	0%	0%	0%
Calc. Pk Hr Volumes	142	709	0	0	0	69	0	2617	1309	0	0	0
Adjustments								644	-210			
Bal Pk Hr Volumes	**142**	**709**	**0**	**0**	**0**	**69**	**0**	**3261**	**1099**	**0**	**0**	**0**

Adjustments were made to achieve balance between upstream and downstream intersection volumes as well as reasonable split between movements

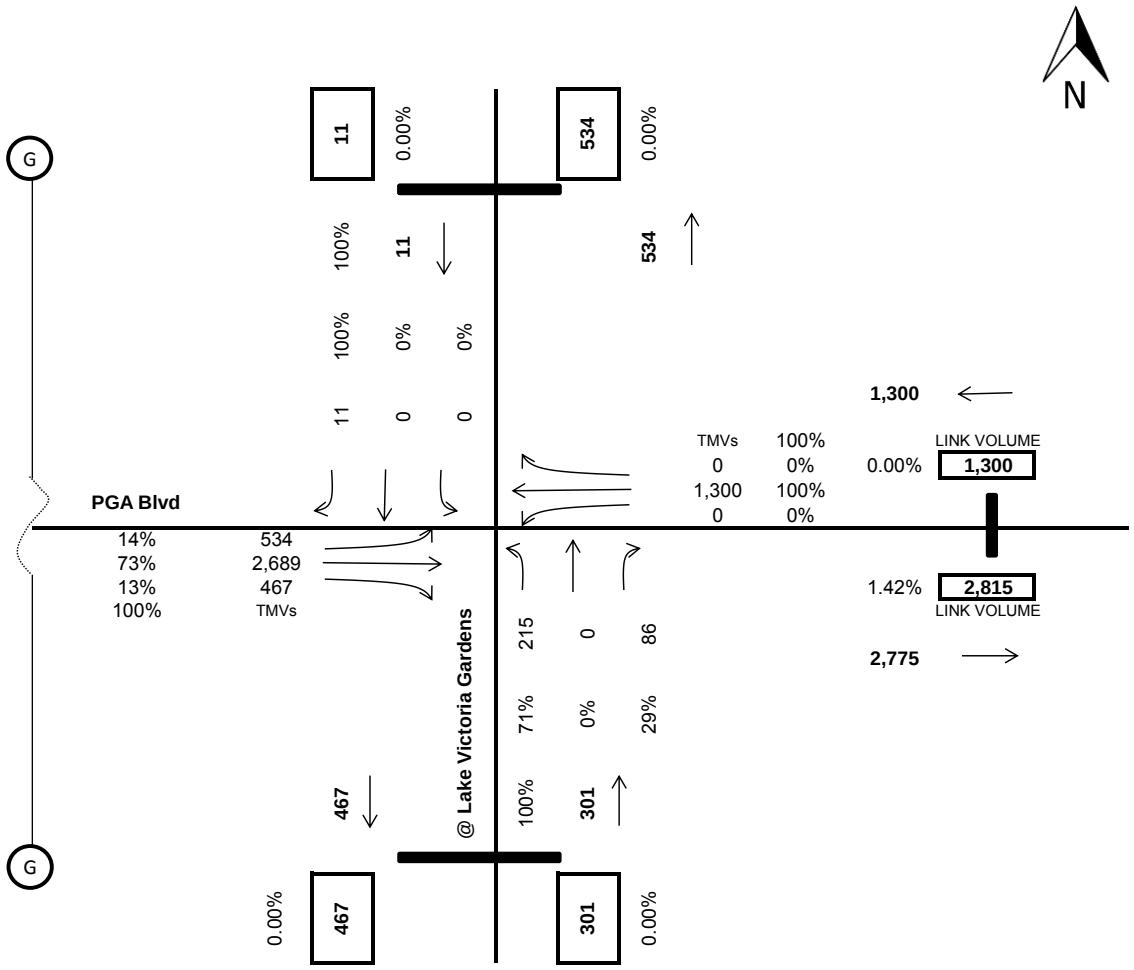
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard** **Turning Movement Volume Development** **2030 No Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **7 of 8** *Date:* 9/24/15

@ Lake Victoria Gardens



Turning Movement Volumes
@ Lake Victoria Gardens

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,300**			**301**			**3,838**			**11**	
TM Pk Hr Counts	0	1428	0	215	0	86	424	2114	368	0	0	11
% Turns	0%	100%	0%	71%	0%	29%	15%	73%	13%	0%	0%	100%
Calc. Pk Hr Volumes	0	1300	0	215	0	86	560	2792	486	0	0	11
Adjustments							-26	-103	-19			
Bal Pk Hr Volumes	**0**	**1300**	**0**	**215**	**0**	**86**	**534**	**2689**	**467**	**0**	**0**	**11**

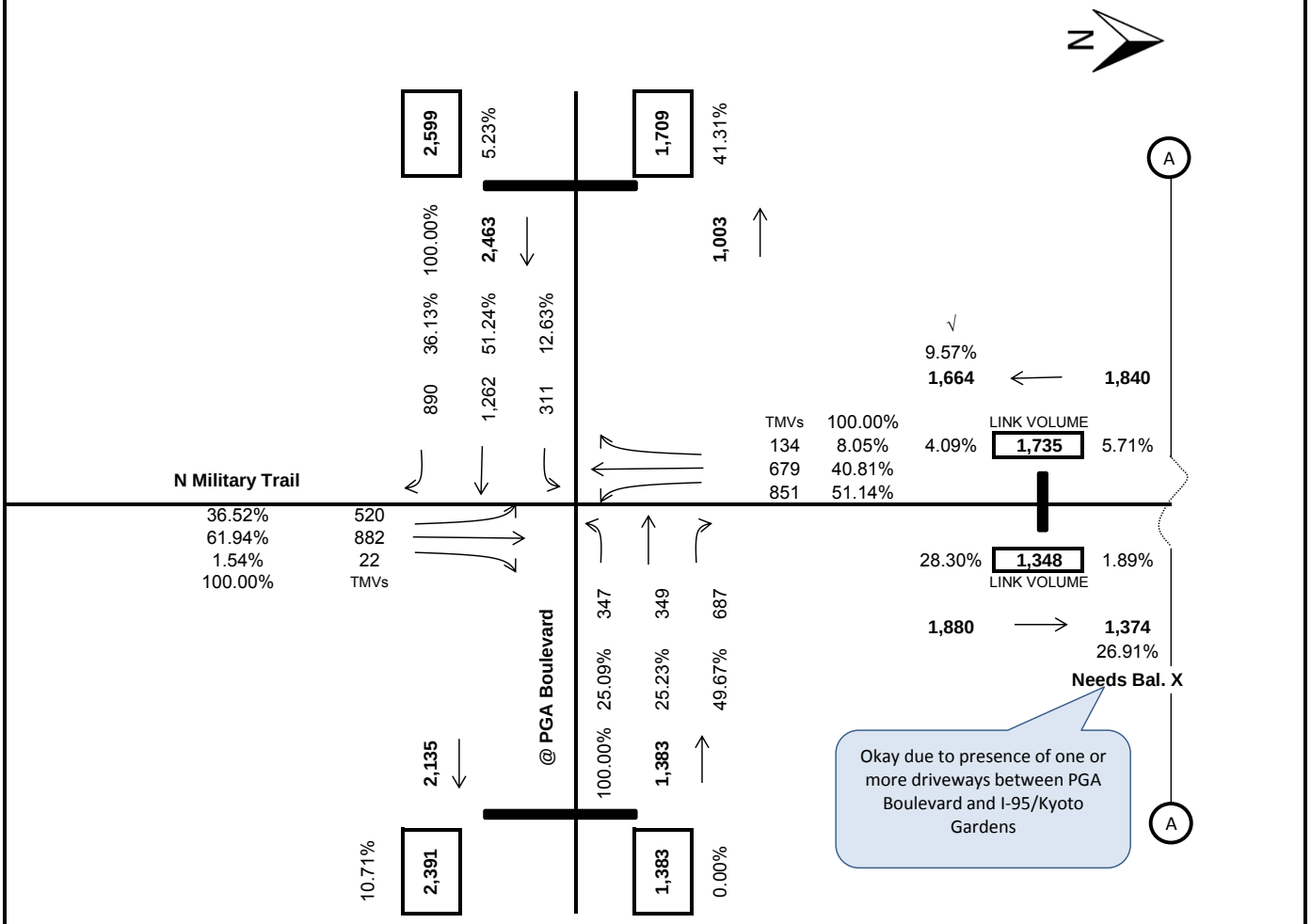
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66 →	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard** **Turning Movement Volume Development** **2030 No Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **8 of 8** *Date:* 9/24/15

@ PGA Boulevard



Turning Movement Volumes
@ PGA Boulevard

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes												
TM Pk Hr Counts												
% Turns												
Calc. Pk Hr Volumes												
Adjustments												
Bal Pk Hr Volumes	**851**	**679**	**134**	**347**	**349**	**687**	**520**	**882**	**22**	**311**	**1262**	**890**

For consistency, balanced peak hour volumes from major street arterial (aka PGA Boulevard) were used. See PGA Boulevard Arterial for details

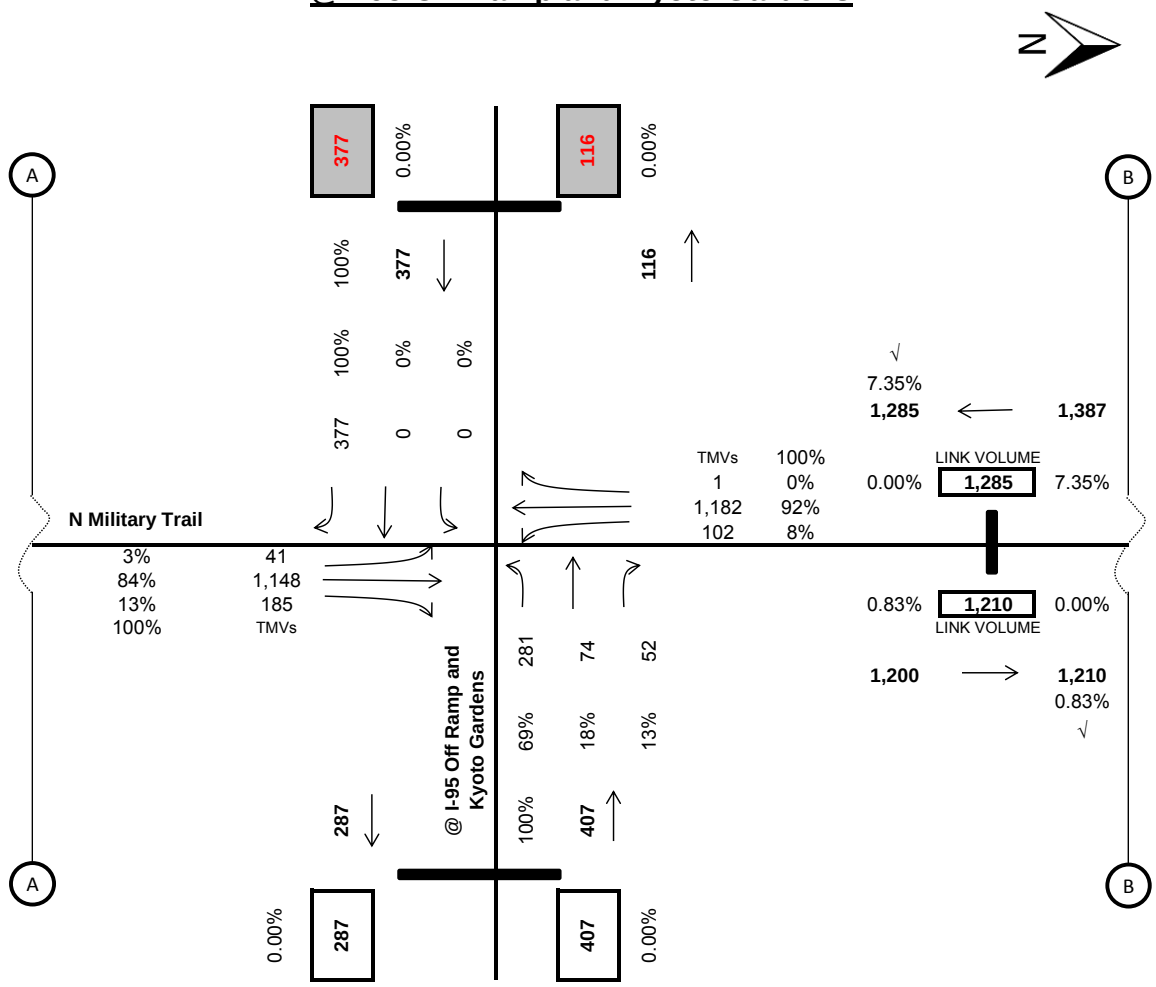
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66 →	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **N Military Trail** **Turning Movement Volume Development** **2030 No Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **1 of 4** *Date:* 9/24/15

@ I-95 Off Ramp and Kyoto Gardens



Turning Movement Volumes
@ I-95 Off Ramp and Kyoto

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**1,285**			**407**			**1,348**			**377**		
TM Pk Hr Counts	255	2943	2	281	74	52	33	2557	413	0	0	72
% Turns	8%	92%	0%	69%	18%	13%	1%	85%	14%	0%	0%	100%
Calc. Pk Hr Volumes	102	1182	1	281	74	52	15	1148	185	0	0	377
Adjustments							26					
Bal Pk Hr Volumes	**102**	**1182**	**1**	**281**	**74**	**52**	**41**	**1148**	**185**	**0**	**0**	**377**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 → — Turning Movement Volumes (Balanced)

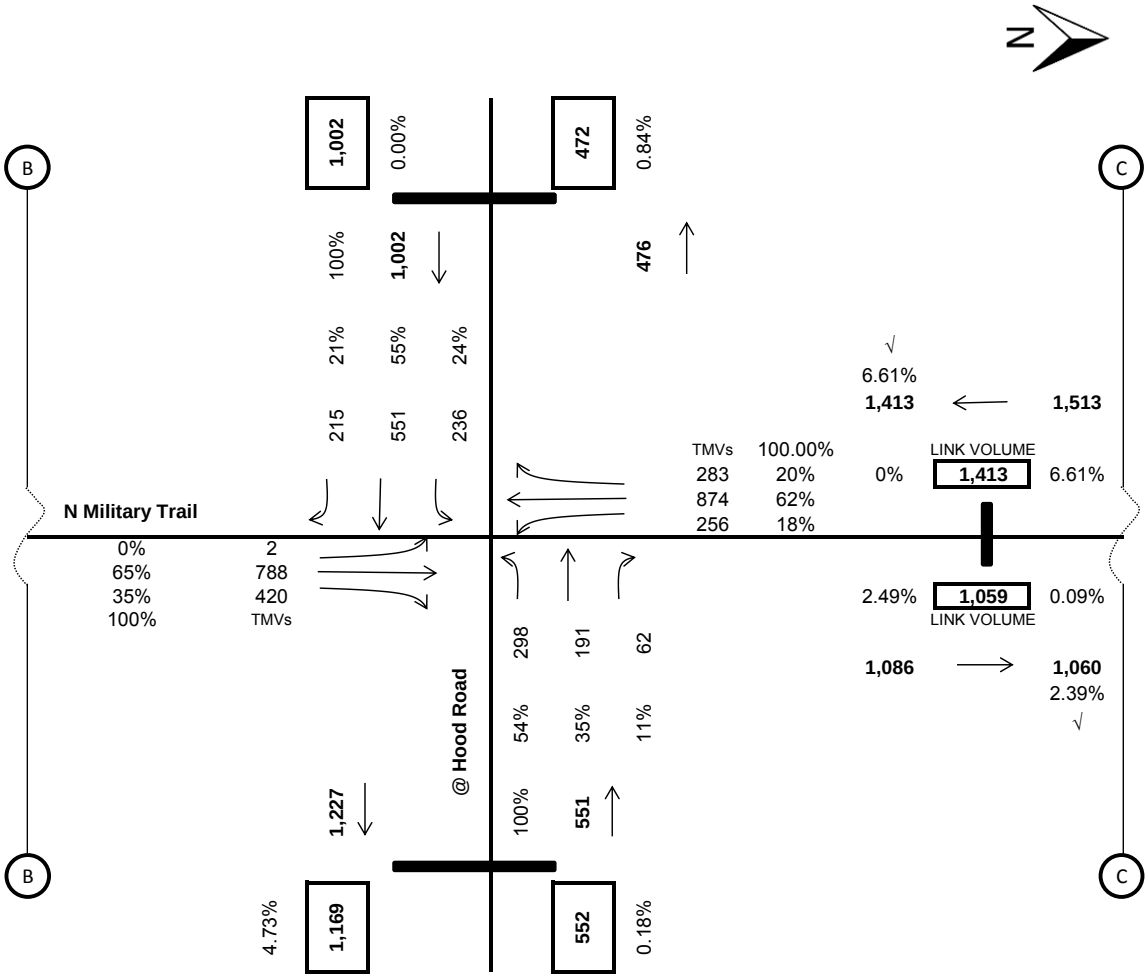
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name:	Exhibit Name:		
SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	N Military Trail Turning Movement Volume Development 2030 No Build AM Peak Hour	Exhibit No:	TBD
		Page No:	2 of 4
		Date:	9/24/15

@ Hood Road



Turning Movement Volumes
@ Hood Road

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**1,413**			**552**			**1,210**			**1,002**		
TM Pk Hr Counts	441	1506	487	835	536	175	4	1427	761	429	1004	392
% Turns	18%	62%	20%	54%	35%	11%	0%	65%	35%	24%	55%	21%
Calc. Pk Hr Volumes	256	874	283	298	191	62	2	788	420	236	551	215
Adjustments												
Bal Pk Hr Volumes	**256**	**874**	**283**	**298**	**191**	**62**	**2**	**788**	**420**	**236**	**551**	**215**

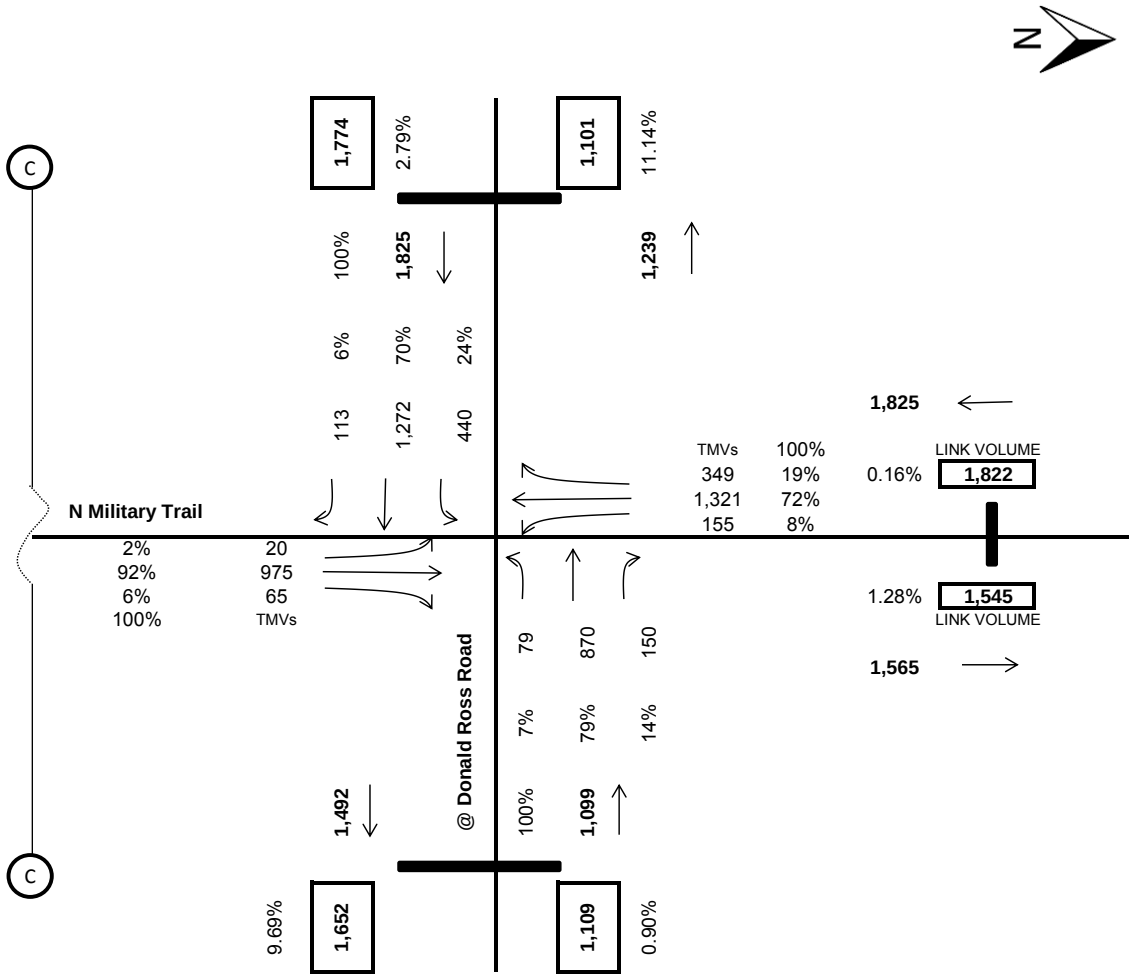
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **N Military Trail** **Turning Movement Volume Development** **2030 No Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **3 of 4** *Date:* 9/24/15

@ Donald Ross Road



Turning Movement Volumes
@ Donald Ross Road

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,822**			**1,109**			**1,059**			**1,774**	
TM Pk Hr Counts	224	1983	529	85	952	162	35	1600	102	421	1169	108
% Turns	8%	72%	19%	7%	79%	14%	2%	92%	6%	25%	69%	6%
Calc. Pk Hr Volumes	149	1321	352	79	881	150	21	975	62	440	1221	113
Adjustments	6		-3		-11		-1		3		51	
Bal Pk Hr Volumes	**155**	**1321**	**349**	**79**	**870**	**150**	**20**	**975**	**65**	**440**	**1272**	**113**

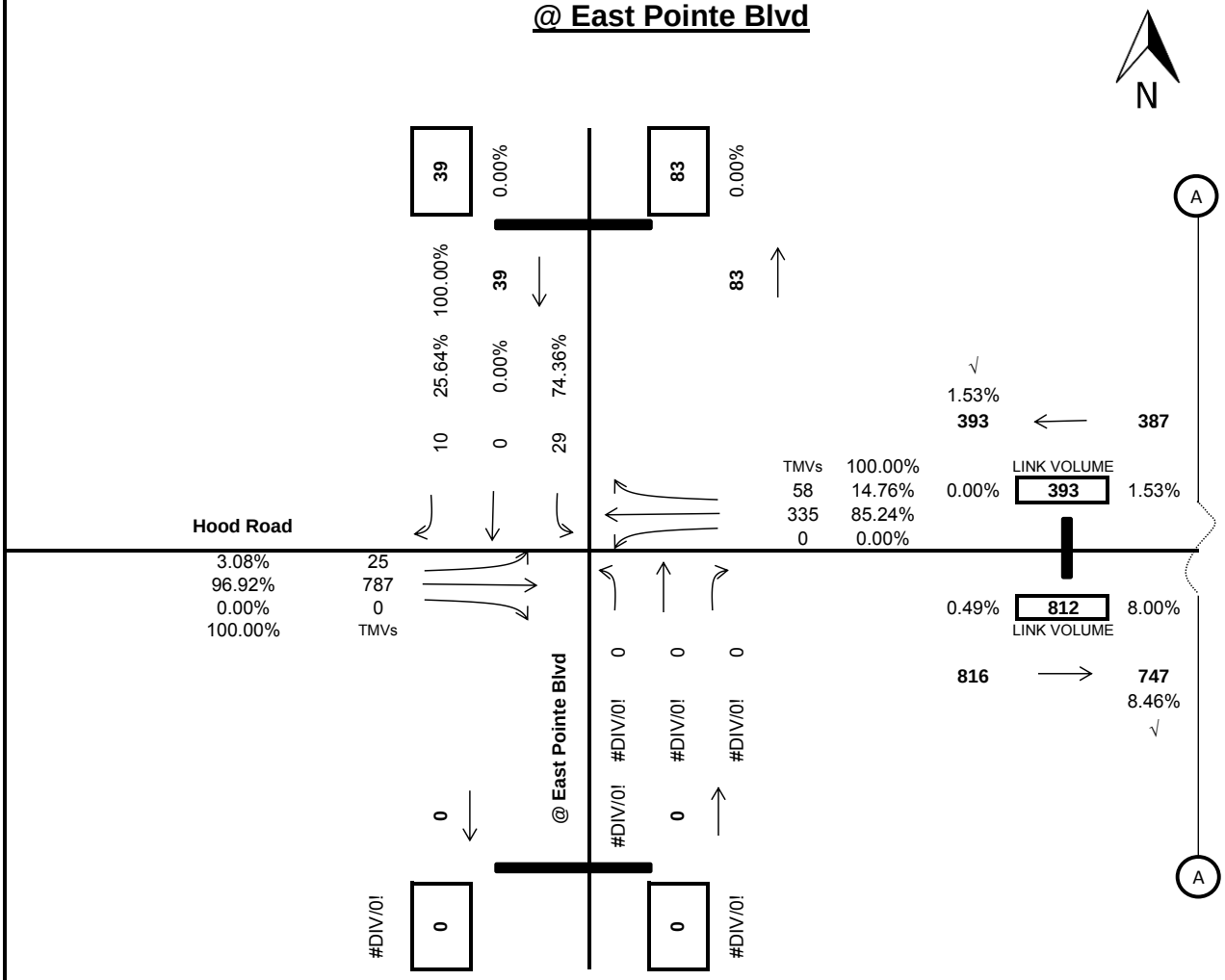
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **N Military Trail** **Turning Movement Volume Development** **2030 No Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **4 of 4** *Date:* 9/24/15

@ East Pointe Blvd



Turning Movement Volumes
@ East Pointe Blvd

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**393**			**0**			**812**			**39**	
TM Pk Hr Counts	0	175	30	0	0	0	10	310	0	29	0	10
% Turns	0%	85%	15%	0%	0%	0%	3%	97%	0%	74%	0%	26%
Calc. Pk Hr Volumes	0	335	58	0	0	0	25	787	0	29	0	10
Adjustments												
Bal Pk Hr Volumes	**0**	**335**	**58**	**0**	**0**	**0**	**25**	**787**	**0**	**29**	**0**	**10**

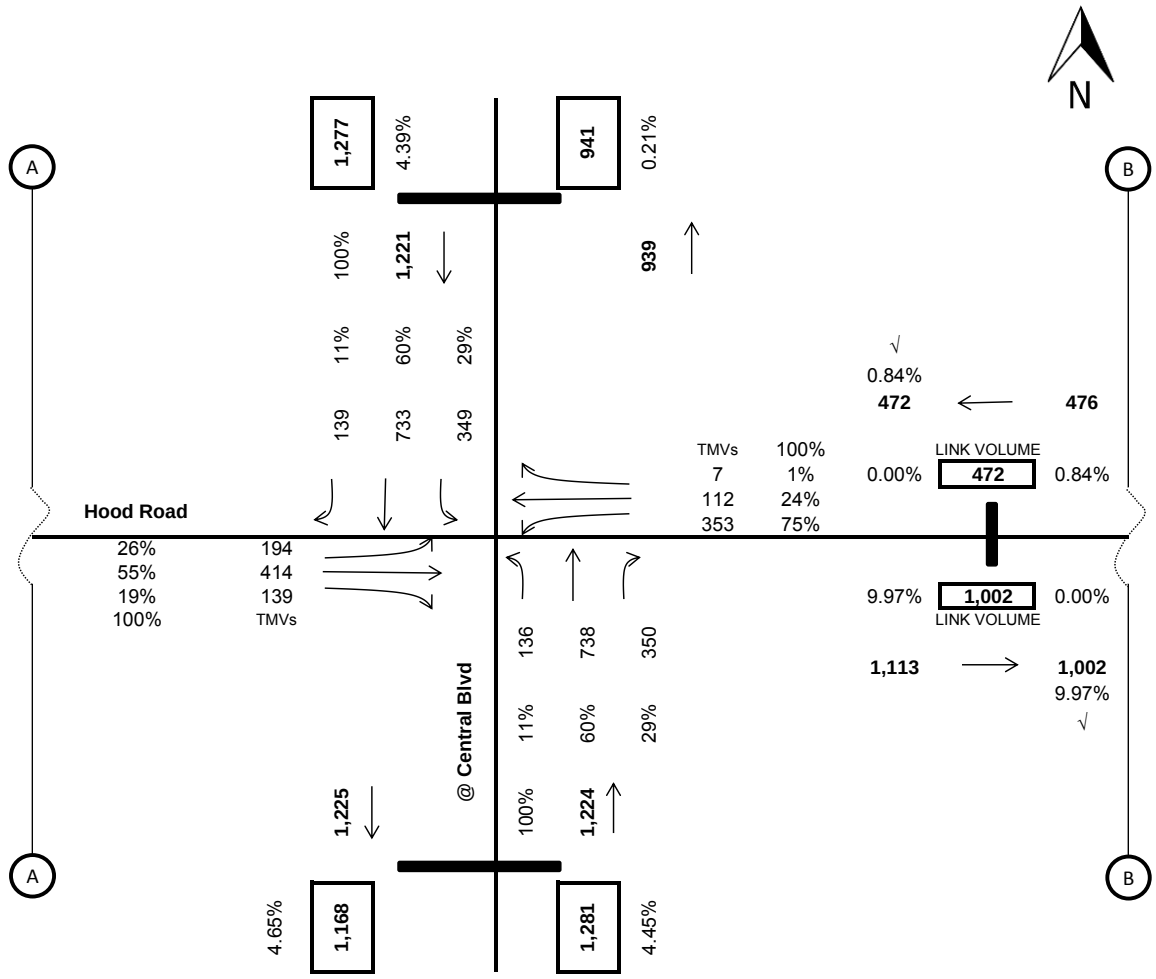
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A / A	Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Hood Road** **Turning Movement Volume Development** **2030 No Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **1 of 3** *Date:* 9/24/15

@ Central Blvd



Turning Movement Volumes
@ Central Blvd

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes												
TM Pk Hr Counts												
% Turns												
Calc. Pk Hr Volumes												
Adjustments												
Bal Pk Hr Volumes	**353**	**112**	**7**	**136**	**738**	**350**	**194**	**414**	**139**	**349**	**733**	**139**

LEGEND

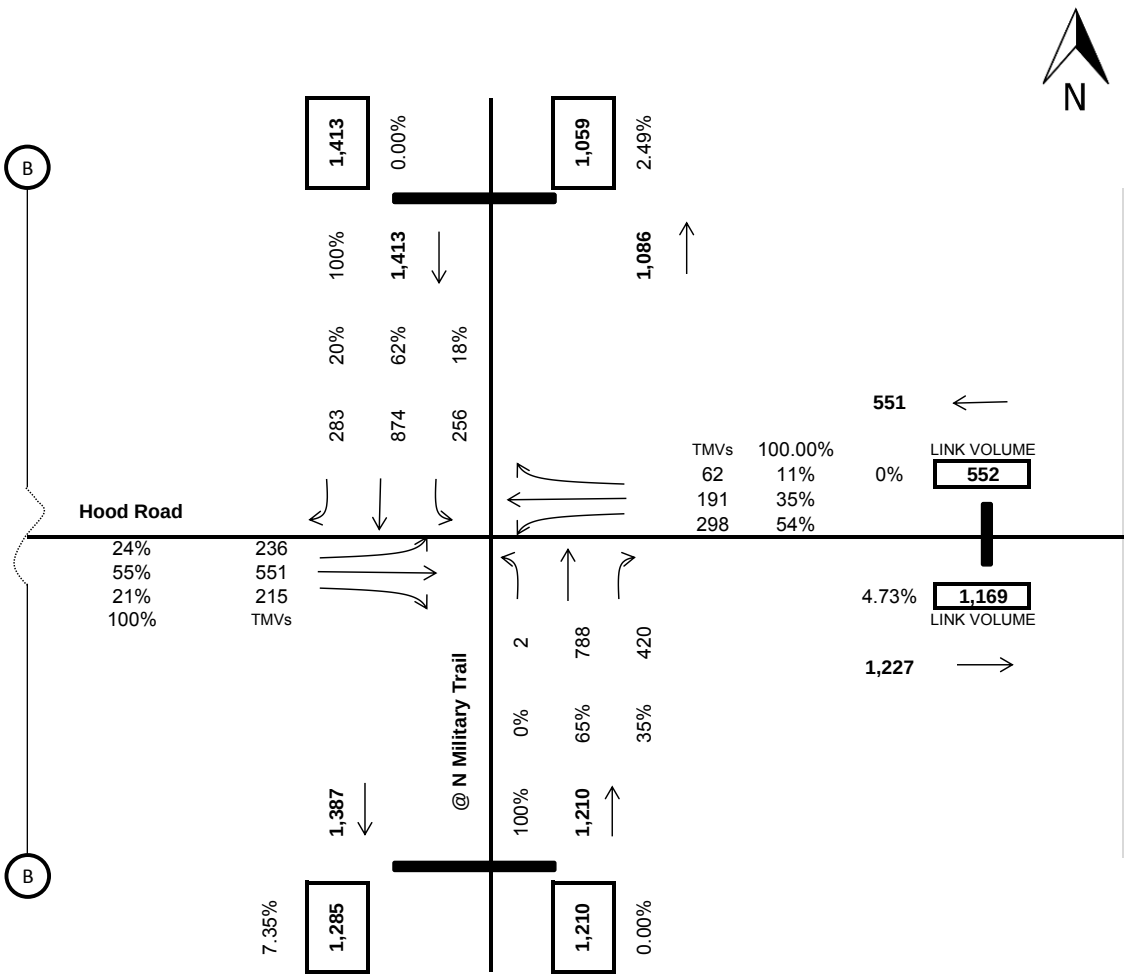
1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66 →	Turning Movement Volumes (Balanced)
A	Match Line
A	

For consistency, balanced peak hour volumes from major street arterial (aka Central Boulevard) were used. See Central Boulevard Arterial for details

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Hood Road** **Turning Movement Volume Development** **2030 No Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **2 of 3** *Date:* 9/24/15

@ N Military Trail



Turning Movement Volumes
@ N Military Trail

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes												
TM Pk Hr Counts												
% Turns												
Calc. Pk Hr Volumes												
Adjustments												
Bal Pk Hr Volumes	**298**	**191**	**62**	**2**	**788**	**420**	**236**	**551**	**215**	**256**	**874**	**283**

LEGEND

1,500 Control Volumes (Peak Hour)*

1,300 Link Volumes (Peak Hour)

66 Turning Movement Volumes (Balanced)

A Match Line

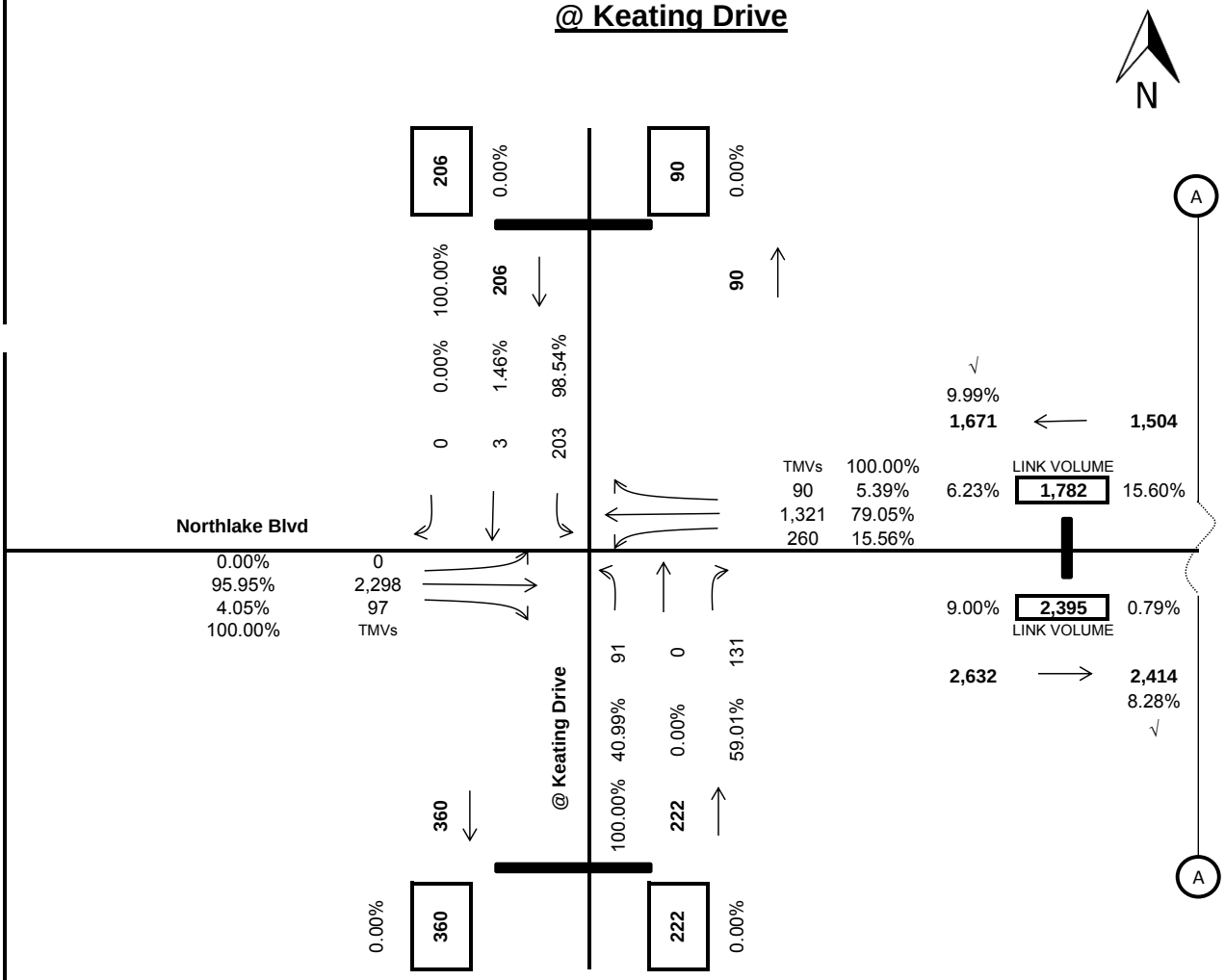
A

For consistency, balanced peak hour volumes from major street arterial (aka N Military Trail) were used. See N Military Trail Arterial for details

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name:	Exhibit Name:	
SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	**Hood Road** **Turning Movement Volume Development** **2030 No Build AM Peak Hour**	Exhibit No: **TBD** Page No: **3 of 3** Date: 9/24/15

@ Keating Drive



Turning Movement Volumes
@ Keating Drive

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,782**			**222**			**2,395**			**206**	
TM Pk Hr Counts	270	1364	95	91	0	131	0	2804	118	203	3	0
% Turns	16%	79%	5%	41%	0%	59%	0%	96%	4%	99%	1%	0%
Calc. Pk Hr Volumes	278	1406	98	91	0	131	0	2298	97	203	3	0
Adjustments	-18	-85	-8									
Bal Pk Hr Volumes	**260**	**1321**	**90**	**91**	**0**	**131**	**0**	**2298**	**97**	**203**	**3**	**0**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

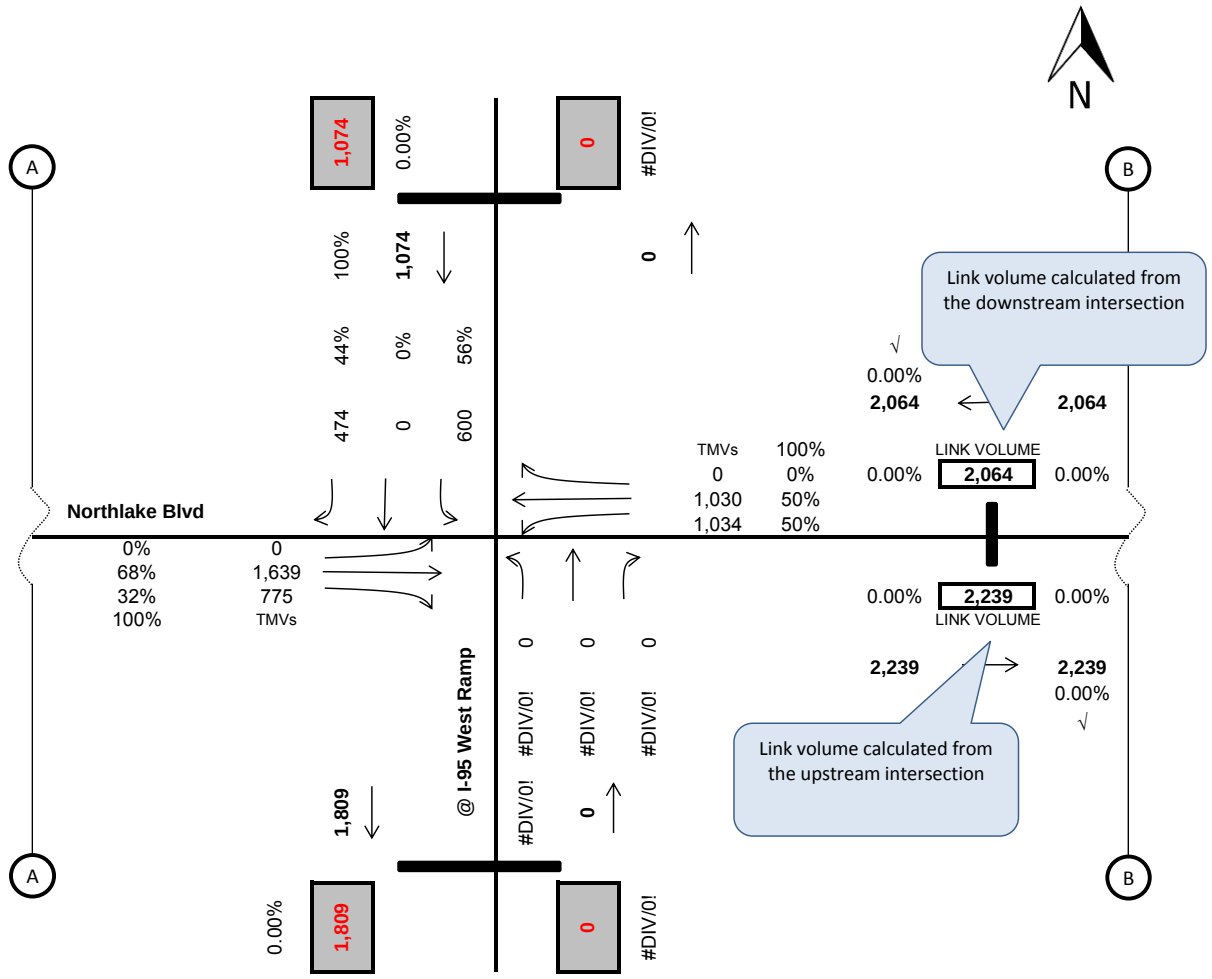
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Northlake Boulevard** **Turning Movement Volume Development** **2030 No Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **1 of 5** *Date:* 9/24/15

@ I-95 West Ramp



Turning Movement Volumes
@ I-95 West Ramp

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**2,064**			**0**			**2,395**			**1,074**		
TM Pk Hr Counts	897	940	0	0	0	0	0	2148	990	997	0	789
% Turns	49%	51%	0%	0%	0%	0%	0%	68%	32%	56%	0%	44%
Calc. Pk Hr Volumes	1008	1056	0	0	0	0	0	1639	756	600	0	474
Adjustments	26	-26							19			
Bal Pk Hr Volumes	**1034**	**1030**	**0**	**0**	**0**	**0**	**0**	**1639**	**775**	**600**	**0**	**474**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

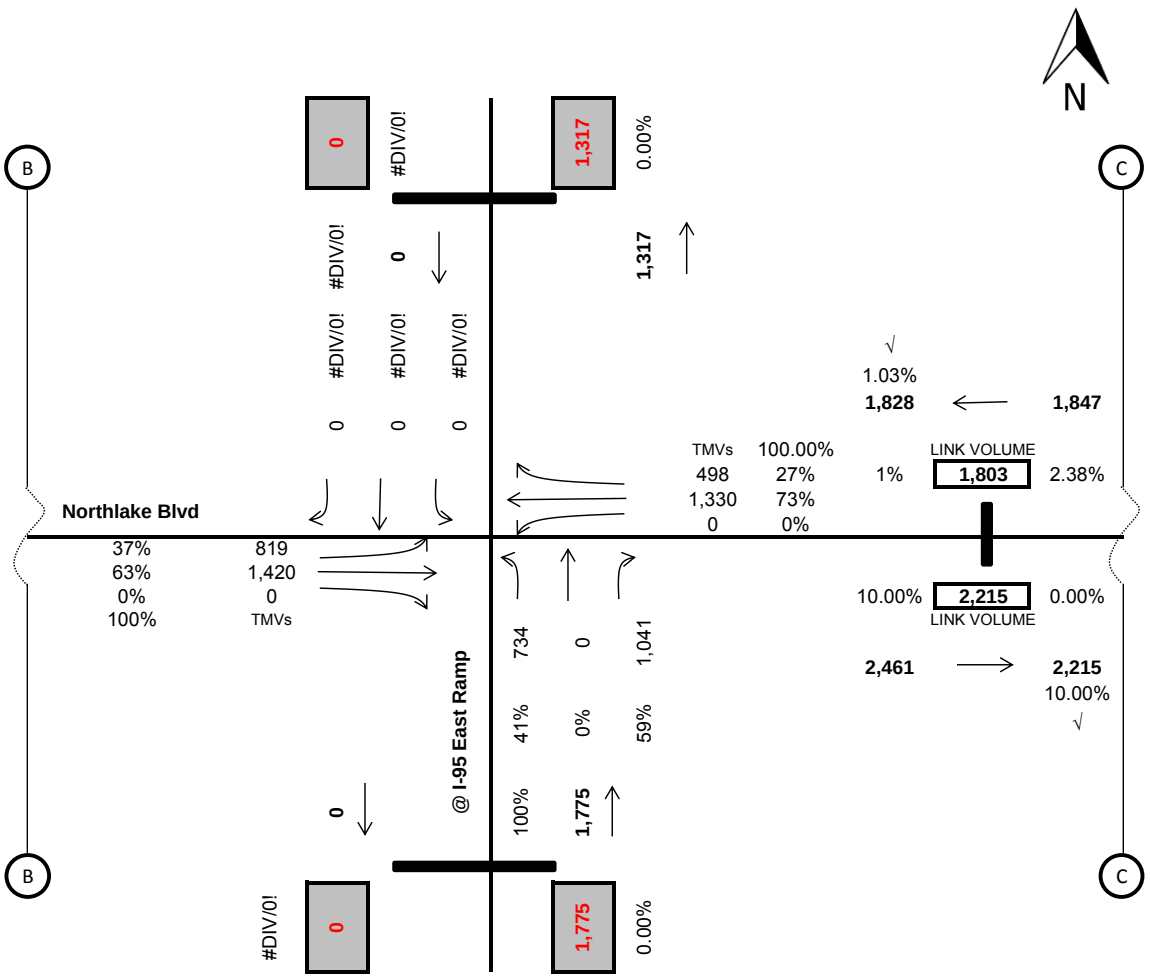
66 → — Turning Movement Volumes (Balanced)

A … A — Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Northlake Boulevard** **Turning Movement Volume Development** **2030 No Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **2 of 5** *Date:* 9/24/15

@ I-95 East Ramp



Turning Movement Volumes
@ I-95 East Ramp

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,803**			**1,775**			**2,239**			**0**	
TM Pk Hr Counts	0	1291	459	546	0	967	1094	2049	0	0	0	0
% Turns	0%	74%	26%	36%	0%	64%	35%	65%	0%	0%	0%	0%
Calc. Pk Hr Volumes	0	1330	473	641	0	1134	779	1460	0	0	0	0
Adjustments			25	93		-93	40	-40				
Bal Pk Hr Volumes	**0**	**1330**	**498**	**734**	**0**	**1041**	**819**	**1420**	**0**	**0**	**0**	**0**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

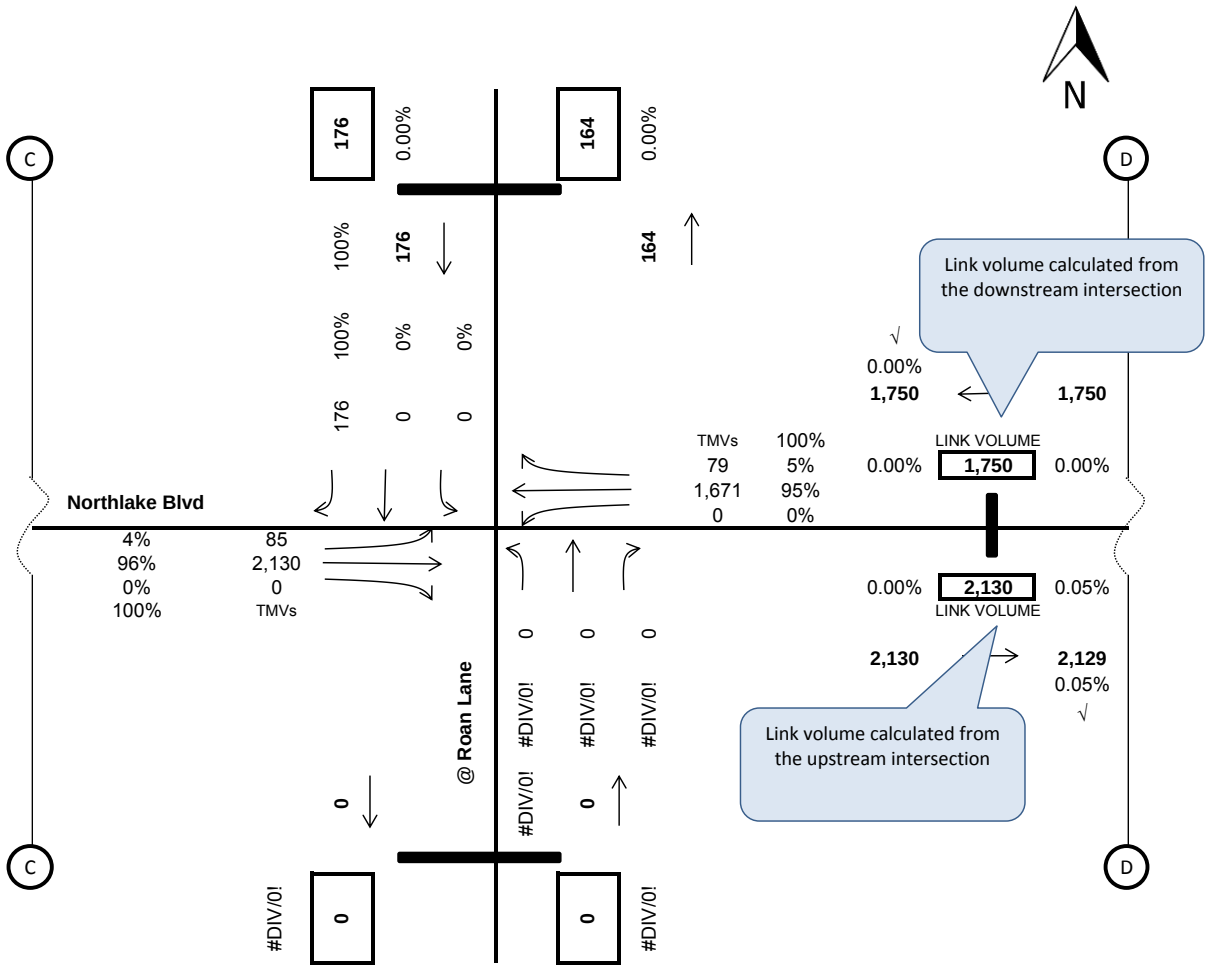
66 → — Turning Movement Volumes (Balanced)

A … A — Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Northlake Boulevard** **Turning Movement Volume Development** **2030 No Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **3 of 5** *Date:* 9/24/15

@ Roan Lane



Turning Movement Volumes
@ Roan Lane

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,750**			**0**			**2,215**			**176**	
TM Pk Hr Counts	0	1682	80	0	0	0	118	2967	0	0	0	176
% Turns	0%	95%	5%	0%	0%	0%	4%	96%	0%	0%	0%	100%
Calc. Pk Hr Volumes	0	1671	79	0	0	0	85	2130	0	0	0	176
Adjustments												
Bal Pk Hr Volumes	**0**	**1671**	**79**	**0**	**0**	**0**	**85**	**2130**	**0**	**0**	**0**	**176**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 → Turning Movement Volumes (Balanced)

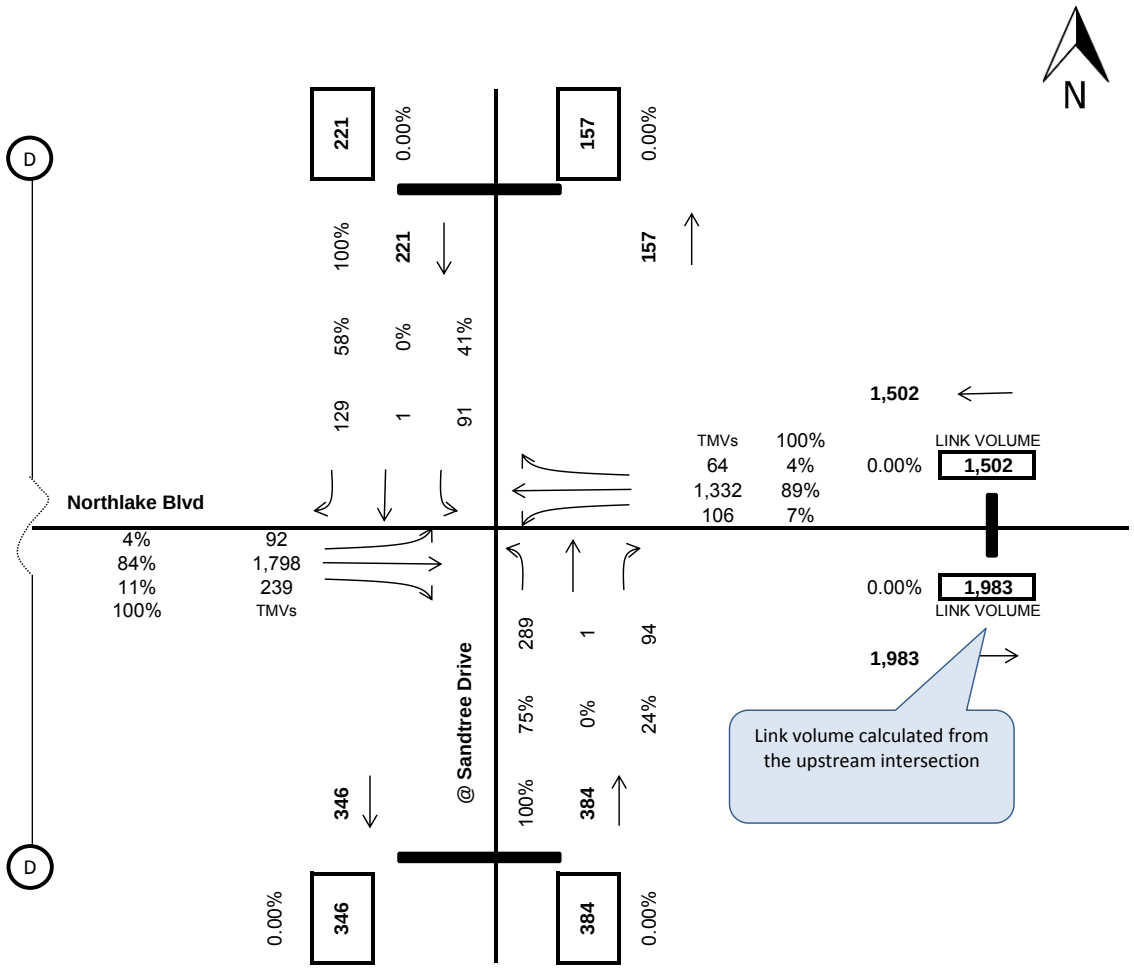
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Northlake Boulevard Turning Movement Volume Development 2030 No Build AM Peak Hour**	*Exhibit No:* **TBD**
		Page No: **4 of 5**
		Date: 9/24/15

@ Sandtree Drive



Turning Movement Volumes
@ Sandtree Drive

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,502**			**384**			**2,130**			**221**	
TM Pk Hr Counts	106	1332	64	289	1	94	131	2547	339	91	1	129
% Turns	7%	89%	4%	75%	0%	24%	4%	84%	11%	41%	0%	58%
Calc. Pk Hr Volumes	106	1332	64	289	1	94	92	1798	239	91	1	129
Adjustments												
Bal Pk Hr Volumes	**106**	**1332**	**64**	**289**	**1**	**94**	**92**	**1798**	**239**	**91**	**1**	**129**

LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A / A	Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

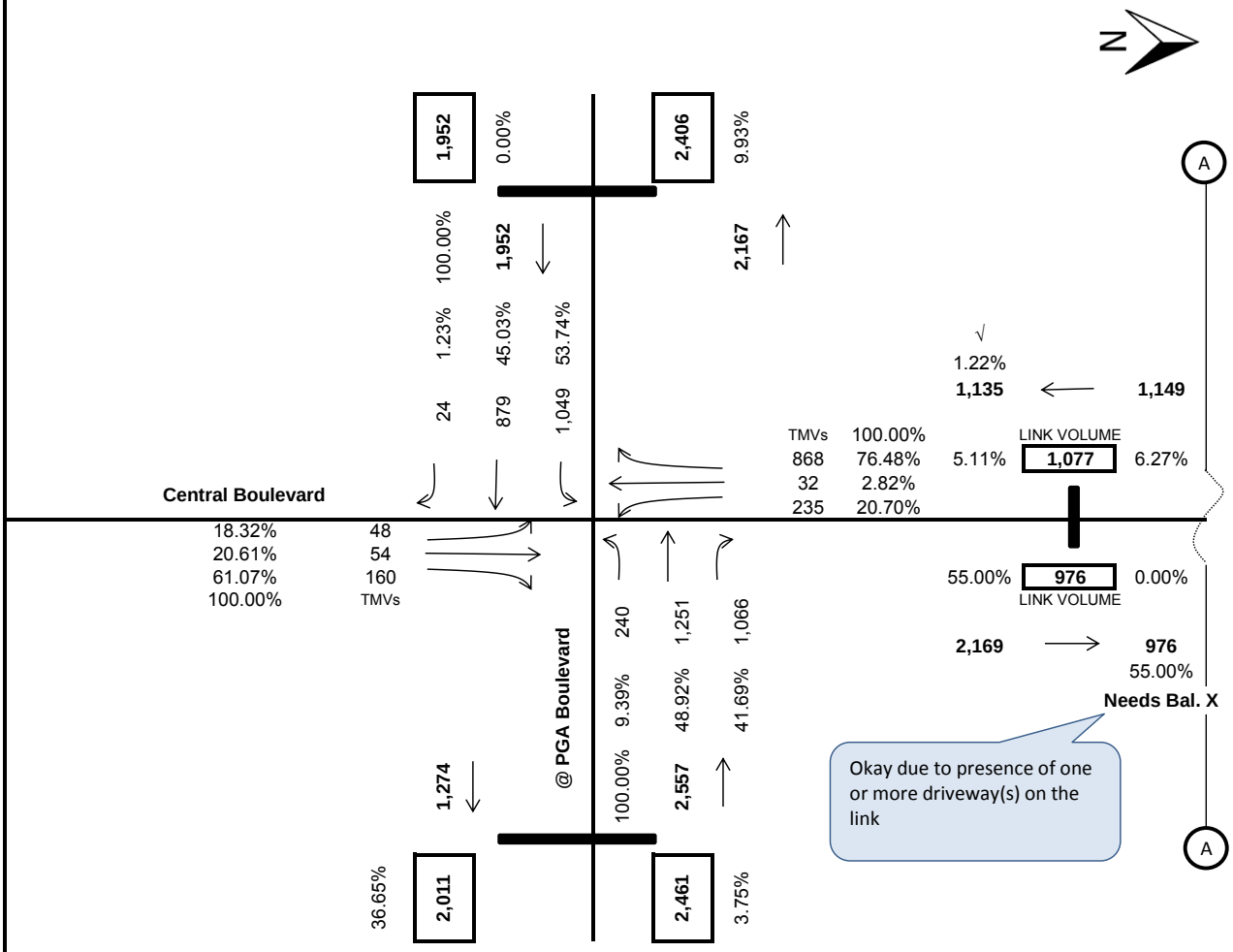
Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Northlake Boulevard Turning Movement Volume Development 2030 No Build AM Peak Hour**	*Exhibit No:* **TBD**
		Page No: **5 of 5**
		Date: 9/24/15

APPENDIX Z

BALANCED TURNING MOVEMENT DEVELOPMENT SHEETS

2030 NO BUILD PM PEAK HOUR

@ PGA Boulevard



Turning Movement Volumes
@ PGA Boulevard

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes												
TM Pk Hr Counts												
% Turns												
Calc. Pk Hr Volumes												
Adjustments												
Bal Pk Hr Volumes	**235**	**32**	**868**	**240**	**1251**	**1066**	**48**	**54**	**160**	**1049**	**879**	**24**

LEGEND

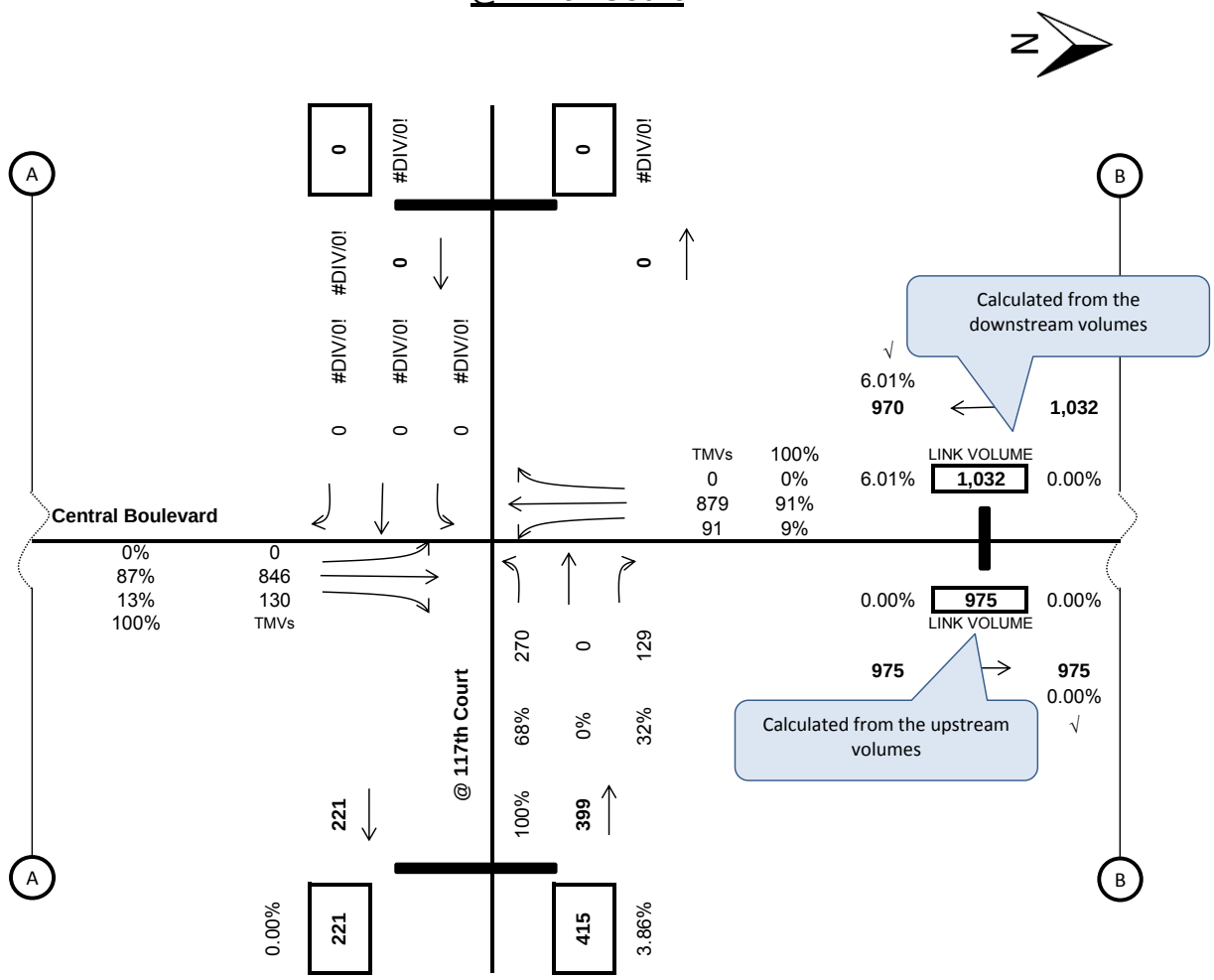
- **1,500** — Control Volumes (Peak Hour)*
- **1,300** — Link Volumes (Peak Hour)
- 66 — Turning Movement Volumes (Balanced)
- A — Match Line

For consistency, balanced peak hour volumes from major street arterial (aka PGA Boulevard) were used. See PGA Boulevard Arterial for details

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Central Boulevard Turning Movement Volume Development 2030 No Build PM Peak Hour**	*Exhibit No:* **TBD**
		Page No: **1 of 5**
		Date: 9/25/15

@ 117th Court



Turning Movement Volumes
@ 117th Court

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,032**			**415**			**976**			**0**	
TM Pk Hr Counts	146	1513	0	286	0	129	0	1897	292	0	0	0
% Turns	9%	91%	0%	69%	0%	31%	0%	87%	13%	0%	0%	0%
Calc. Pk Hr Volumes	91	941	0	286	0	129	0	846	130	0	0	0
Adjustments		-62		-16								
Bal Pk Hr Volumes	**91**	**879**	**0**	**270**	**0**	**129**	**0**	**846**	**130**	**0**	**0**	**0**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

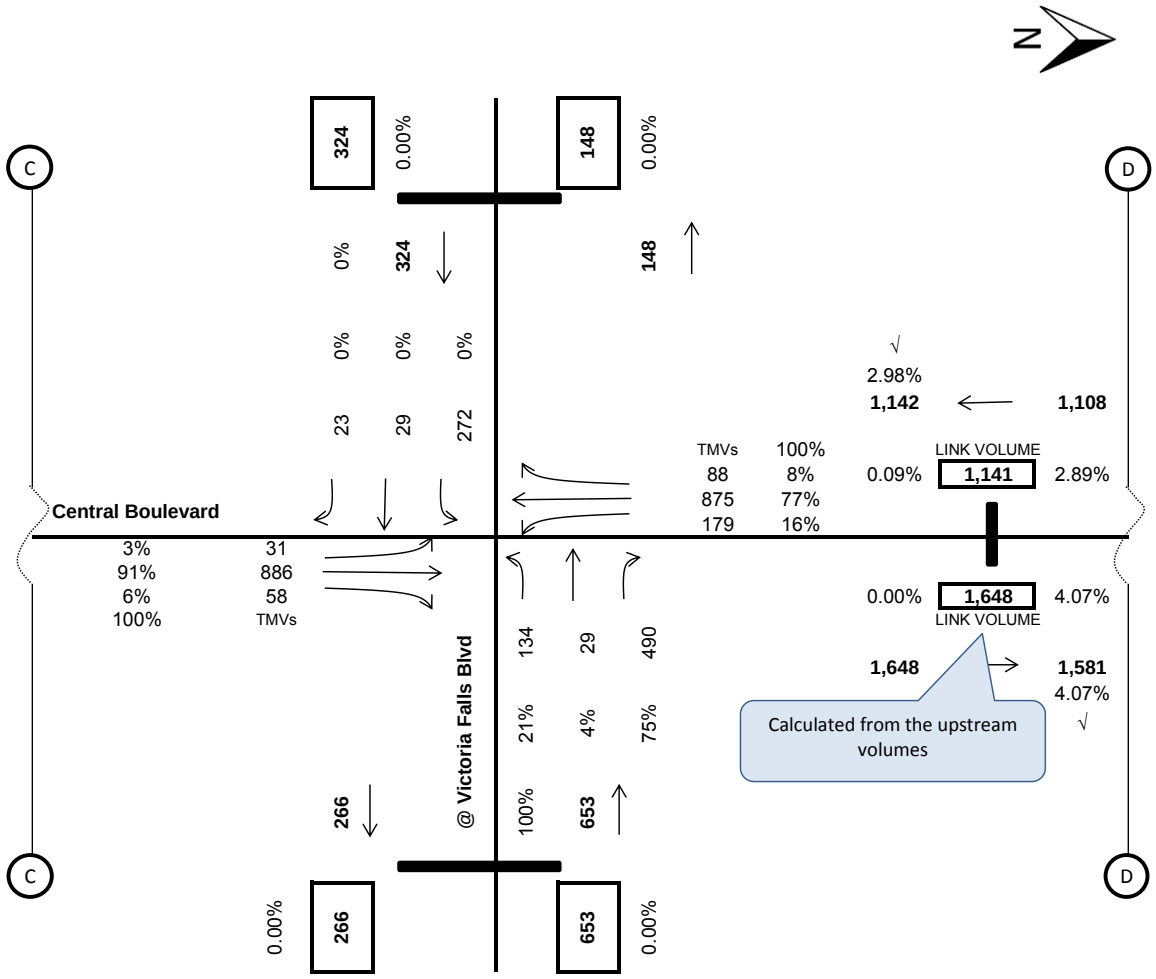
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Central Boulevard** **Turning Movement Volume Development** **2030 No Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **2 of 5** *Date:* 9/25/15

@ Victoria Falls Blvd



Turning Movement Volumes
@ Victoria Falls Blvd

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**1,141**			**653**			**975**			**324**		
TM Pk Hr Counts	323	1582	159	134	29	490	67	1933	126	272	30	22
% Turns	16%	77%	8%	21%	4%	75%	3%	91%	6%	84%	9%	7%
Calc. Pk Hr Volumes	179	875	88	134	29	490	31	886	58	272	29	23
Adjustments												
Bal Pk Hr Volumes	**179**	**875**	**88**	**134**	**29**	**490**	**31**	**886**	**58**	**272**	**29**	**23**

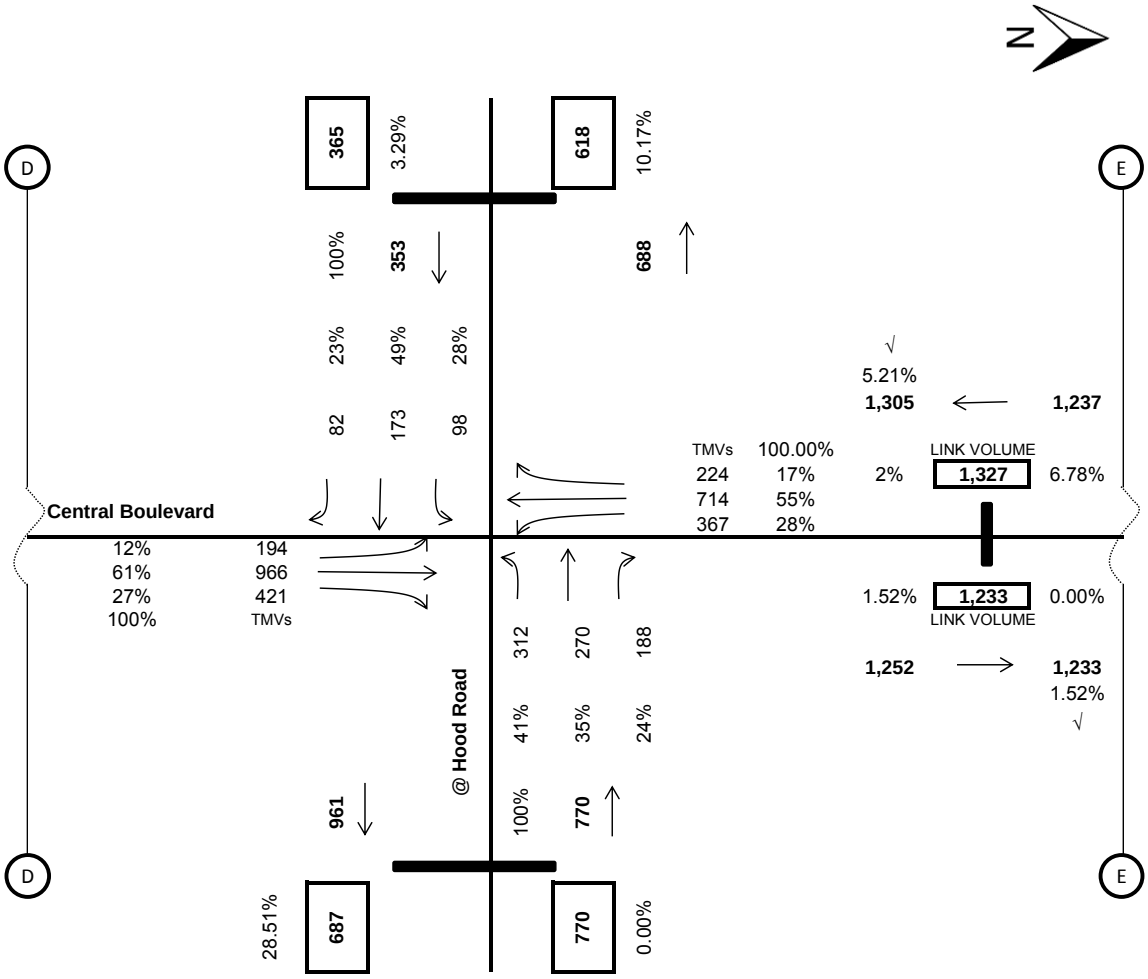
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A / A	Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Central Boulevard** **Turning Movement Volume Development** **2030 No Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **3 of 5** *Date:* 9/25/15

@ Hood Road



Turning Movement Volumes
@ Hood Road

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,327**			**770**			**1,648**			**365**	
TM Pk Hr Counts	555	1019	319	711	614	427	307	1418	700	207	392	174
% Turns	29%	54%	17%	41%	35%	24%	13%	58%	29%	27%	51%	23%
Calc. Pk Hr Volumes	389	714	224	312	270	188	209	964	476	98	185	82
Adjustments	-22						-15	2	-55		-12	
Bal Pk Hr Volumes	**367**	**714**	**224**	**312**	**270**	**188**	**194**	**966**	**421**	**98**	**173**	**82**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

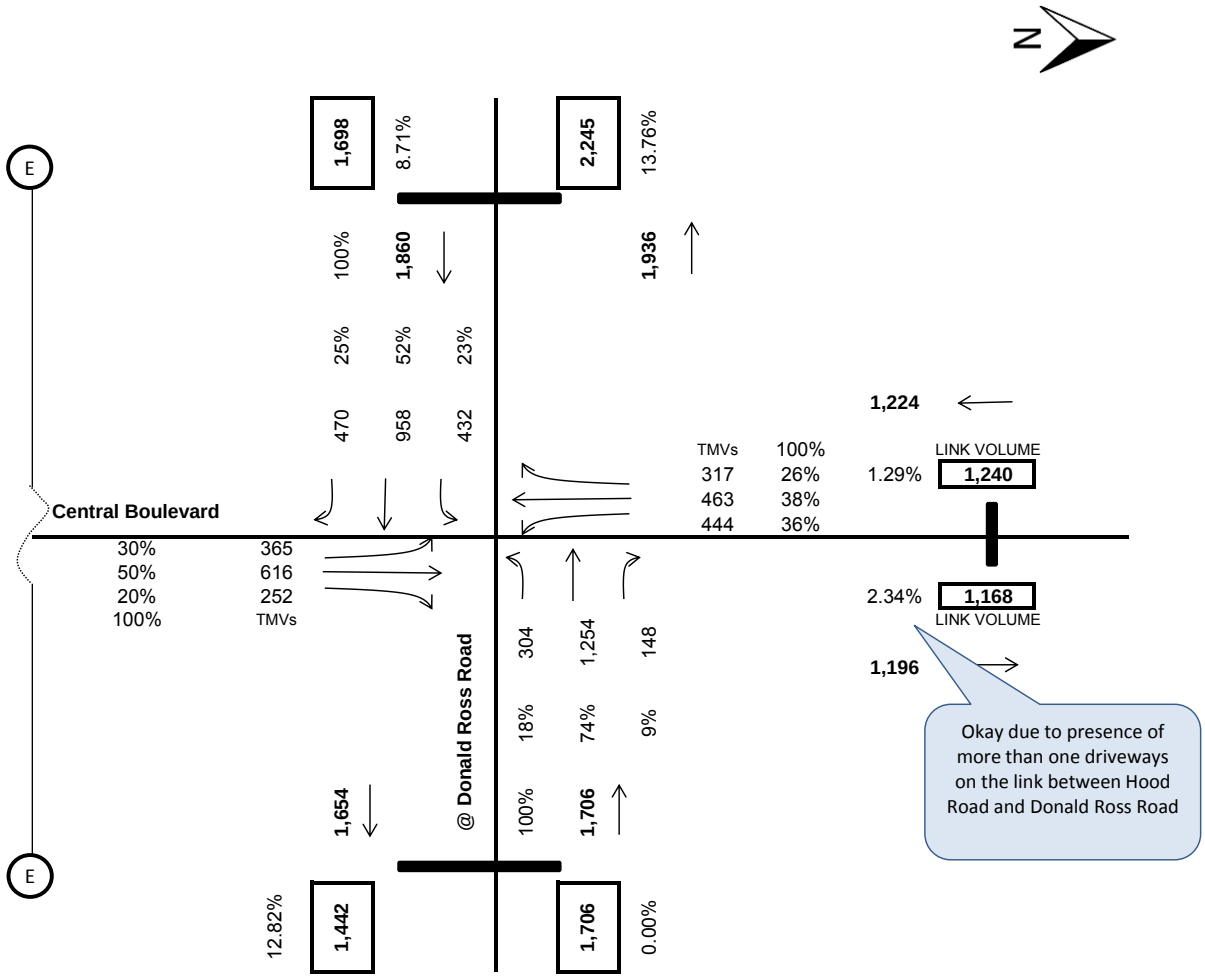
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name:	Exhibit Name:		
SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	**Central Boulevard** **Turning Movement Volume Development** **2030 No Build PM Peak Hour**	*Exhibit No:*	**TBD**
		Page No:	**4 of 5**
		Date:	9/25/15

@ Donald Ross Road



Turning Movement Volumes
@ Donald Ross Road

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**1,240**			**1,706**			**1,233**			**1,698**		
TM Pk Hr Counts	194	243	150	296	1219	144	197	332	136	584	1053	661
% Turns	33%	41%	26%	18%	73%	9%	30%	50%	20%	25%	46%	29%
Calc. Pk Hr Volumes	410	513	317	304	1254	148	365	616	252	432	778	488
Adjustments	34	-50									180	-18
Bal Pk Hr Volumes	**444**	**463**	**317**	**304**	**1254**	**148**	**365**	**616**	**252**	**432**	**958**	**470**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

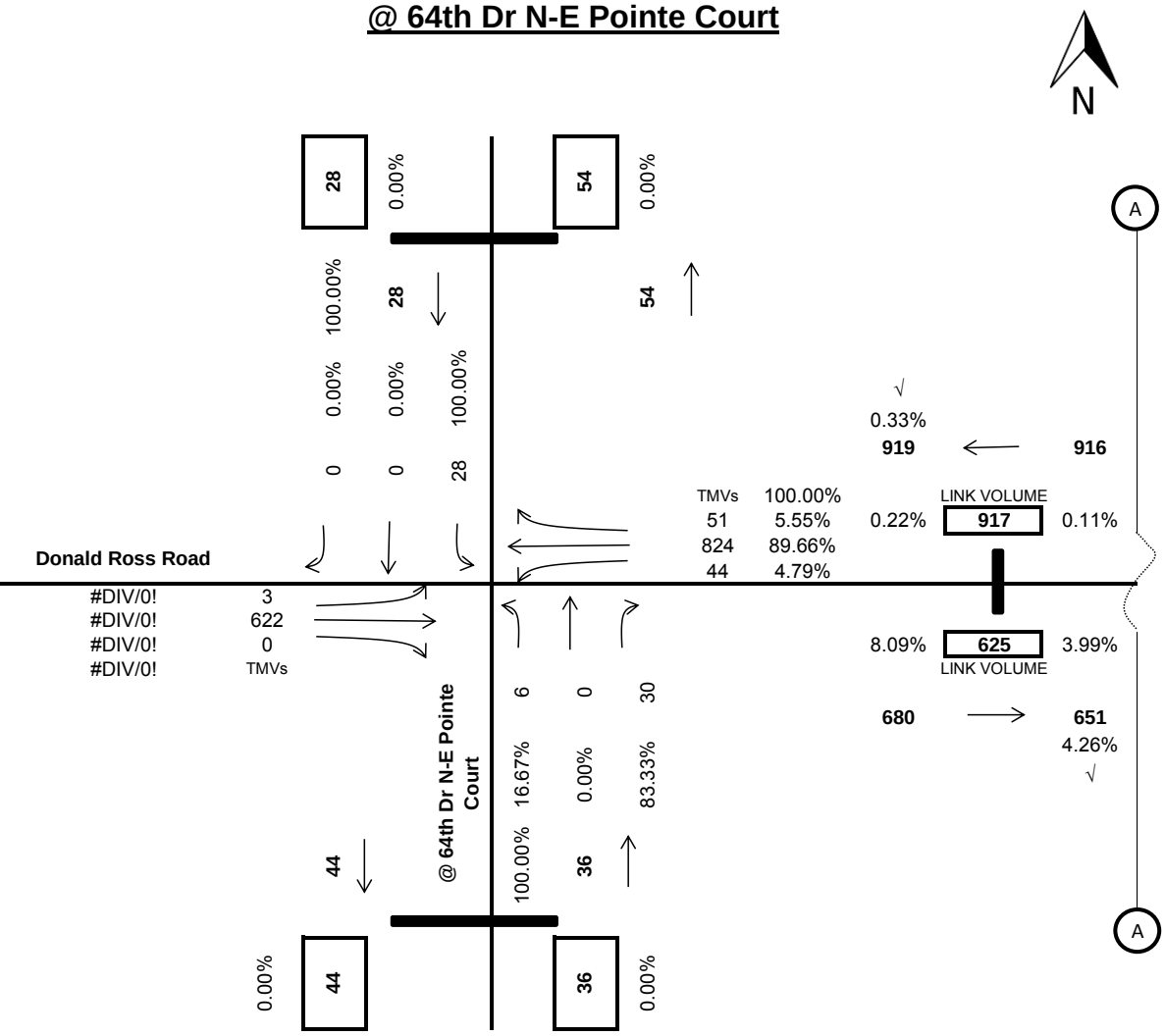
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Central Boulevard** **Turning Movement Volume Development** **2030 No Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **5 of 5** *Date:* 9/25/15

@ 64th Dr N-E Pointe Court



Turning Movement Volumes
@ 64th Dr N-E Pointe Court

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**917**			**36**			**625**			**28**	
TM Pk Hr Counts	39	775	48	6	0	30	3	592	0	28	0	0
% Turns	5%	90%	6%	17%	0%	83%	1%	99%	0%	100%	0%	0%
Calc. Pk Hr Volumes	44	824	51	6	0	30	3	622	0	28	0	0
Adjustments												
Bal Pk Hr Volumes	**44**	**824**	**51**	**6**	**0**	**30**	**3**	**622**	**0**	**28**	**0**	**0**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 → — Turning Movement Volumes (Balanced)

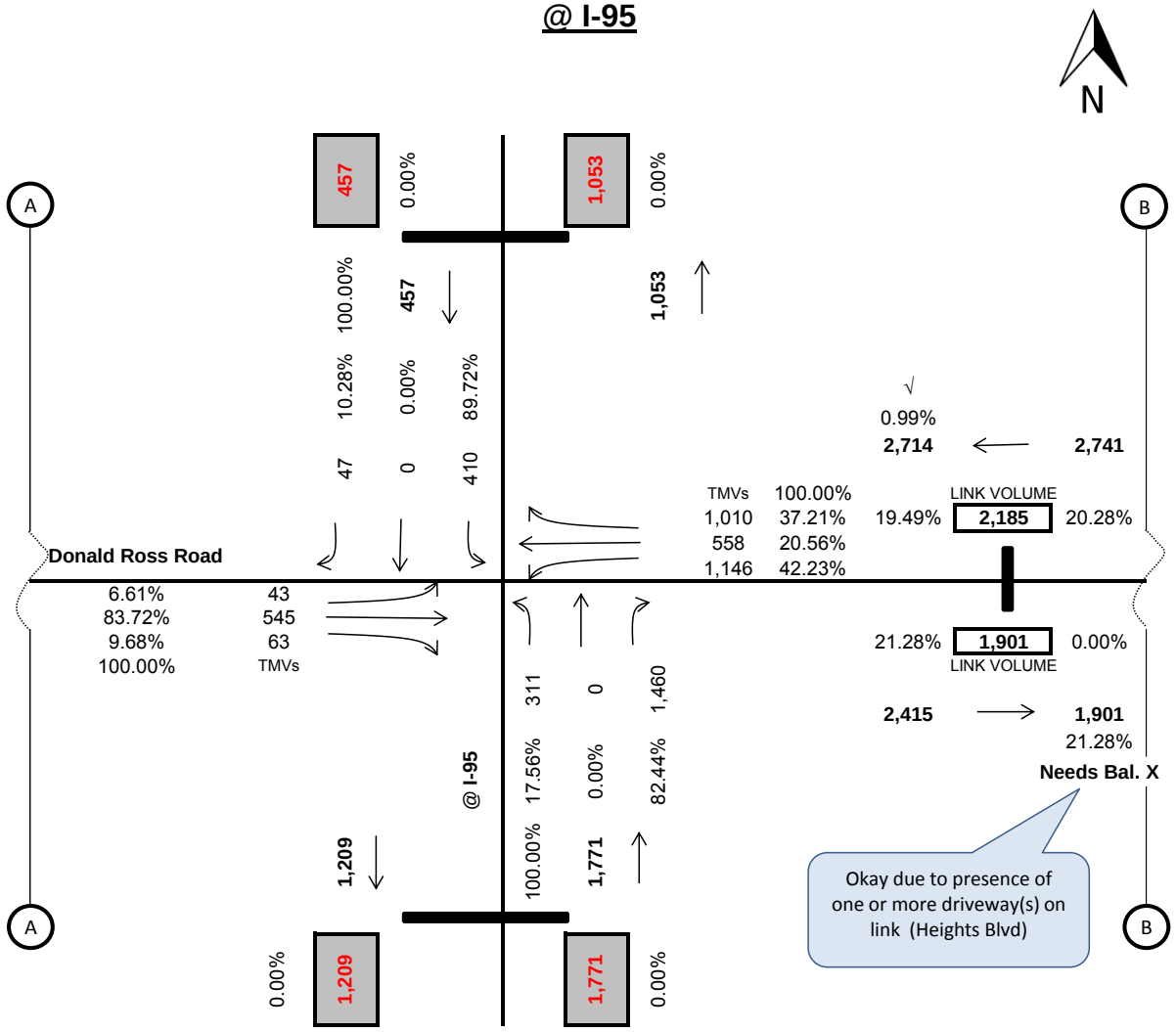
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413655-1-22-01	*Exhibit Name:* **Donald Ross Road** **Turning Movement Volume Development** **2030 No Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **1 of 5** *Date:* 9/25/15

@ I-95



Turning Movement Volumes
@ I-95

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**2,185**			**1,771**			**625**			**457**	
TM Pk Hr Counts	1484	743	681	333	0	1563	42	1113	122	705	0	80
% Turns	51%	26%	23%	18%	0%	82%	3%	87%	10%	90%	0%	10%
Calc. Pk Hr Volumes	1115	558	512	311	0	1460	21	545	60	410	0	47
Adjustments	31		498		0		22		3			
Bal Pk Hr Volumes	**1146**	**558**	**1010**	**311**	**0**	**1460**	**43**	**545**	**63**	**410**	**0**	**47**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

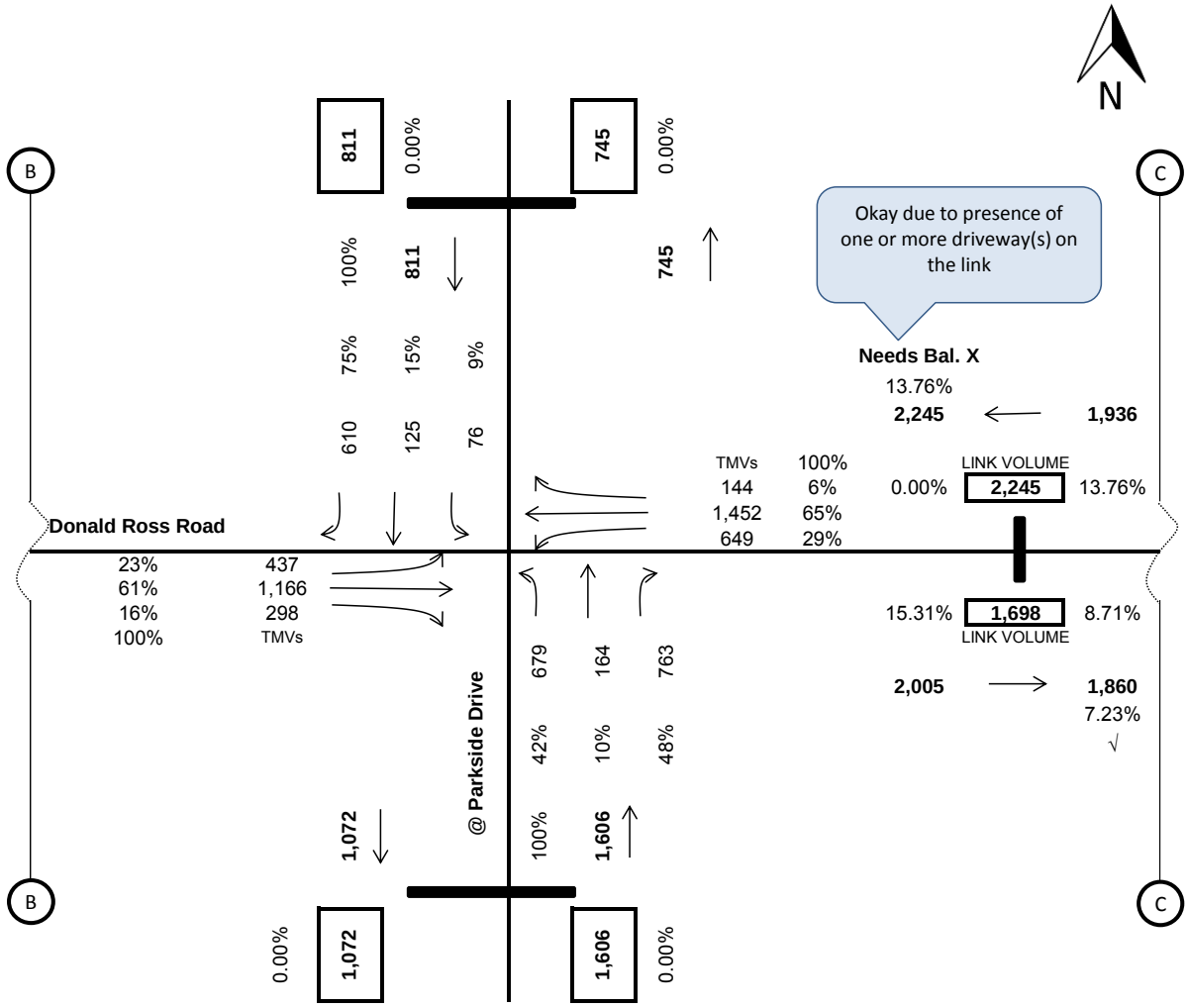
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 417265-1-22-01	*Exhibit Name:* **Donald Ross Road** **Turning Movement Volume Development** **2030 No Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **2 of 5** *Date:* 9/25/15

@ Parkside Drive



Turning Movement Volumes
@ Parkside Drive

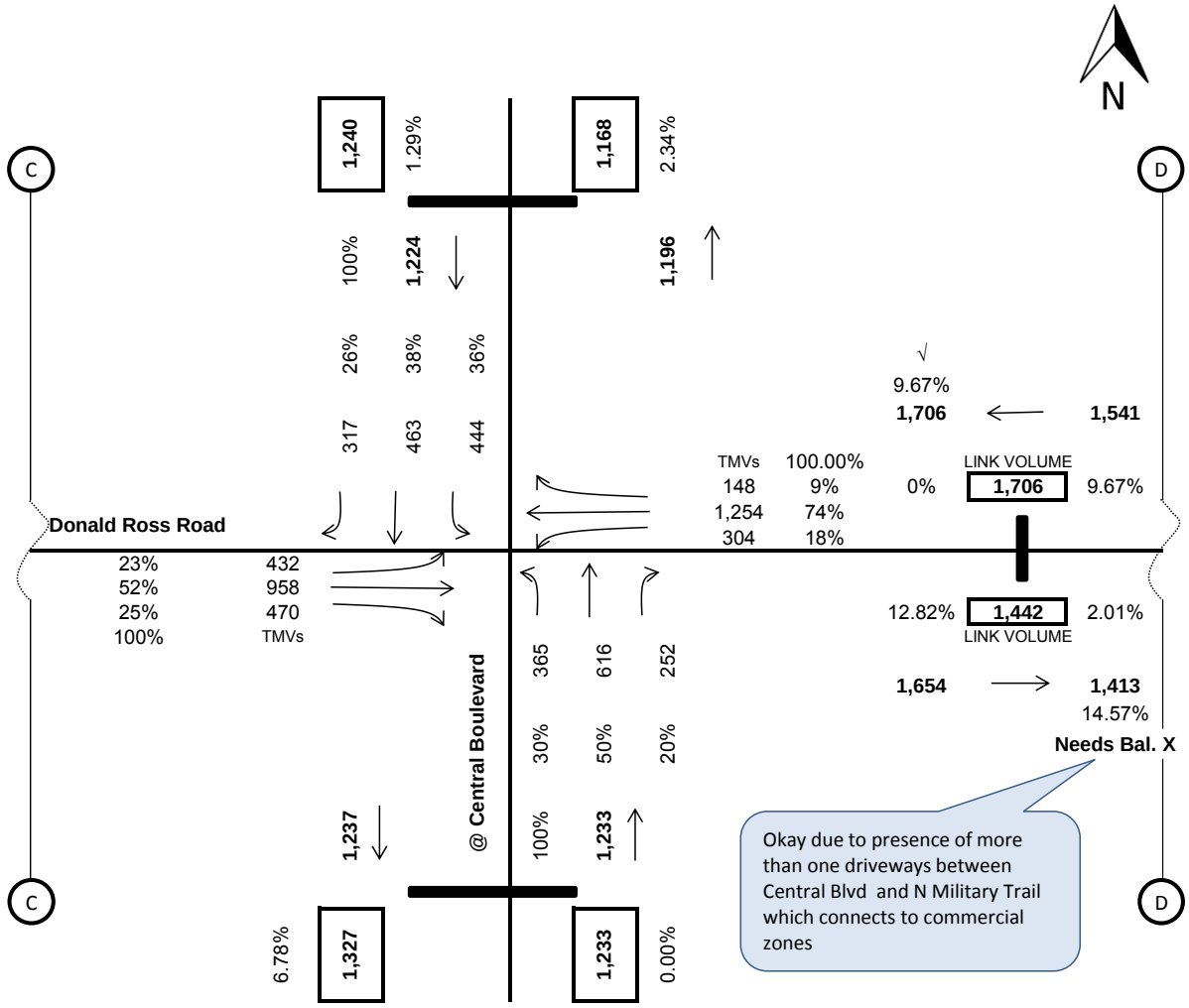
Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**2,245**			**1,606**			**1,901**			**811**	
TM Pk Hr Counts	626	1402	139	679	164	763	574	1533	392	76	125	610
% Turns	29%	65%	6%	42%	10%	48%	23%	61%	16%	9%	15%	75%
Calc. Pk Hr Volumes	649	1452	144	679	164	763	437	1166	298	76	125	610
Adjustments												
Bal Pk Hr Volumes	**649**	**1452**	**144**	**679**	**164**	**763**	**437**	**1166**	**298**	**76**	**125**	**610**

LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66 →	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

@ Central Boulevard



Turning Movement Volumes
@ Central Boulevard

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes												
TM Pk Hr Counts												
% Turns												
Calc. Pk Hr Volumes												
Adjustments												
Bal Pk Hr Volumes	**304**	**1254**	**148**	**365**	**616**	**252**	**432**	**958**	**470**	**444**	**463**	**317**

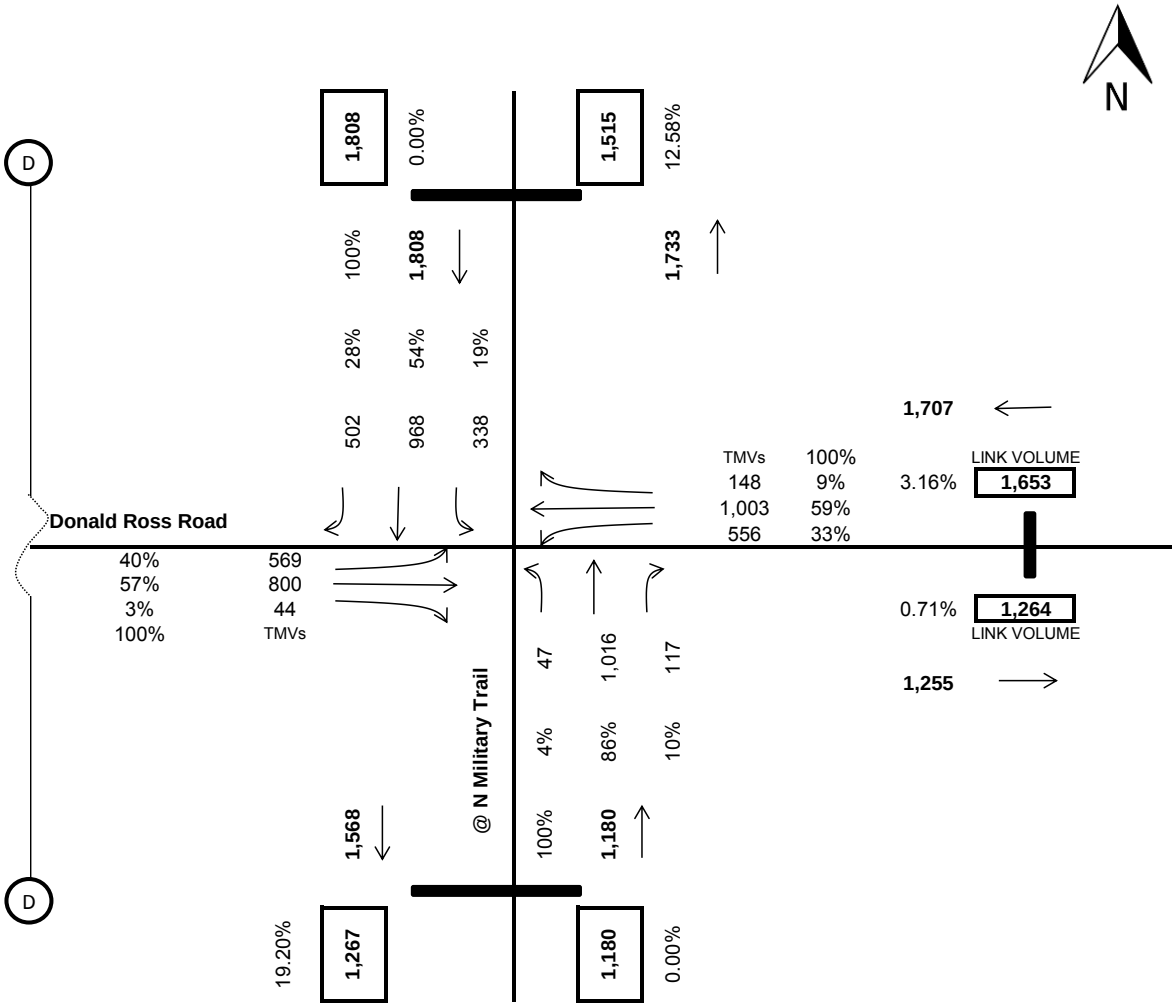
For consistency, balanced peak hour volumes from major street arterial (aka Central Boulevard) were used. See Central Boulevard Arterial for details

LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

@ N Military Trail



Turning Movement Volumes
@ N Military Trail

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes												
TM Pk Hr Counts												
% Turns												
Calc. Pk Hr Volumes												
Adjustments												
Bal Pk Hr Volumes	**556**	**1003**	**148**	**47**	**1016**	**117**	**569**	**800**	**44**	**338**	**968**	**502**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

A — Match Line

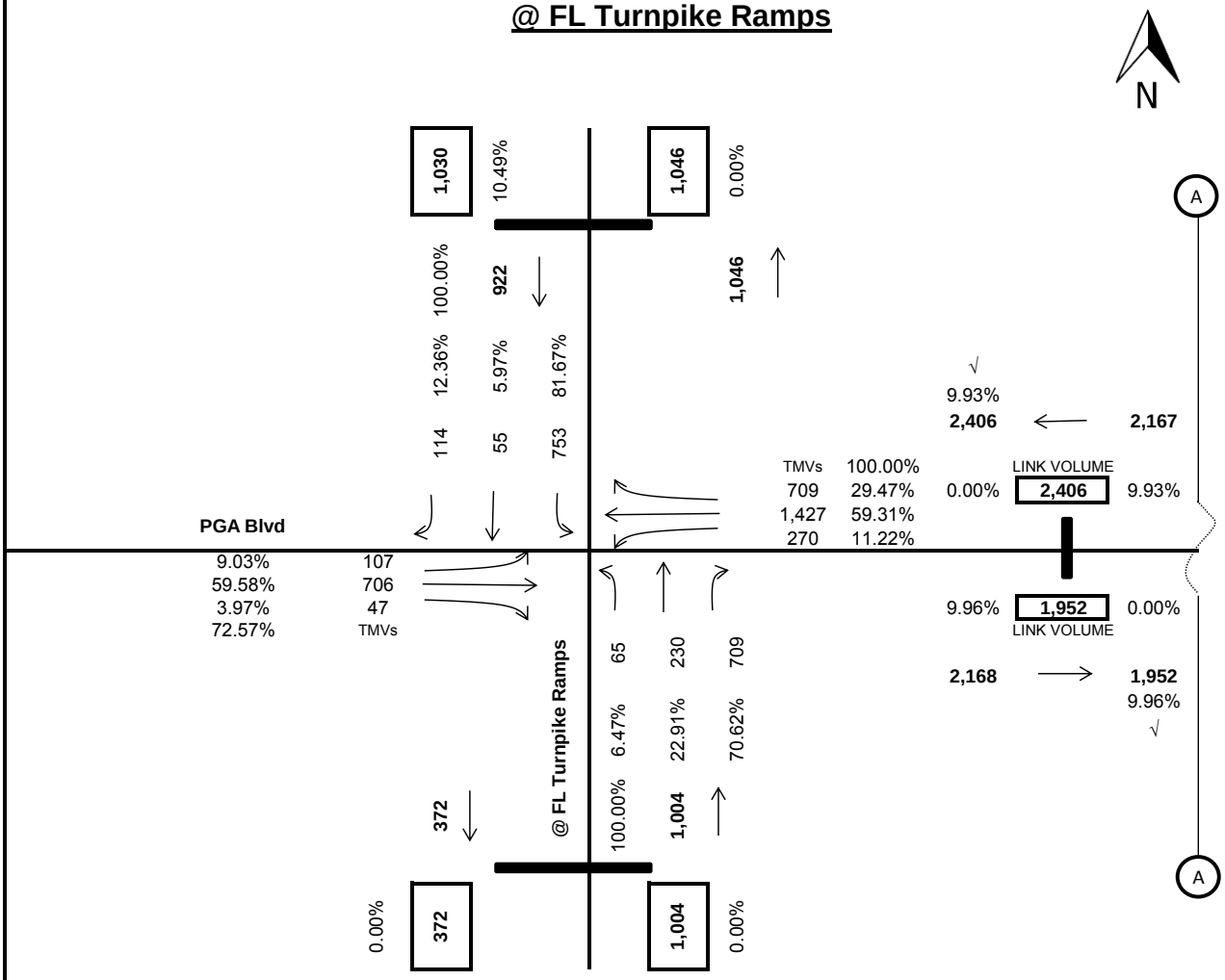
A

For consistency, balanced peak hour volumes from major street arterial (aka N Military Trail) were used. See N Military Trail Arterial for details

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FPID No. 413261-1-22-01	*Exhibit Name:* **Donald Ross Road** **Turning Movement Volume Development** **2030 No Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **5 of 5** *Date:* 9/25/15

@ FL Turnpike Ramps



Turning Movement Volumes
@ FL Turnpike Ramps

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**2,406**			**1,100**			**953**			**1,030**		
TM Pk Hr Counts	389	2143	1058	65	230	805	231	1727	97	861	55	114
% Turns	11%	60%	29%	6%	21%	73%	11%	84%	5%	84%	5%	11%
Calc. Pk Hr Volumes	261	1436	709	65	230	805	107	801	45	861	55	114
Adjustments	9	-9				-96		-95	2	-108		
Bal Pk Hr Volumes	**270**	**1427**	**709**	**65**	**230**	**709**	**107**	**706**	**47**	**753**	**55**	**114**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

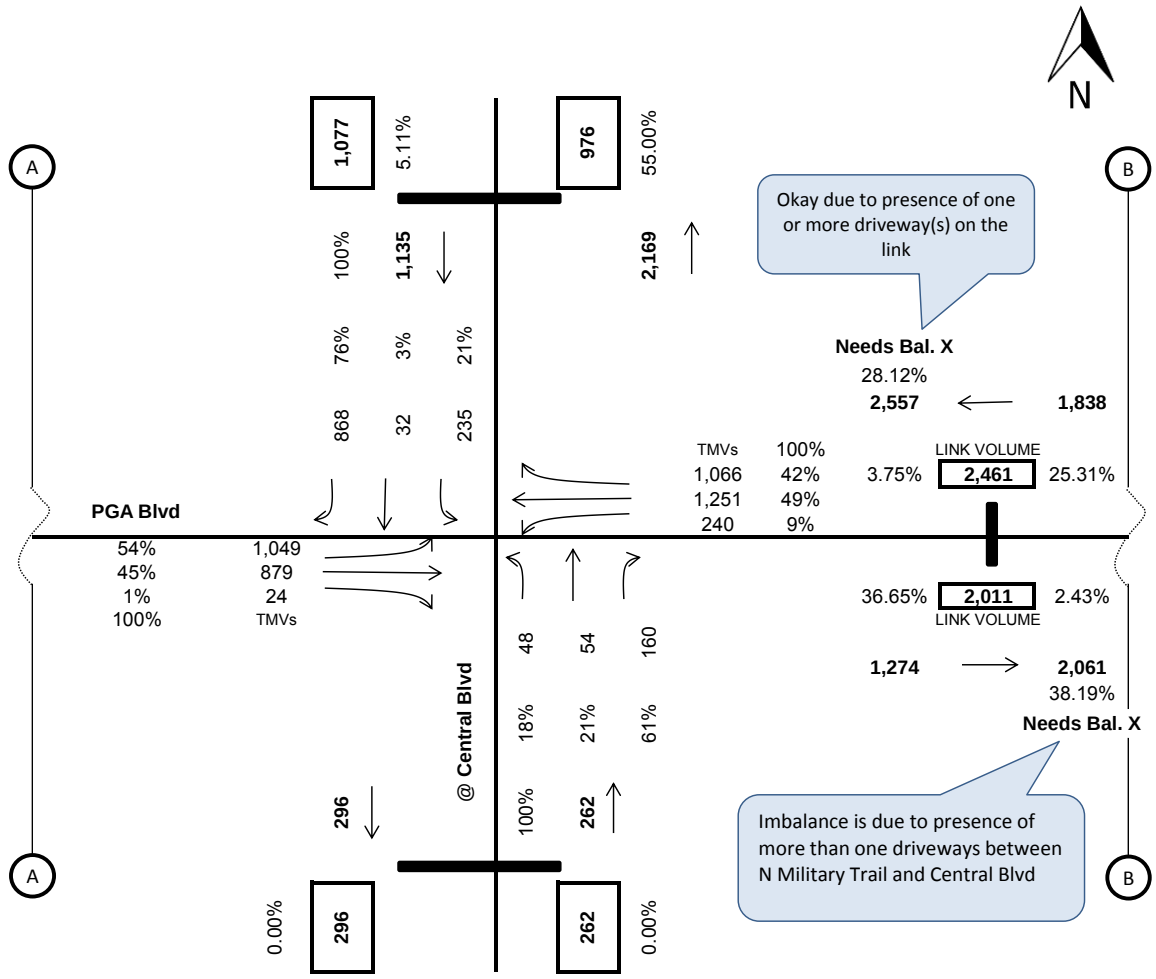
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard** **Turning Movement Volume Development** **2030 No Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **1 of 8** *Date:* 9/25/15

@ Central Blvd



Turning Movement Volumes
@ Central Blvd

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**2,461**			**262**			**1,952**			**1,077**		
TM Pk Hr Counts	219	1052	972	48	54	160	1458	1221	33	407	56	1399
% Turns	10%	47%	43%	18%	21%	61%	54%	45%	1%	22%	3%	75%
Calc. Pk Hr Volumes	240	1154	1066	48	54	160	1049	879	24	235	32	809
Adjustments		97										59
Bal Pk Hr Volumes	**240**	**1251**	**1066**	**48**	**54**	**160**	**1049**	**879**	**24**	**235**	**32**	**868**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

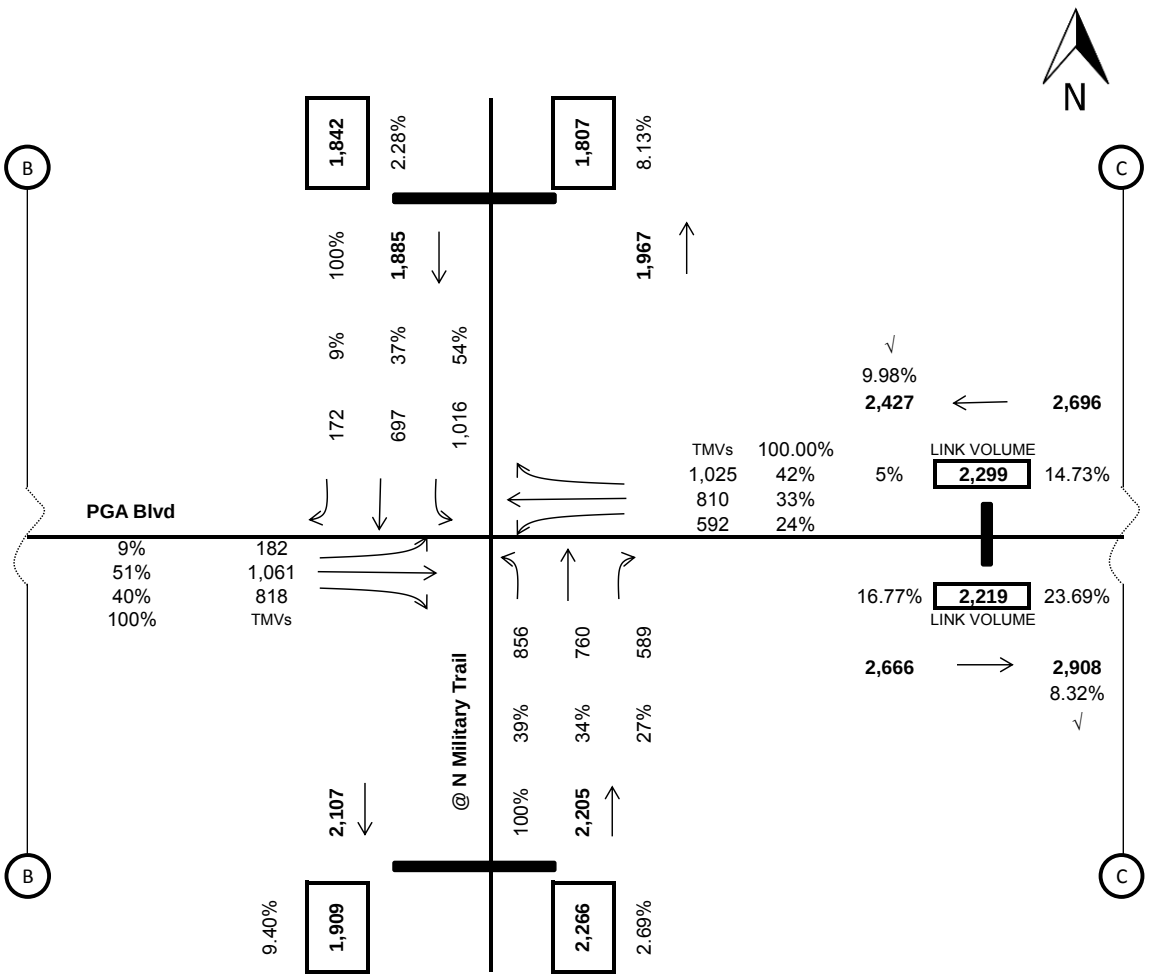
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name:	Exhibit Name:		
SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	**PGA Boulevard** **Turning Movement Volume Development** **2030 No Build PM Peak Hour**	*Exhibit No:*	**TBD**
		Page No:	**2 of 8**
		Date:	9/25/15

@ N Military Trail



Turning Movement Volumes
@ N Military Trail

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**2,299**			**2,266**			**2,011**			**1,842**		
TM Pk Hr Counts	744	1038	1434	674	649	462	163	906	733	1633	1170	288
% Turns	23%	32%	45%	38%	36%	26%	9%	50%	41%	53%	38%	9%
Calc. Pk Hr Volumes	532	742	1025	856	824	586	182	1011	818	973	697	172
Adjustments	60	68			-64	3		50		43		
Bal Pk Hr Volumes	**592**	**810**	**1025**	**856**	**760**	**589**	**182**	**1061**	**818**	**1016**	**697**	**172**

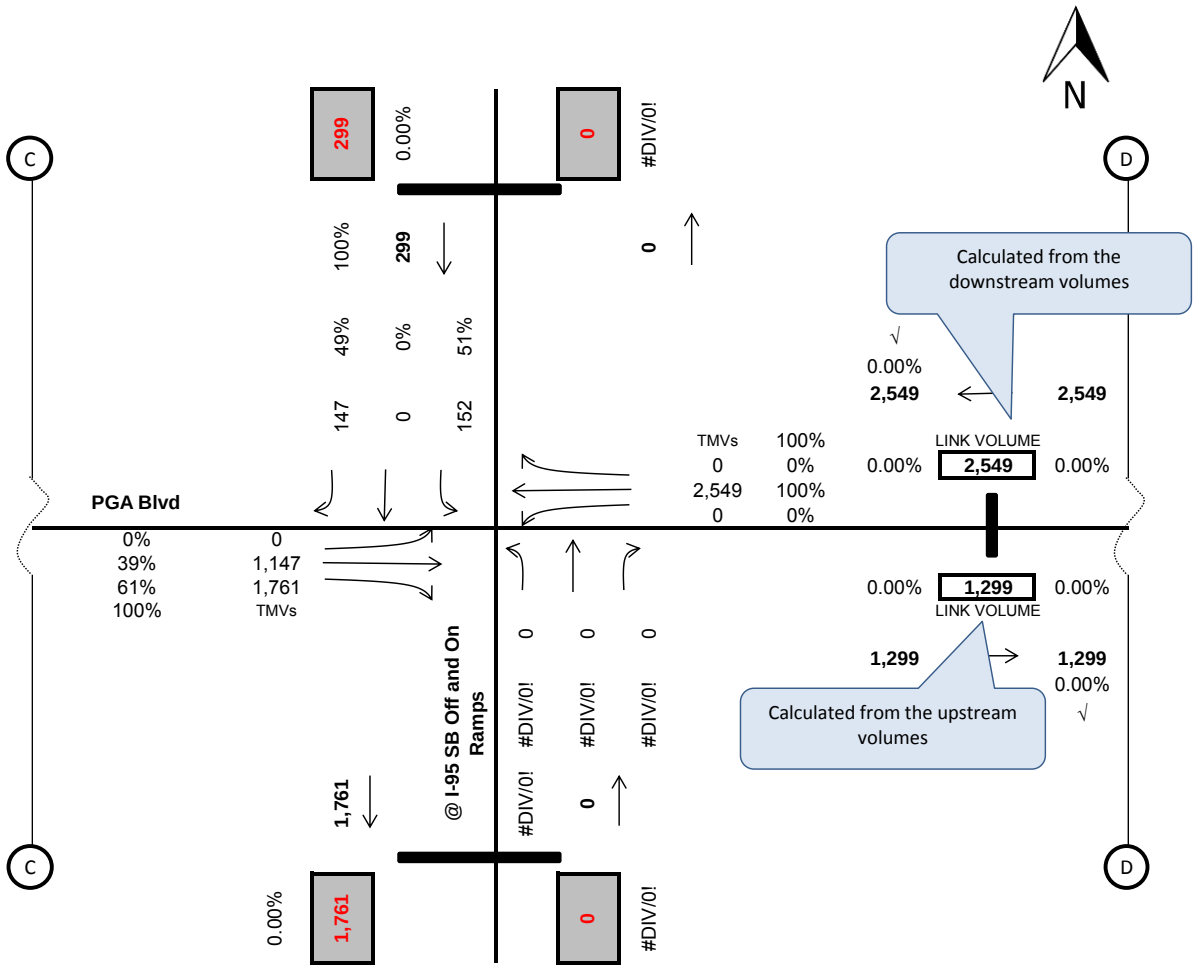
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard, Project Development & Environmental Study, FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard Turning Movement Volume Development 2030 No Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **3 of 8** *Date:* 9/25/15

@ I-95 SB Off and On Ramps



Turning Movement Volumes
@ I-95 SB Off and On Ramps

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**2,549**			**0**			**2,219**			**299**	
TM Pk Hr Counts	0	3501	0	0	0	0	0	696	1892	166	0	165
% Turns	0%	100%	0%	0%	0%	0%	0%	27%	73%	50%	0%	50%
Calc. Pk Hr Volumes	0	2549	0	0	0	0	0	597	1622	150	0	149
Adjustments								550	139	2		-2
Bal Pk Hr Volumes	**0**	**2549**	**0**	**0**	**0**	**0**	**0**	**1147**	**1761**	**152**	**0**	**147**

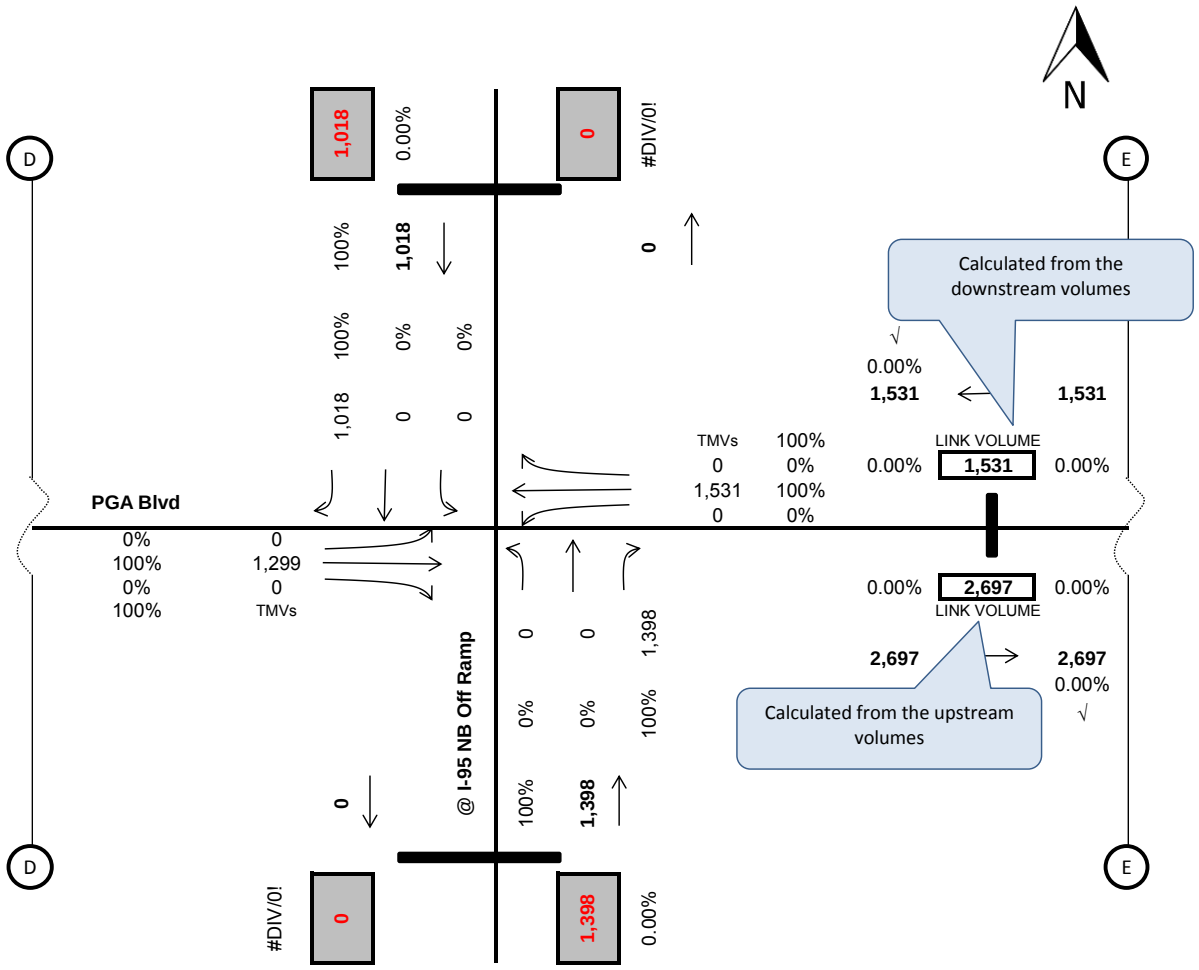
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A / A	Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard, Project Development & Environmental Study, FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard, Turning Movement Volume Development, 2030 No Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **4 of 8** *Date:* 9/25/15

@ I-95 NB Off Ramp



Turning Movement Volumes
@ I-95 NB Off Ramp

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,531**			**1,398**			**1,299**			**1,018**	
TM Pk Hr Counts	0	3051	0	0	0	2250	0	862	0	0	0	1726
% Turns	0%	100%	0%	0%	0%	100%	0%	100%	0%	0%	0%	100%
Calc. Pk Hr Volumes	0	1531	0	0	0	1398	0	1299	0	0	0	1018
Adjustments												
Bal Pk Hr Volumes	**0**	**1531**	**0**	**0**	**0**	**1398**	**0**	**1299**	**0**	**0**	**0**	**1018**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 → — Turning Movement Volumes (Balanced)

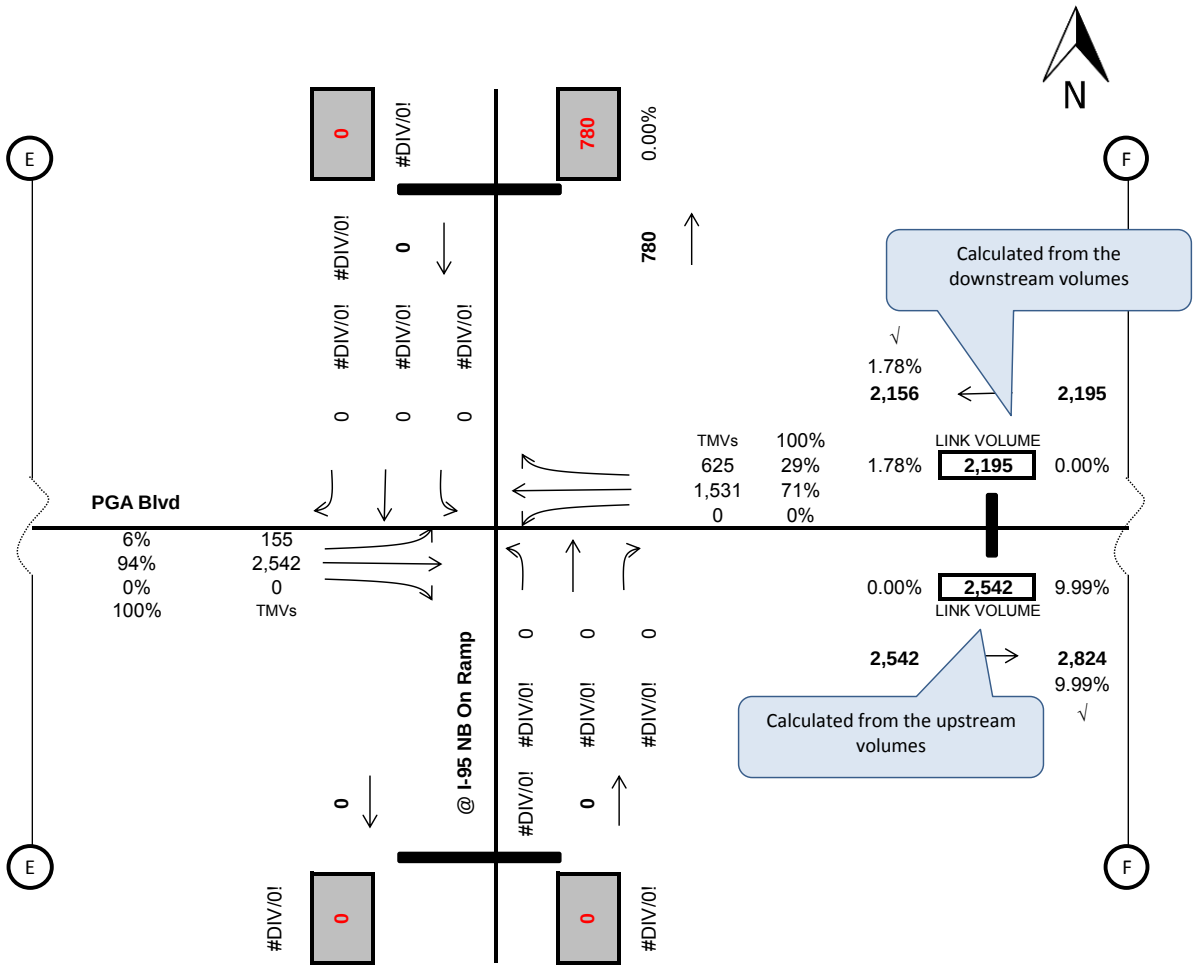
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard, Project Development & Environmental Study, FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard, Turning Movement Volume Development, 2030 No Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **5 of 8** *Date:* 9/25/15

@ I-95 NB On Ramp



Turning Movement Volumes
@ I-95 NB On Ramp

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**2,195**			**0**			**2,697**			**0**	
TM Pk Hr Counts	0	1326	575	0	0	0	169	2944	0	0	0	0
% Turns	0%	70%	30%	0%	0%	0%	5%	95%	0%	0%	0%	0%
Calc. Pk Hr Volumes	0	1531	664	0	0	0	146	2551	0	0	0	0
Adjustments			-39				9	-9				
Bal Pk Hr Volumes	**0**	**1531**	**625**	**0**	**0**	**0**	**155**	**2542**	**0**	**0**	**0**	**0**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

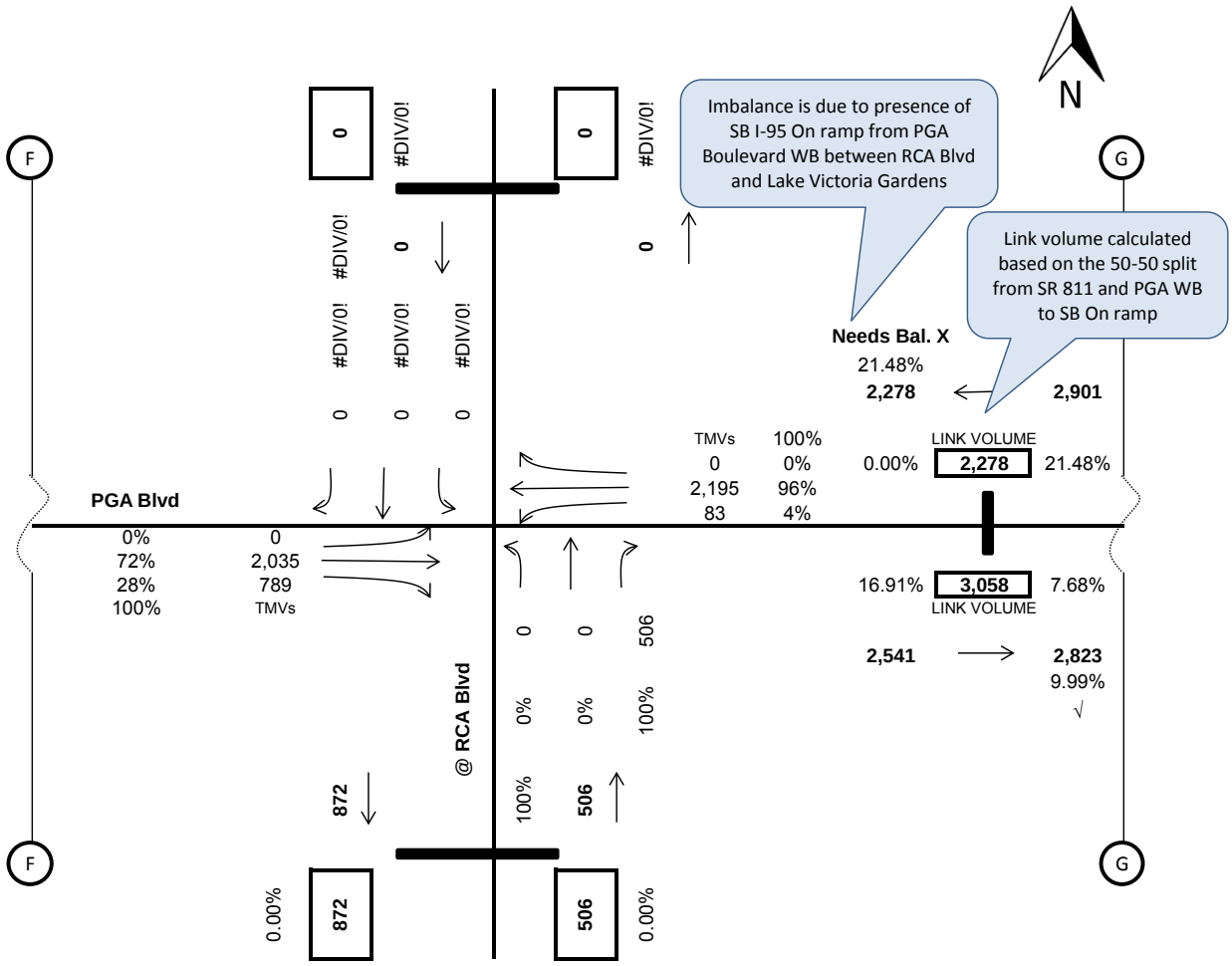
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard** **Turning Movement Volume Development** **2030 No Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **6 of 8** *Date:* 9/25/15

@ RCA Blvd



Turning Movement Volumes
@ RCA Blvd

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**2,278**			**506**			**2,542**			**0**		
TM Pk Hr Counts	72	1901	0	0	0	506	0	1893	1050	0	0	0
% Turns	4%	96%	0%	0%	0%	100%	0%	64%	36%	0%	0%	0%
Calc. Pk Hr Volumes	83	2195	0	0	0	506	0	1635	907	0	0	0
Adjustments								400	-118			
Bal Pk Hr Volumes	**83**	**2195**	**0**	**0**	**0**	**506**	**0**	**2035**	**789**	**0**	**0**	**0**

Given no-build condition, adjustment is made so that split is closer to the existing no-build condition

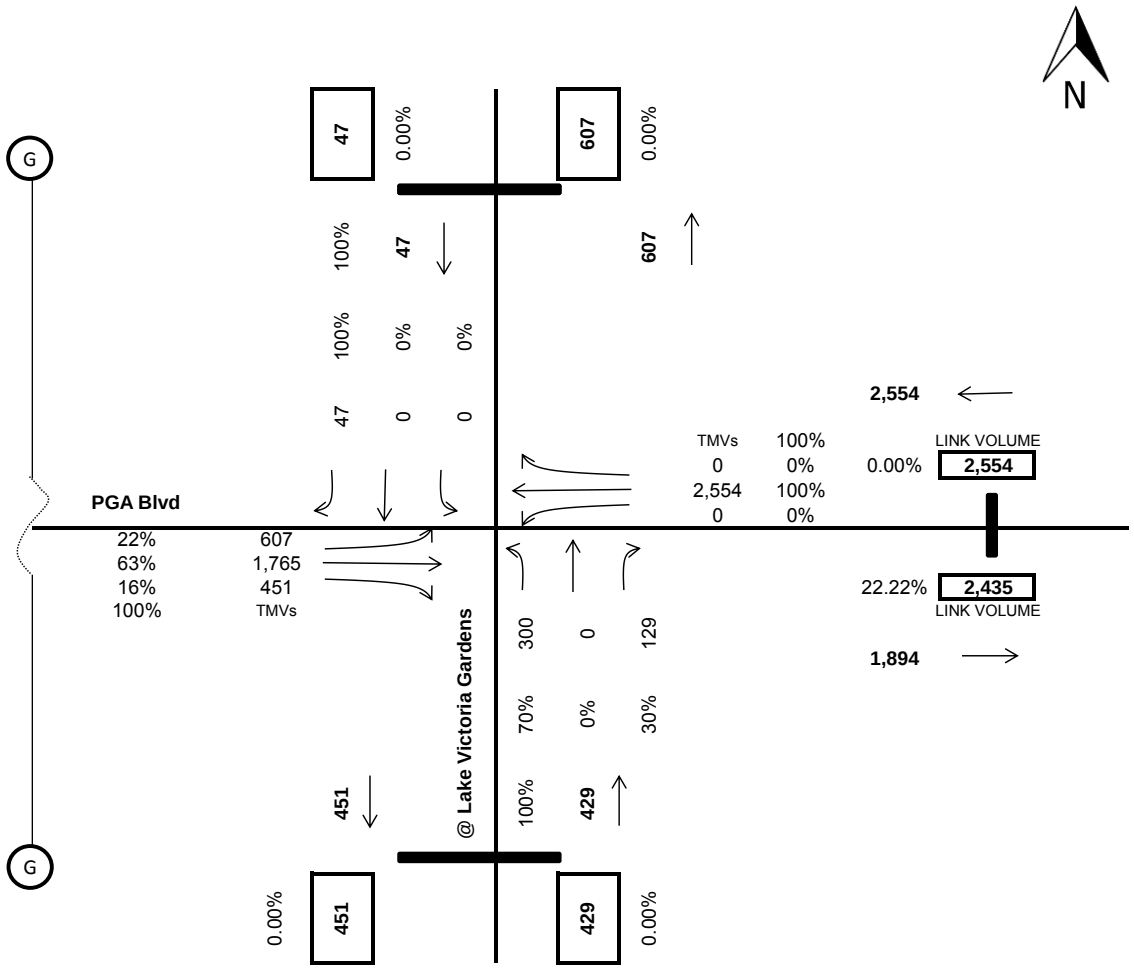
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard** **Turning Movement Volume Development** **2030 No Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **7 of 8** *Date:* 9/25/15

@ Lake Victoria Gardens



Turning Movement Volumes
@ Lake Victoria Gardens

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**2,554**			**429**			**3,058**			**47**	
TM Pk Hr Counts	0	2807	0	300	0	129	507	1611	373	0	0	47
% Turns	0%	100%	0%	70%	0%	30%	20%	65%	15%	0%	0%	100%
Calc. Pk Hr Volumes	0	2554	0	300	0	129	622	1978	458	0	0	47
Adjustments							-15	-213	-7			
Bal Pk Hr Volumes	**0**	**2554**	**0**	**300**	**0**	**129**	**607**	**1765**	**451**	**0**	**0**	**47**

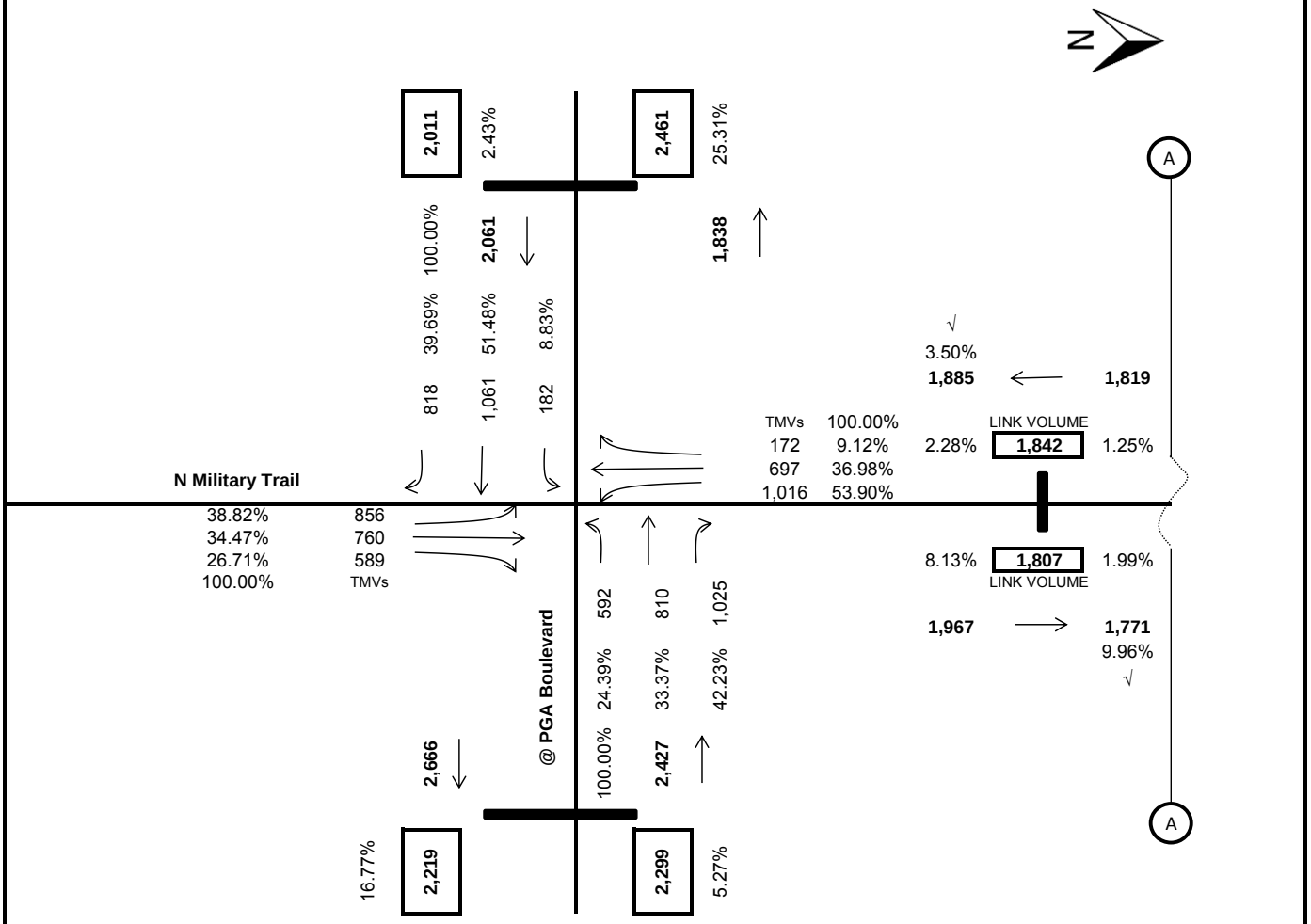
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard** **Turning Movement Volume Development** **2030 No Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **8 of 8** *Date:* 9/25/15

@ PGA Boulevard



Turning Movement Volumes
@ PGA Boulevard

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes												
TM Pk Hr Counts												
% Turns												
Calc. Pk Hr Volumes												
Adjustments												
Bal Pk Hr Volumes	**1016**	**697**	**172**	**592**	**810**	**1025**	**856**	**760**	**589**	**182**	**1061**	**818**

LEGEND

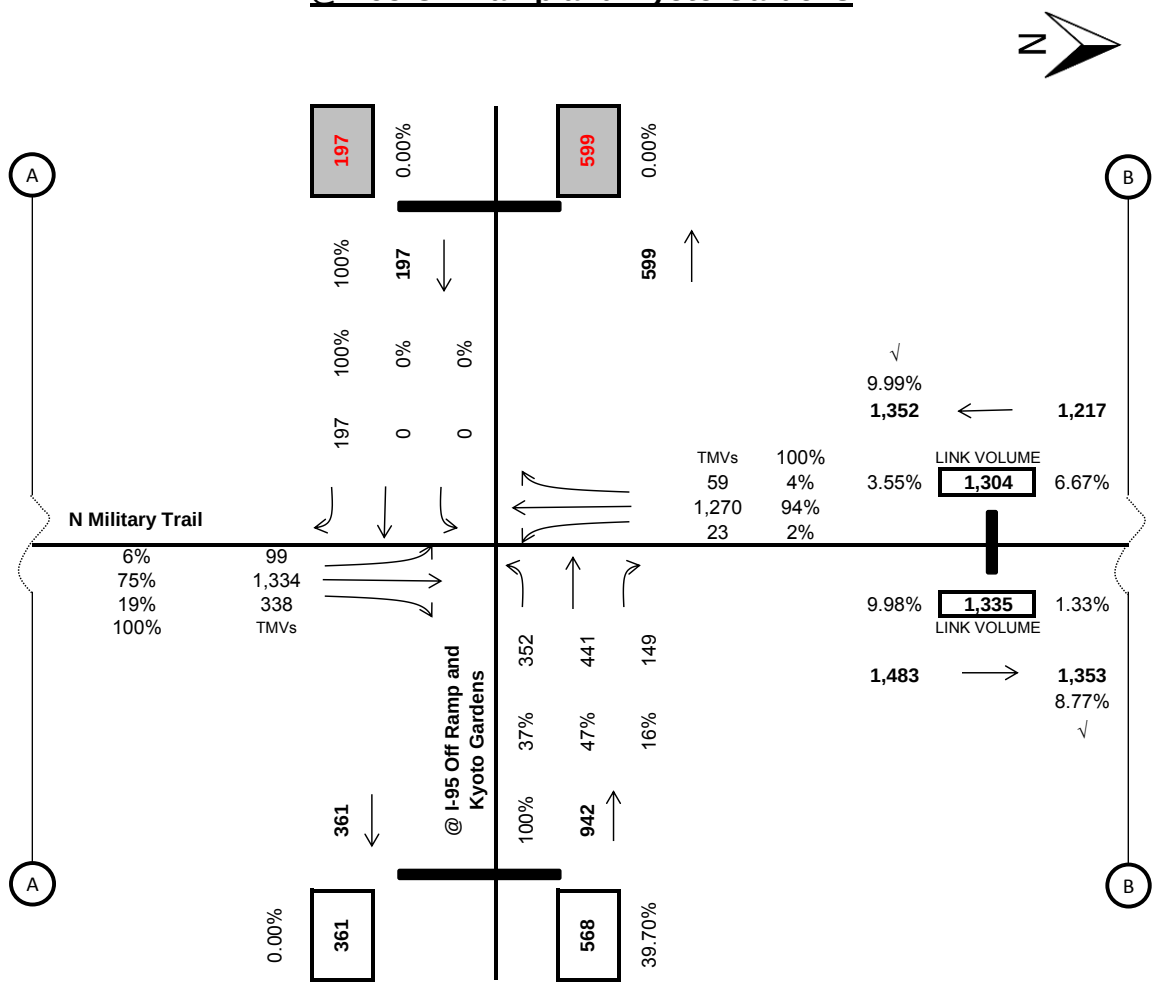
1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A / A	Match Line

For consistency, balanced peak hour volumes from major street arterial (aka PGA Boulevard) were used. See PGA Boulevard Arterial for details

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **N Military Trail** **Turning Movement Volume Development** **2030 No Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **1 of 4** *Date:* 9/25/15

@ I-95 Off Ramp and Kyoto Gardens



Turning Movement Volumes
@ I-95 Off Ramp and Kyoto

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,304**			**568**			**1,807**			**197**	
TM Pk Hr Counts	45	2499	17	332	67	169	28	2808	653	0	0	70
% Turns	2%	98%	1%	58%	12%	30%	1%	80%	19%	0%	0%	100%
Calc. Pk Hr Volumes	23	1272	9	332	67	169	15	1454	338	0	0	197
Adjustments		-2	50	20	374	-20	84	-120				
Bal Pk Hr Volumes	**23**	**1270**	**59**	**352**	**441**	**149**	**99**	**1334**	**338**	**0**	**0**	**197**

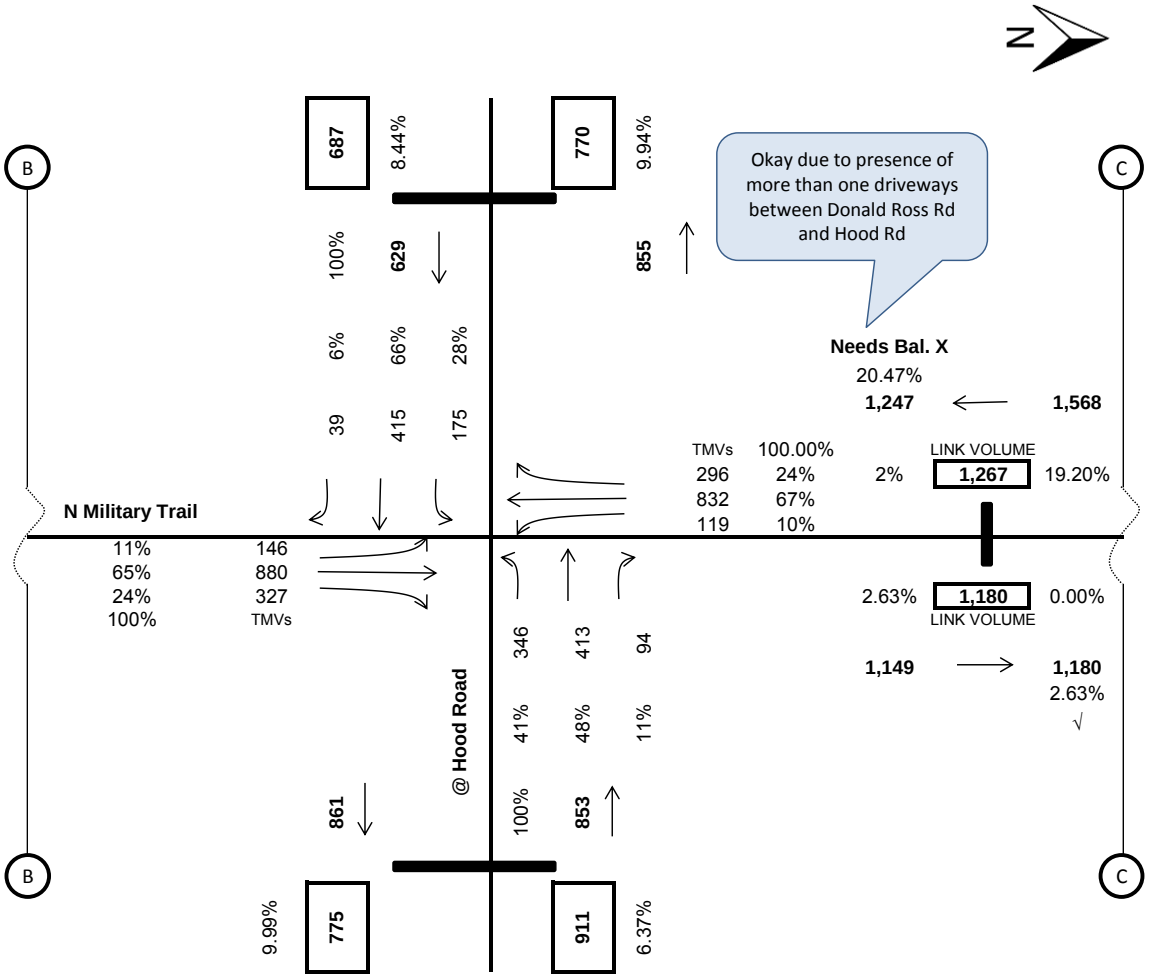
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A / A	Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard, Project Development & Environmental Study, FM No. 413265-1-22-01	*Exhibit Name:* N Military Trail, Turning Movement Volume Development, 2030 No Build PM Peak Hour	*Exhibit No:* TBD
		Page No: 2 of 4
		Date: 9/25/15

@ Hood Road



Turning Movement Volumes
@ Hood Road

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,267**			**911**			**1,335**			**687**	
TM Pk Hr Counts	193	1354	515	708	962	192	274	1567	696	419	1135	93
% Turns	9%	66%	25%	38%	52%	10%	11%	62%	27%	25%	69%	6%
Calc. Pk Hr Volumes	119	832	316	346	471	94	144	825	366	175	473	39
Adjustments			-20		-58		2	55	-39		-58	
Bal Pk Hr Volumes	**119**	**832**	**296**	**346**	**413**	**94**	**146**	**880**	**327**	**175**	**415**	**39**

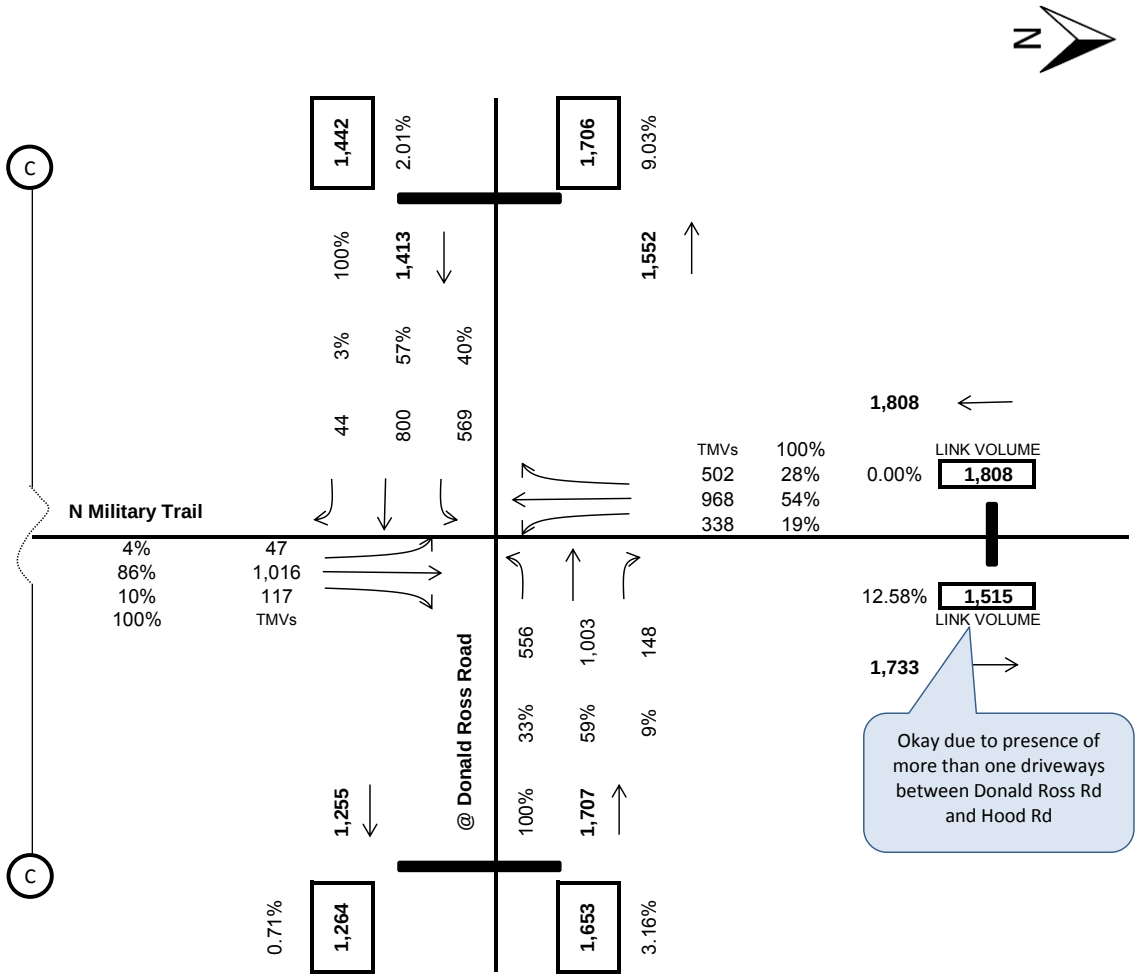
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66 →	Turning Movement Volumes (Balanced)
A … A	Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **N Military Trail** **Turning Movement Volume Development** **2030 No Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **3 of 4** *Date:* 9/25/15

@ Donald Ross Road



Turning Movement Volumes
@ Donald Ross Road

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**1,808**			**1,653**			**1,180**			**1,442**		
TM Pk Hr Counts	404	1158	601	641	1093	170	75	1612	185	643	859	47
% Turns	19%	54%	28%	34%	57%	9%	4%	86%	10%	42%	55%	3%
Calc. Pk Hr Volumes	338	968	502	556	949	148	47	1016	117	599	800	44
Adjustments					54					-30		
Bal Pk Hr Volumes	**338**	**968**	**502**	**556**	**1003**	**148**	**47**	**1016**	**117**	**569**	**800**	**44**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

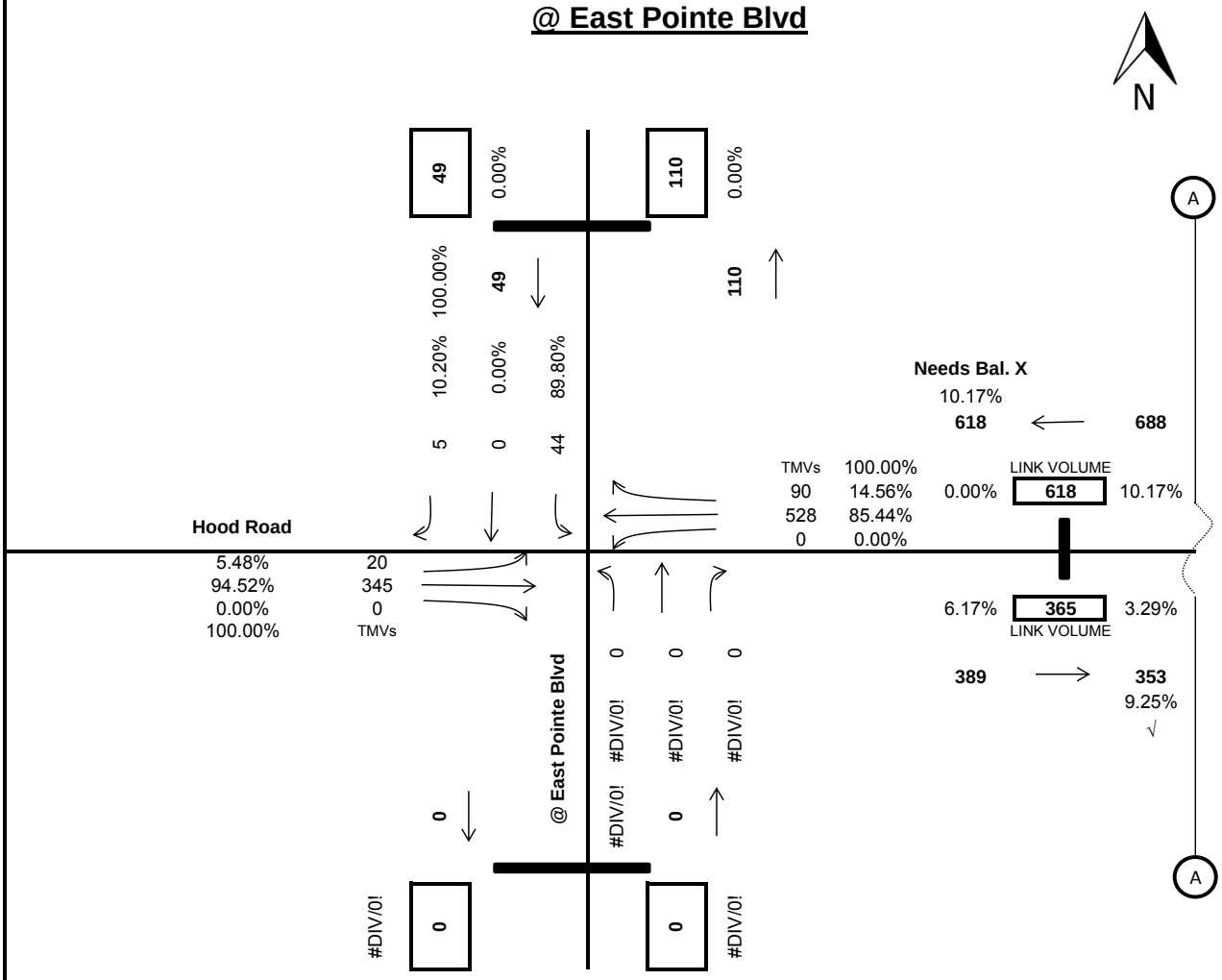
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **N Military Trail** **Turning Movement Volume Development** **2030 No Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **4 of 4** *Date:* 9/25/15

@ East Pointe Blvd



Turning Movement Volumes
@ East Pointe Blvd

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**618**			**0**			**365**			**49**	
TM Pk Hr Counts	0	298	51	0	0	0	13	224	0	44	0	5
% Turns	0%	85%	15%	0%	0%	0%	5%	95%	0%	90%	0%	10%
Calc. Pk Hr Volumes	0	528	90	0	0	0	20	345	0	44	0	5
Adjustments												
Bal Pk Hr Volumes	**0**	**528**	**90**	**0**	**0**	**0**	**20**	**345**	**0**	**44**	**0**	**5**

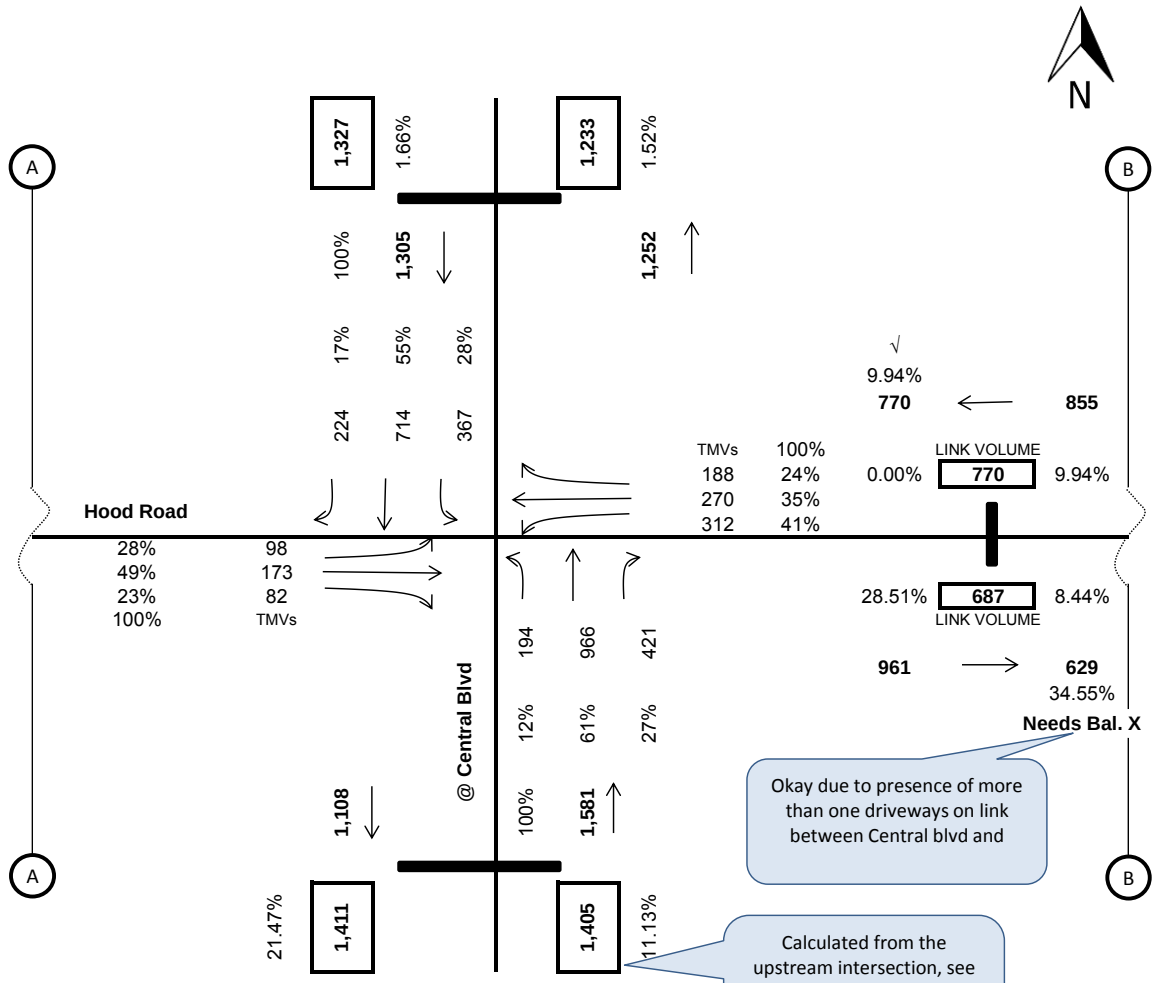
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66 →	Turning Movement Volumes (Balanced)
A / A	Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Hood Road** **Turning Movement Volume Development** **2030 No Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **1 of 3** *Date:* 9/25/15

@ Central Blvd



Turning Movement Volumes
@ Central Blvd

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes												
TM Pk Hr Counts												
% Turns												
Calc. Pk Hr Volumes												
Adjustments												
Bal Pk Hr Volumes	**312**	**270**	**188**	**194**	**966**	**421**	**98**	**173**	**82**	**367**	**714**	**224**

LEGEND

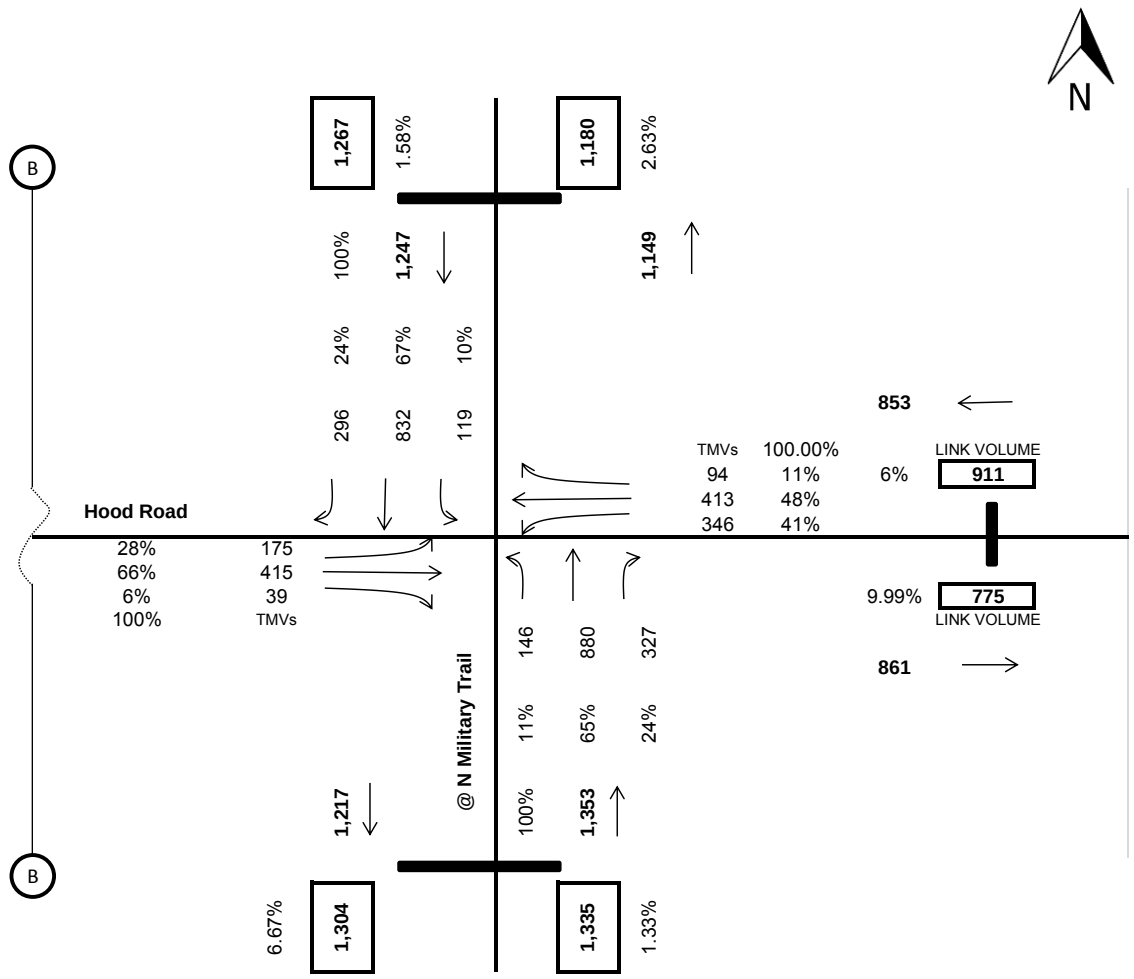
- **1,500** — Control Volumes (Peak Hour)*
- **1,300** — Link Volumes (Peak Hour)
- 66 → Turning Movement Volumes (Balanced)
- A … A — Match Line

For consistency, balanced peak hour volumes from major street arterial (aka Central Boulevard) were used. See Central Boulevard Arterial for details

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Hood Road** **Turning Movement Volume Development** **2030 No Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **2 of 3** *Date:* 9/25/15

@ N Military Trail



Turning Movement Volumes
@ N Military Trail

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes												
TM Pk Hr Counts												
% Turns												
Calc. Pk Hr Volumes												
Adjustments												
Bal Pk Hr Volumes	**346**	**413**	**94**	**146**	**880**	**327**	**175**	**415**	**39**	**119**	**832**	**296**

For consistency, balanced peak hour volumes from major street arterial (aka N Military Trail) were used. See N Military Trail Arterial for details

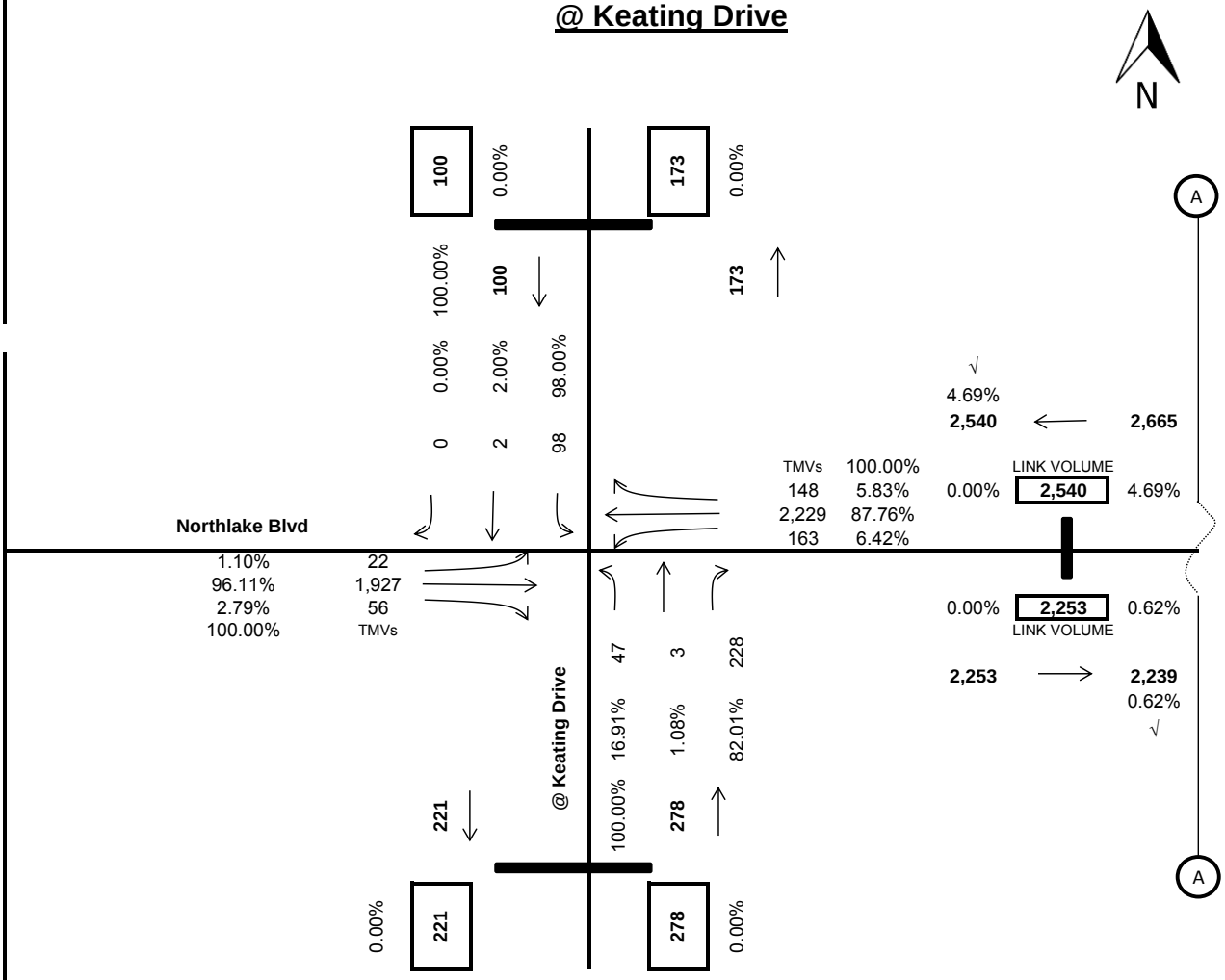
LEGEND

- 1,500 — Control Volumes (Peak Hour)*
- 1,300 — Link Volumes (Peak Hour)
- 66 → — Turning Movement Volumes (Balanced)
- A … A — Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name:	Exhibit Name:		
SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	**Hood Road** **Turning Movement Volume Development** **2030 No Build PM Peak Hour**	*Exhibit No:*	**TBD**
		Page No:	**3 of 3**
		Date:	9/25/15

@ Keating Drive



Turning Movement Volumes
@ Keating Drive

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**2,540**			**278**			**1,958**			**100**		
TM Pk Hr Counts	193	2635	175	47	3	228	22	1880	56	98	2	0
% Turns	6%	88%	6%	17%	1%	82%	1%	96%	3%	98%	2%	0%
Calc. Pk Hr Volumes	163	2229	148	47	3	228	22	1880	56	98	2	0
Adjustments								47				
Bal Pk Hr Volumes	**163**	**2229**	**148**	**47**	**3**	**228**	**22**	**1927**	**56**	**98**	**2**	**0**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

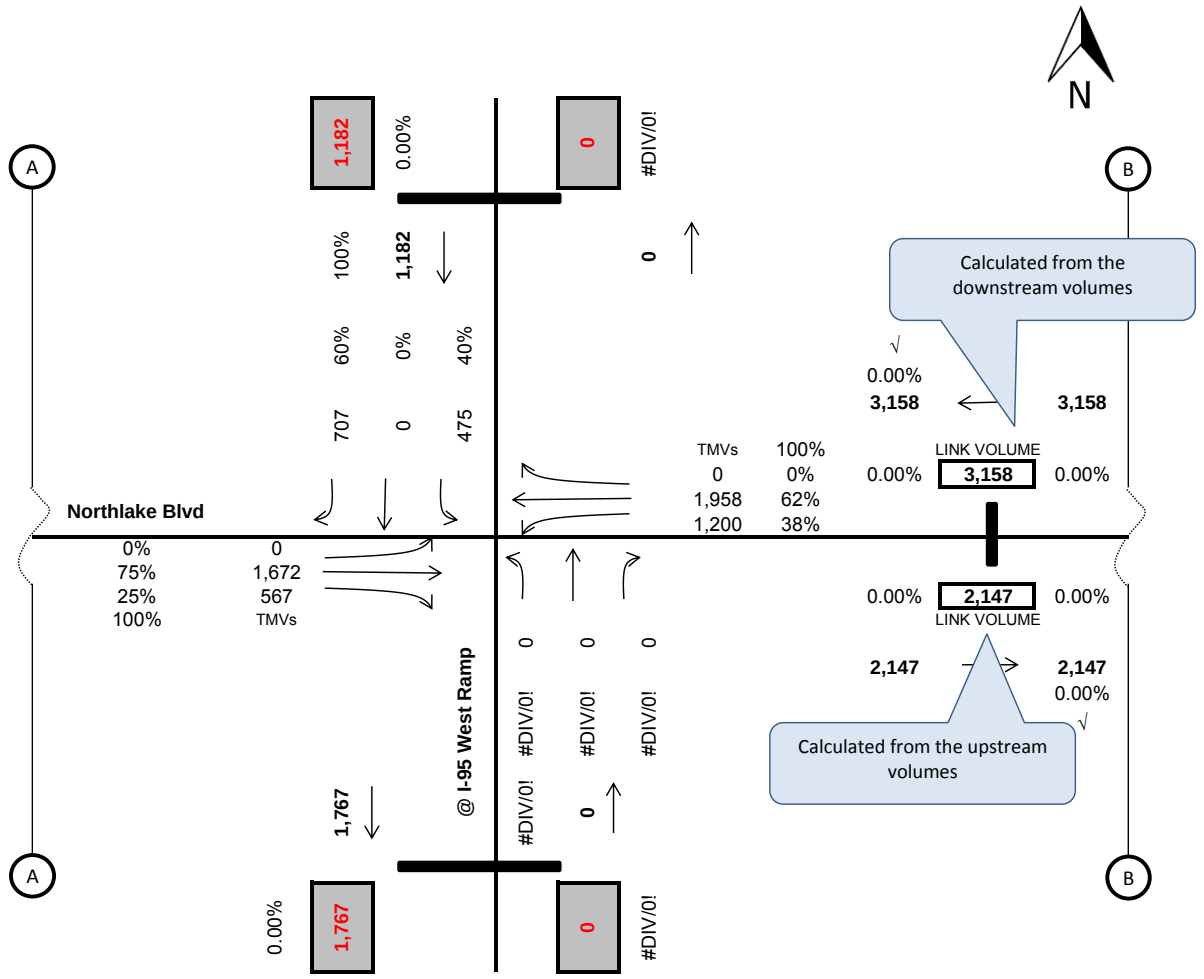
66 → Turning Movement Volumes (Balanced)

A … A — Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Northlake Boulevard** **Turning Movement Volume Development** **2030 No Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **1 of 5** *Date:* 9/25/15

@ I-95 West Ramp



Turning Movement Volumes
@ I-95 West Ramp

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**3,158**			**0**			**2,253**			**1,182**	
TM Pk Hr Counts	1248	1959	0	0	0	0	0	1636	568	699	0	1042
% Turns	39%	61%	0%	0%	0%	0%	0%	74%	26%	40%	0%	60%
Calc. Pk Hr Volumes	1229	1929	0	0	0	0	0	1672	581	475	0	707
Adjustments	-29	29							-14		0	
Bal Pk Hr Volumes	**1200**	**1958**	**0**	**0**	**0**	**0**	**0**	**1672**	**567**	**475**	**0**	**707**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

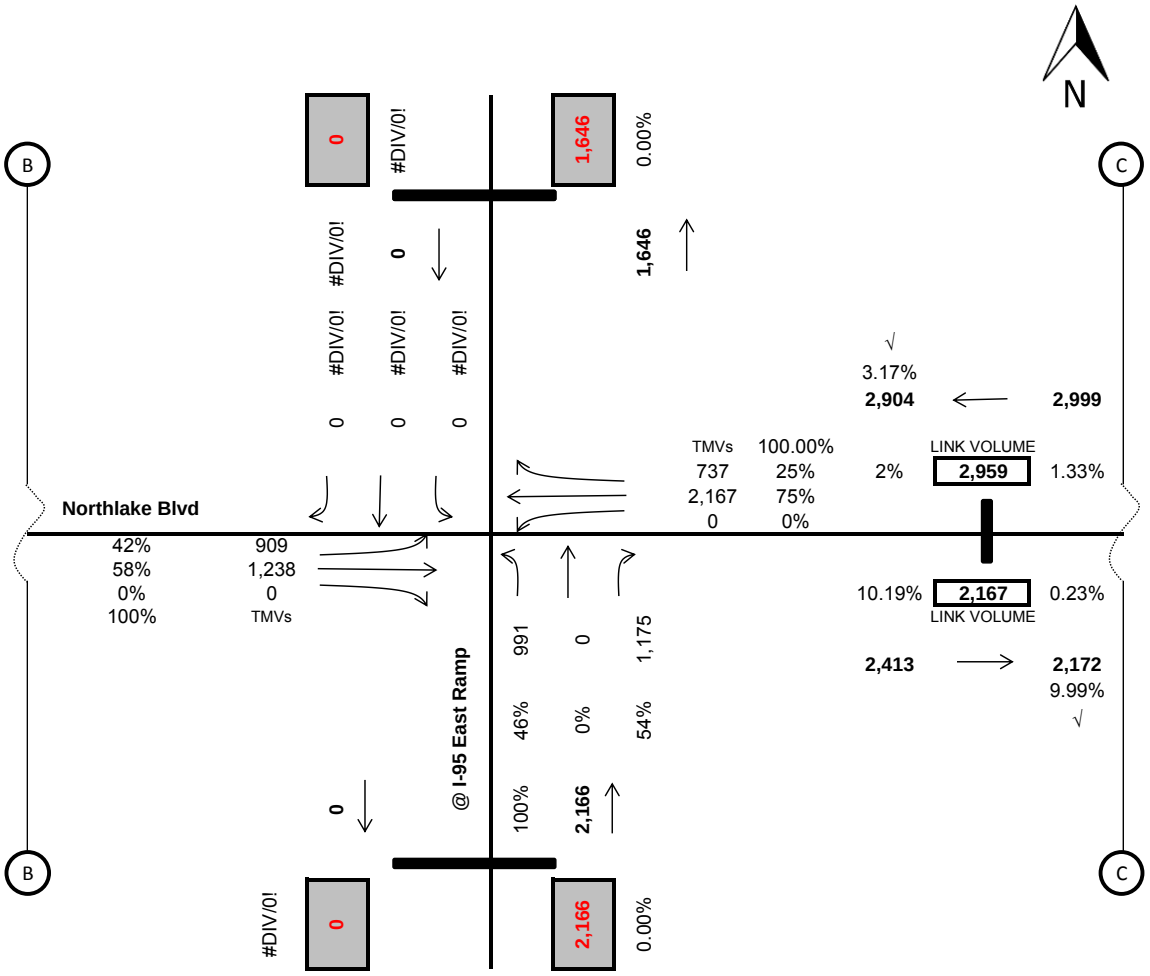
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Northlake Boulevard** **Turning Movement Volume Development** **2030 No Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **2 of 5** *Date:* 9/25/15

@ I-95 East Ramp



Turning Movement Volumes
@ I-95 East Ramp

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**2,959**			**2,166**			**2,147**			**0**	
TM Pk Hr Counts	0	2185	798	1023	0	1214	1063	1272	0	0	0	0
% Turns	0%	73%	27%	46%	0%	54%	46%	54%	0%	0%	0%	0%
Calc. Pk Hr Volumes	0	2167	792	991	0	1175	977	1170	0	0	0	0
Adjustments			-55		0		-68	68				
Bal Pk Hr Volumes	**0**	**2167**	**737**	**991**	**0**	**1175**	**909**	**1238**	**0**	**0**	**0**	**0**

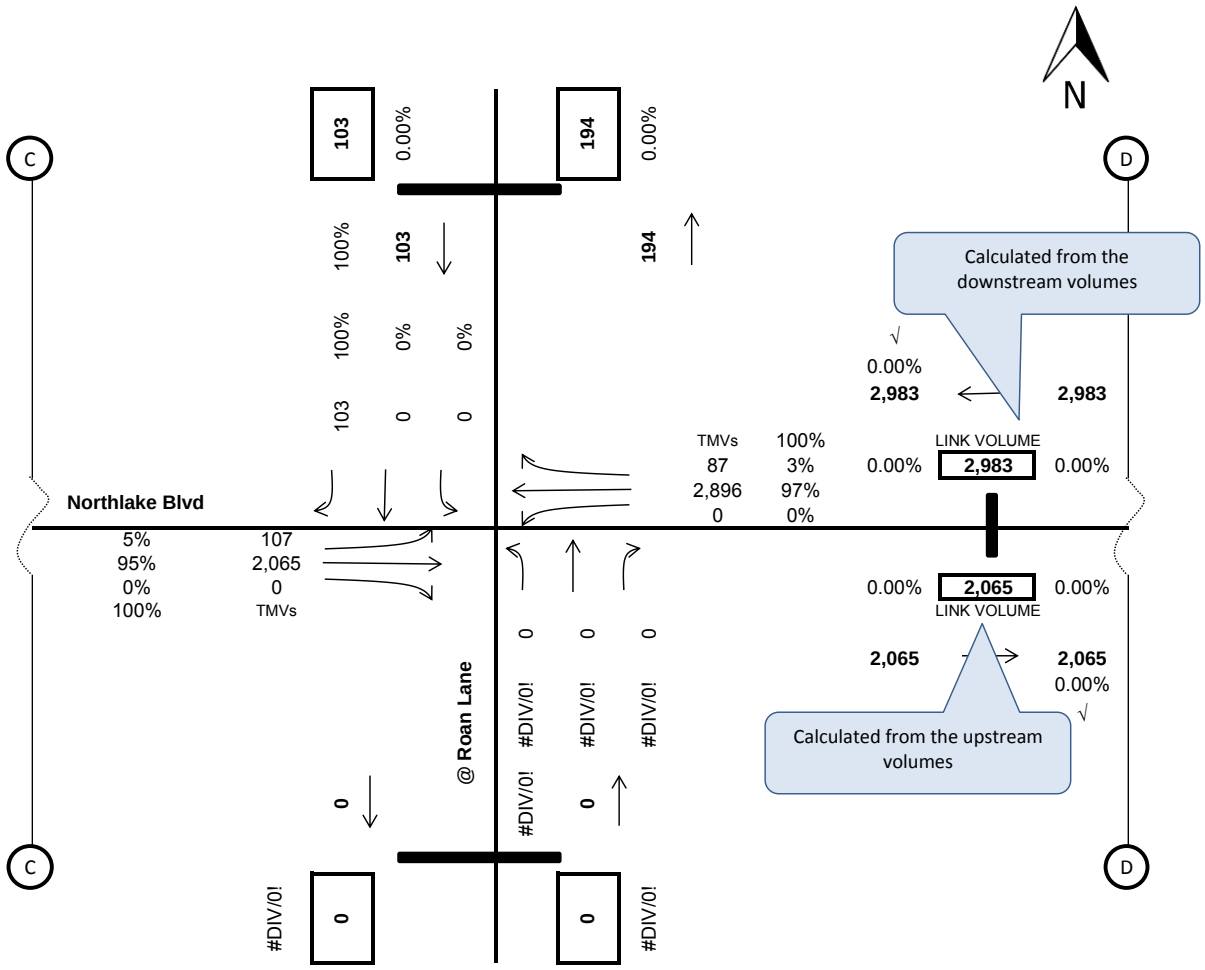
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Northlake Boulevard** **Turning Movement Volume Development** **2030 No Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **3 of 5** *Date:* 9/25/15

@ Roan Lane



Turning Movement Volumes
@ Roan Lane

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**2,983**			**0**			**2,167**			**103**	
TM Pk Hr Counts	0	3038	91	0	0	0	127	2444	0	0	0	103
% Turns	0%	97%	3%	0%	0%	0%	5%	95%	0%	0%	0%	100%
Calc. Pk Hr Volumes	0	2896	87	0	0	0	107	2060	0	0	0	103
Adjustments								5				
Bal Pk Hr Volumes	**0**	**2896**	**87**	**0**	**0**	**0**	**107**	**2065**	**0**	**0**	**0**	**103**

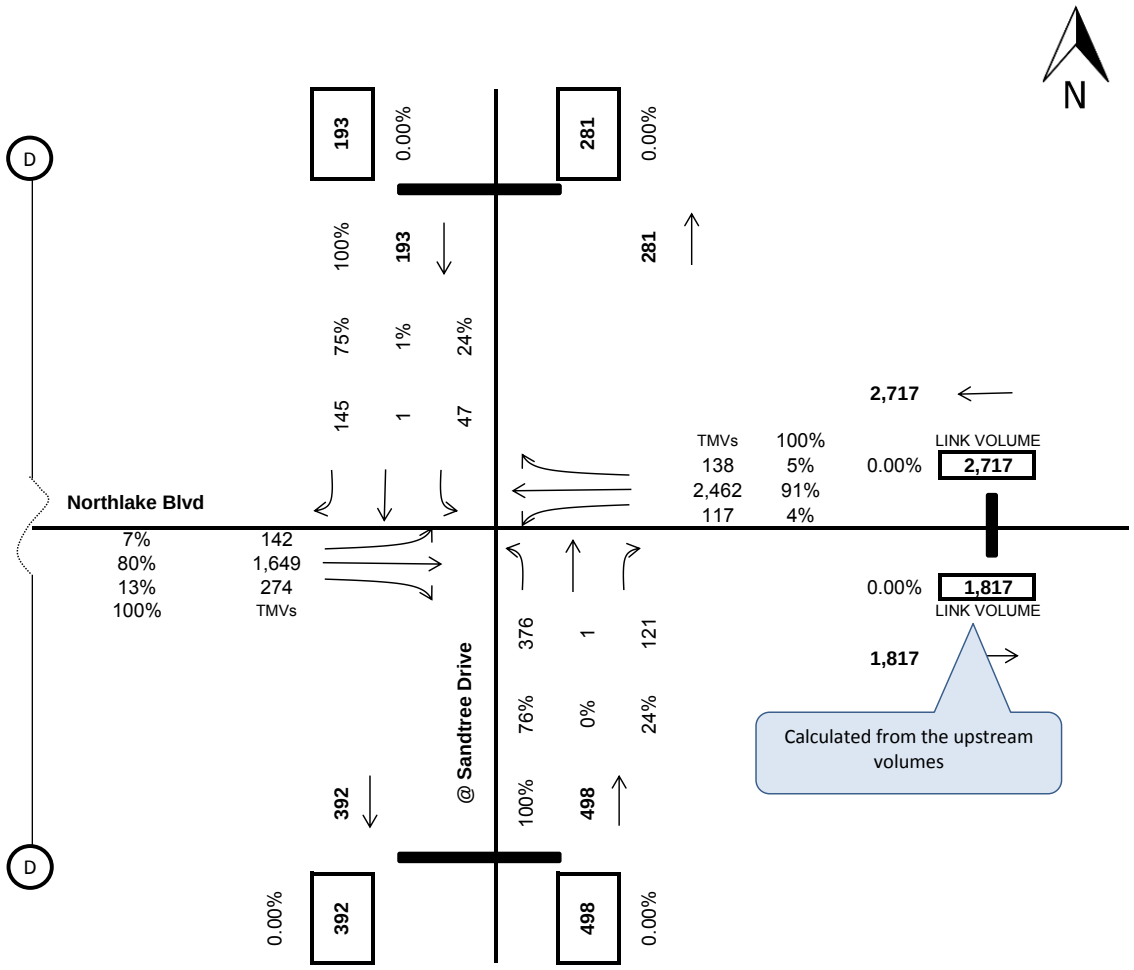
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A … A	Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Northlake Boulevard Turning Movement Volume Development 2030 No Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **4 of 5** *Date:* 9/25/15

@ Sandtree Drive



Turning Movement Volumes
@ Sandtree Drive

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**2,717**			**498**			**2,065**			**193**		
TM Pk Hr Counts	117	2462	138	376	1	121	171	1984	330	47	1	145
% Turns	4%	91%	5%	76%	0%	24%	7%	80%	13%	24%	1%	75%
Calc. Pk Hr Volumes	117	2462	138	376	1	121	142	1649	274	47	1	145
Adjustments												
Bal Pk Hr Volumes	**117**	**2462**	**138**	**376**	**1**	**121**	**142**	**1649**	**274**	**47**	**1**	**145**

LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

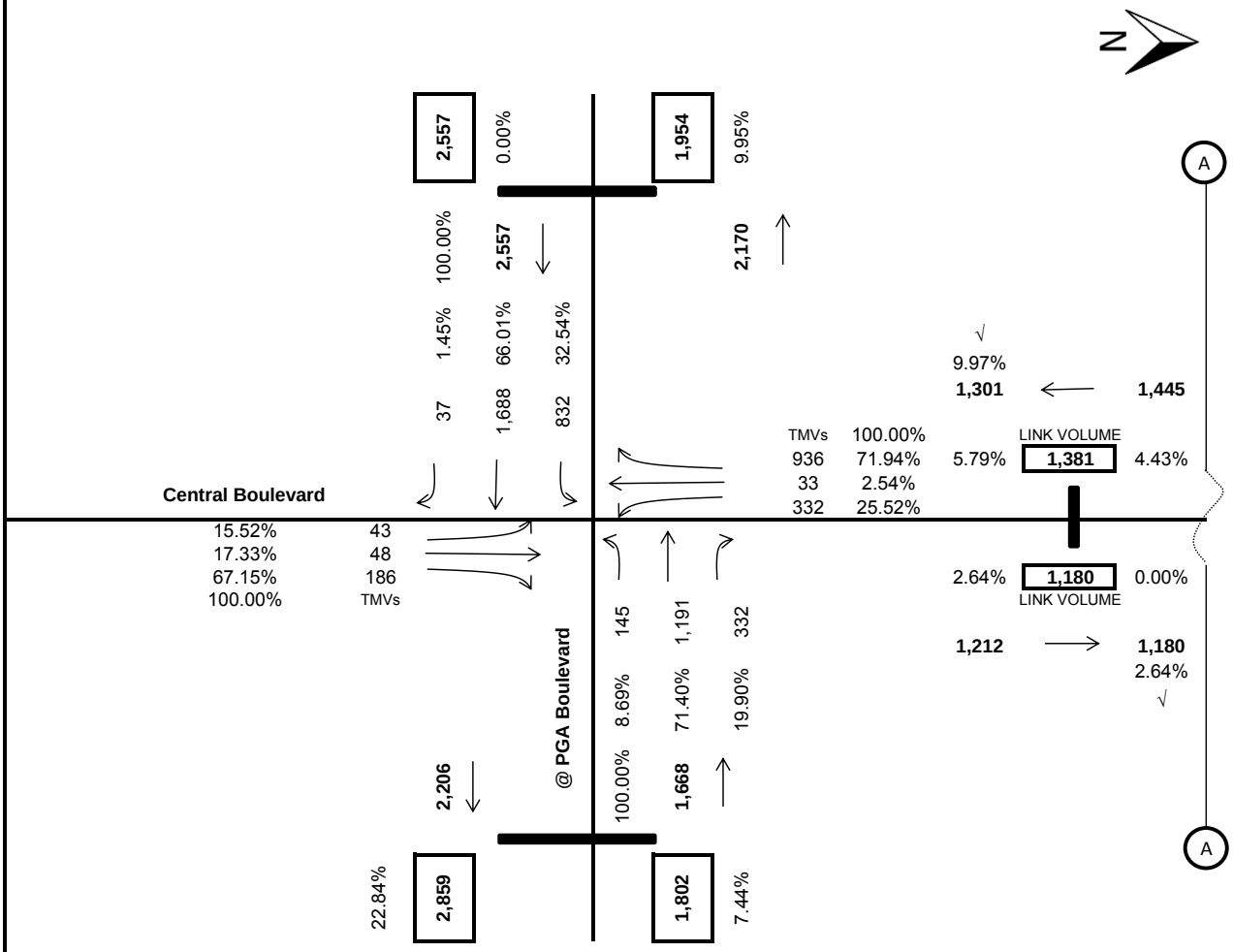
Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Northlake Boulevard Turning Movement Volume Development 2030 No Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **5 of 5** *Date:* 9/25/15

APPENDIX AA

BALANCED TURNING MOVEMENT DEVELOPMENT SHEETS

2040 NO BUILD AM PEAK HOUR

@ PGA Boulevard



Turning Movement Volumes
@ PGA Boulevard

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes												
TM Pk Hr Counts												
% Turns												
Calc. Pk Hr Volumes												
Adjustments												
Bal Pk Hr Volumes	**332**	**33**	**936**	**145**	**1191**	**332**	**43**	**48**	**186**	**832**	**1688**	**37**

LEGEND

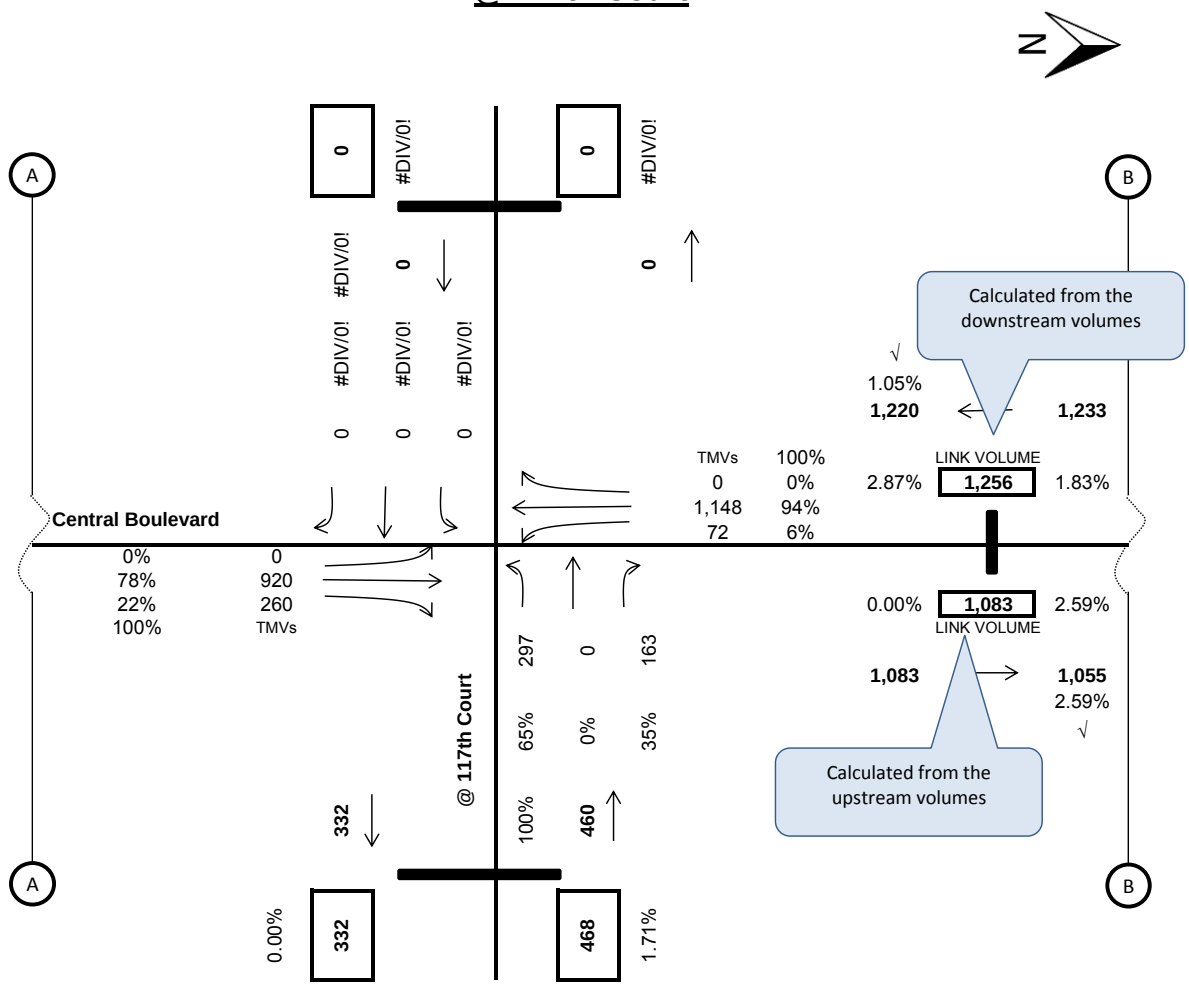
1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

For consistency, balanced peak hour volumes from major street arterial (aka PGA Boulevard) were used. See PGA Boulevard Arterial for details

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Central Boulevard Turning Movement Volume Development 2040 No Build AM Peak Hour**	*Exhibit No:* **TBD**
		Page No: **1 of 5**
		Date: 9/24/15

@ 117th Court



Turning Movement Volumes
@ 117th Court

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**1,256**			**468**			**1,180**			**0**		
TM Pk Hr Counts	109	1801	0	305	0	163	0	1152	326	0	0	0
% Turns	6%	94%	0%	65%	0%	35%	0%	78%	22%	0%	0%	0%
Calc. Pk Hr Volumes	72	1184	0	305	0	163	0	920	260	0	0	0
Adjustments		-36		-8								
Bal Pk Hr Volumes	**72**	**1148**	**0**	**297**	**0**	**163**	**0**	**920**	**260**	**0**	**0**	**0**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

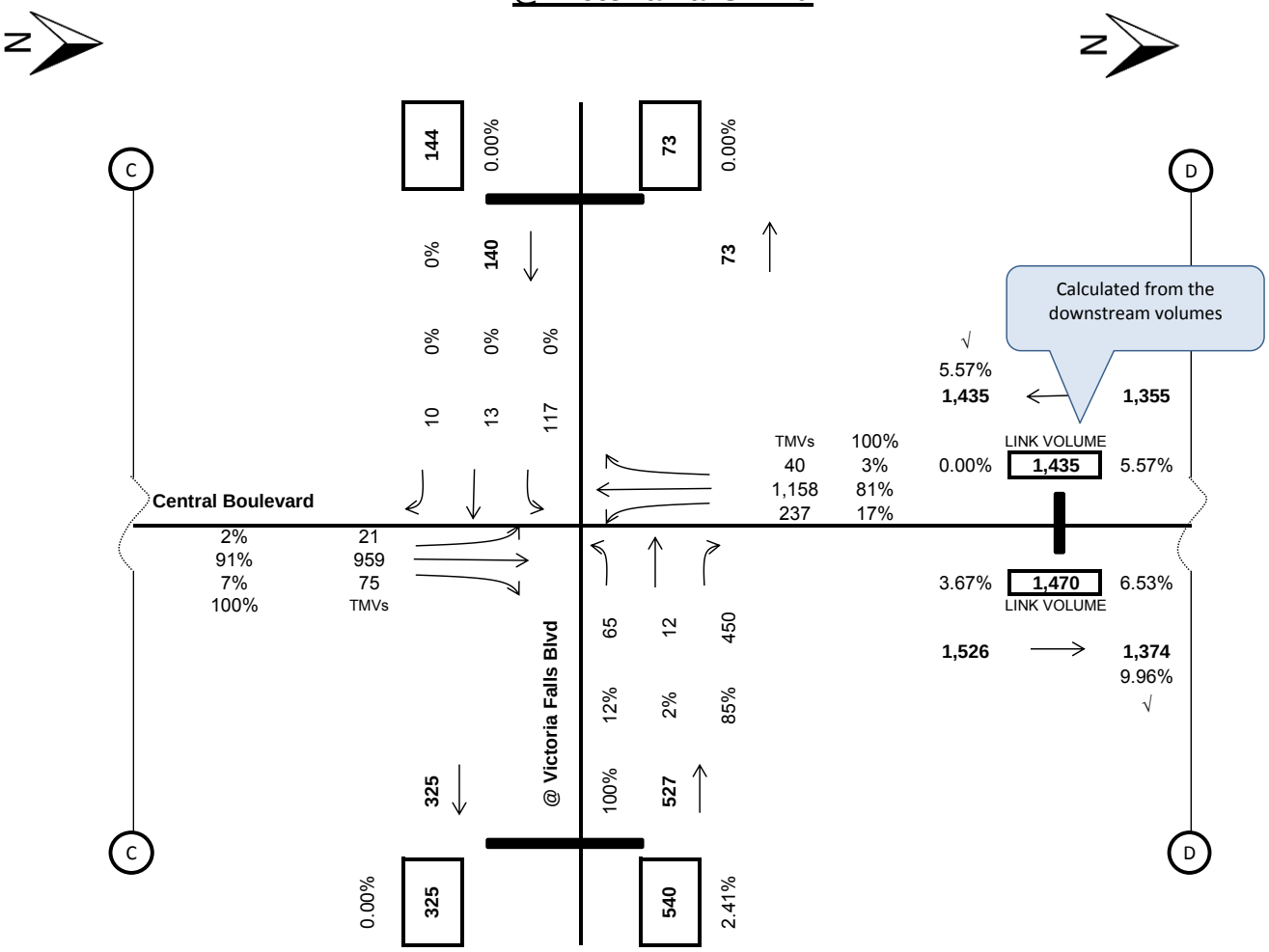
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Central Boulevard** **Turning Movement Volume Development** **2040 No Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **2 of 5** *Date:* 9/24/15

@ Victoria Falls Blvd



Turning Movement Volumes
@ Victoria Falls Blvd

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,435**			**540**			**1,083**			**144**	
TM Pk Hr Counts	382	1869	65	65	12	463	27	1277	97	121	13	10
% Turns	16%	81%	3%	12%	2%	86%	2%	91%	7%	84%	9%	7%
Calc. Pk Hr Volumes	237	1158	40	65	12	463	21	987	75	121	13	10
Adjustments						-13		-28		-4		
Bal Pk Hr Volumes	**237**	**1158**	**40**	**65**	**12**	**450**	**21**	**959**	**75**	**117**	**13**	**10**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

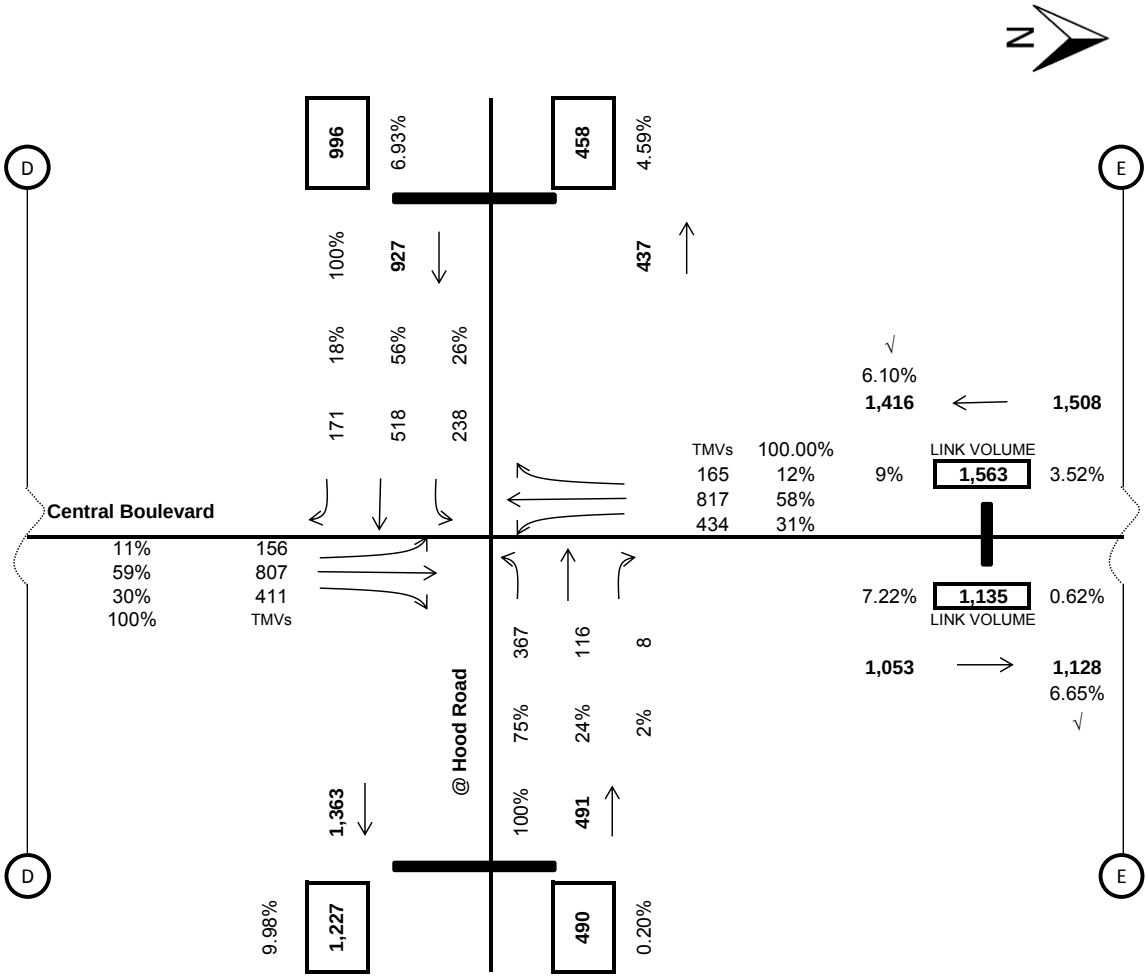
66 → Turning Movement Volumes (Balanced)

A — Match Line — A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Central Boulevard Turning Movement Volume Development 2040 No Build AM Peak Hour**	*Exhibit No:* **TBD**
		Page No: **3 of 5**
		Date: 9/24/15

@ Hood Road



Turning Movement Volumes
@ Hood Road

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**1,563**			**490**			**1,470**			**996**		
TM Pk Hr Counts	635	1150	219	855	270	18	185	1002	552	343	848	246
% Turns	32%	57%	11%	75%	24%	2%	11%	58%	32%	24%	59%	17%
Calc. Pk Hr Volumes	495	897	171	367	116	8	156	847	467	238	588	171
Adjustments	-61	-80	-6					-40	-56		-70	
Bal Pk Hr Volumes	**434**	**817**	**165**	**367**	**116**	**8**	**156**	**807**	**411**	**238**	**518**	**171**

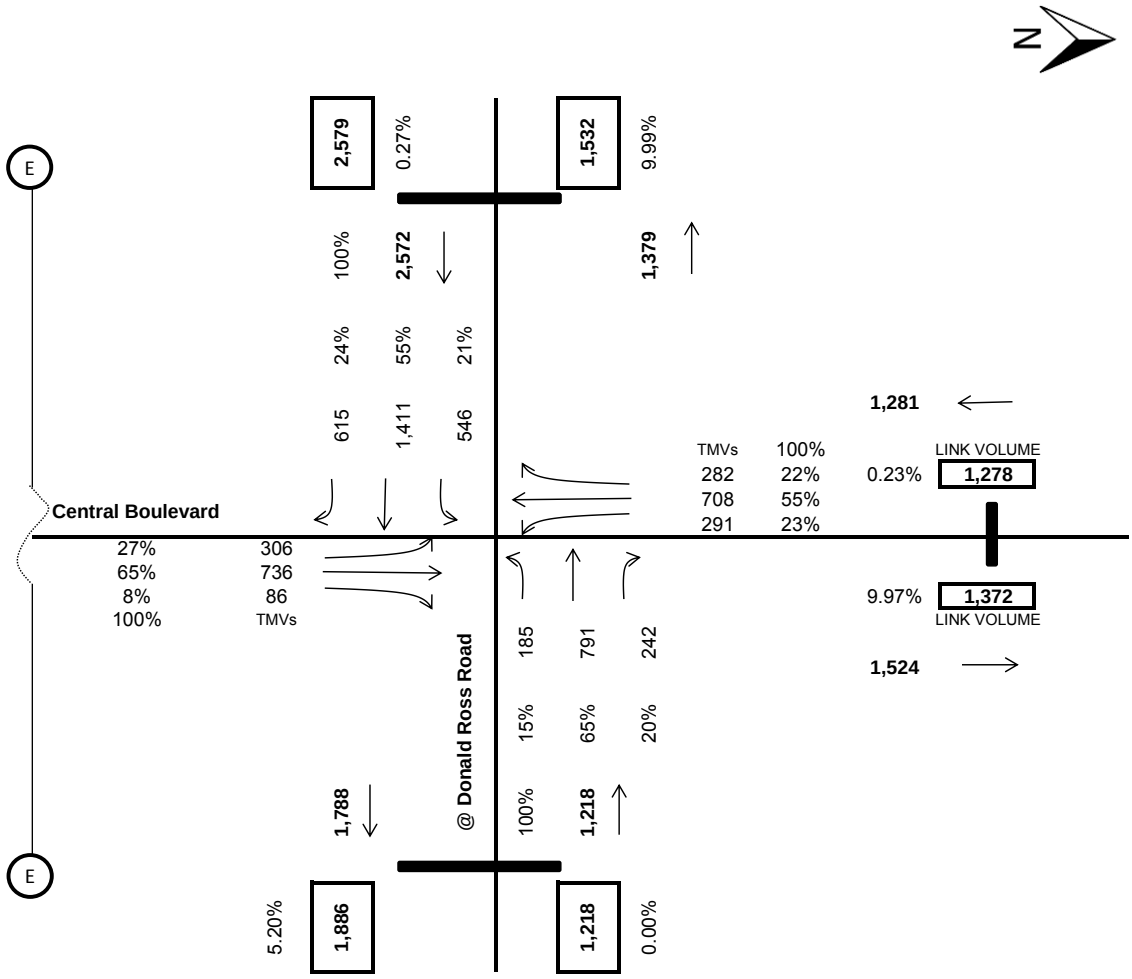
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Central Boulevard** **Turning Movement Volume Development** **2040 No Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **4 of 5** *Date:* 9/24/15

@ Donald Ross Road



Turning Movement Volumes
@ Donald Ross Road

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**1,278**			**1,218**			**1,135**			**2,579**		
TM Pk Hr Counts	622	1514	596	238	1011	315	449	1107	127	453	1158	505
% Turns	23%	55%	22%	15%	65%	20%	27%	66%	8%	21%	55%	24%
Calc. Pk Hr Volumes	291	708	279	185	787	245	303	747	86	552	1411	615
Adjustments			3		4	-3	3	-11		-6		
Bal Pk Hr Volumes	**291**	**708**	**282**	**185**	**791**	**242**	**306**	**736**	**86**	**546**	**1411**	**615**

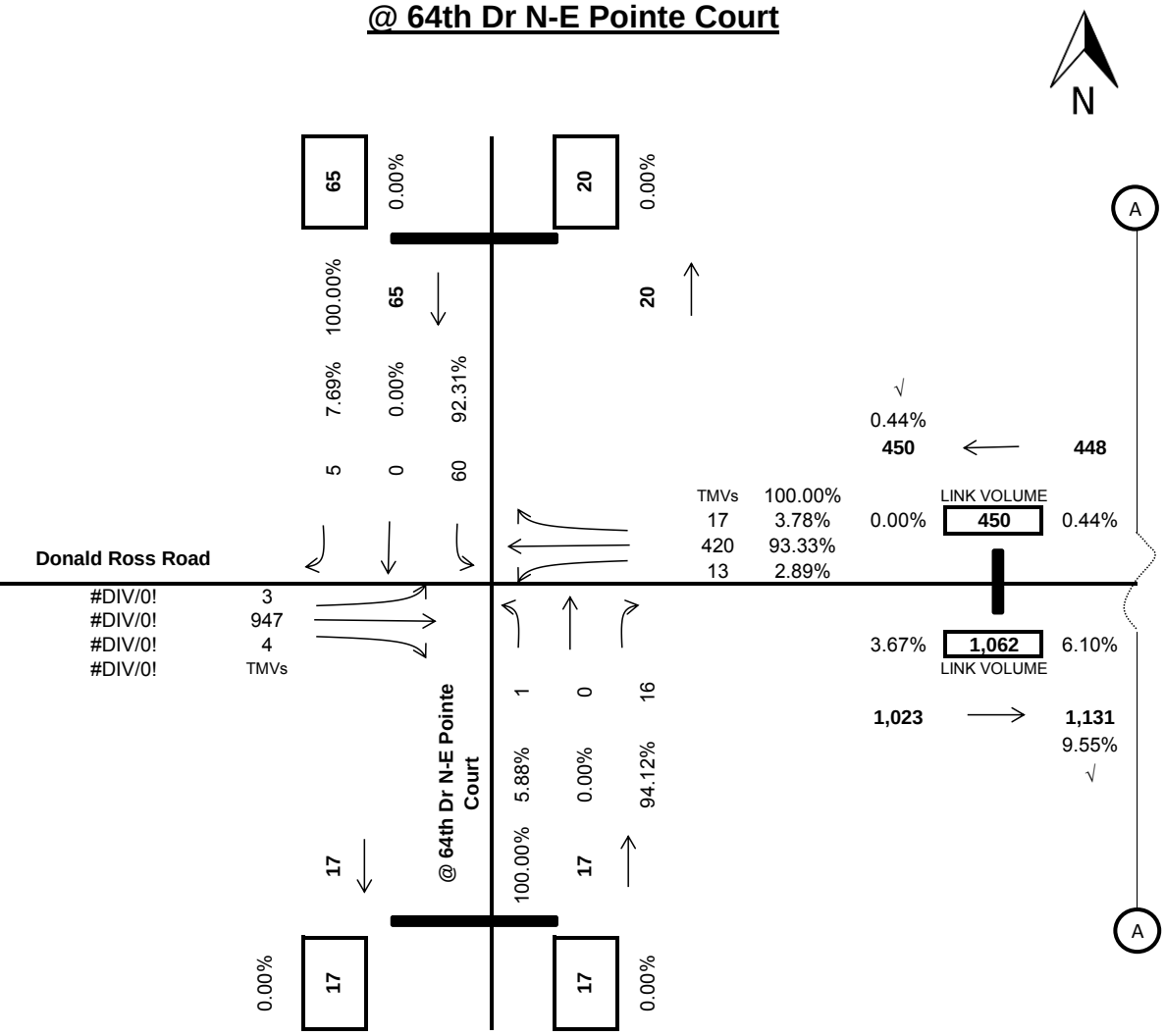
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A … A	Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Central Boulevard Turning Movement Volume Development 2040 No Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **5 of 5** *Date:* 9/24/15

@ 64th Dr N-E Pointe Court



Turning Movement Volumes
@ 64th Dr N-E Pointe Court

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**450**			**17**			**954**			**65**	
TM Pk Hr Counts	14	459	19	1	0	16	3	947	4	60	0	5
% Turns	3%	93%	4%	6%	0%	94%	0%	99%	0%	92%	0%	8%
Calc. Pk Hr Volumes	13	420	17	1	0	16	3	947	4	60	0	5
Adjustments												
Bal Pk Hr Volumes	**13**	**420**	**17**	**1**	**0**	**16**	**3**	**947**	**4**	**60**	**0**	**5**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 → — Turning Movement Volumes (Balanced)

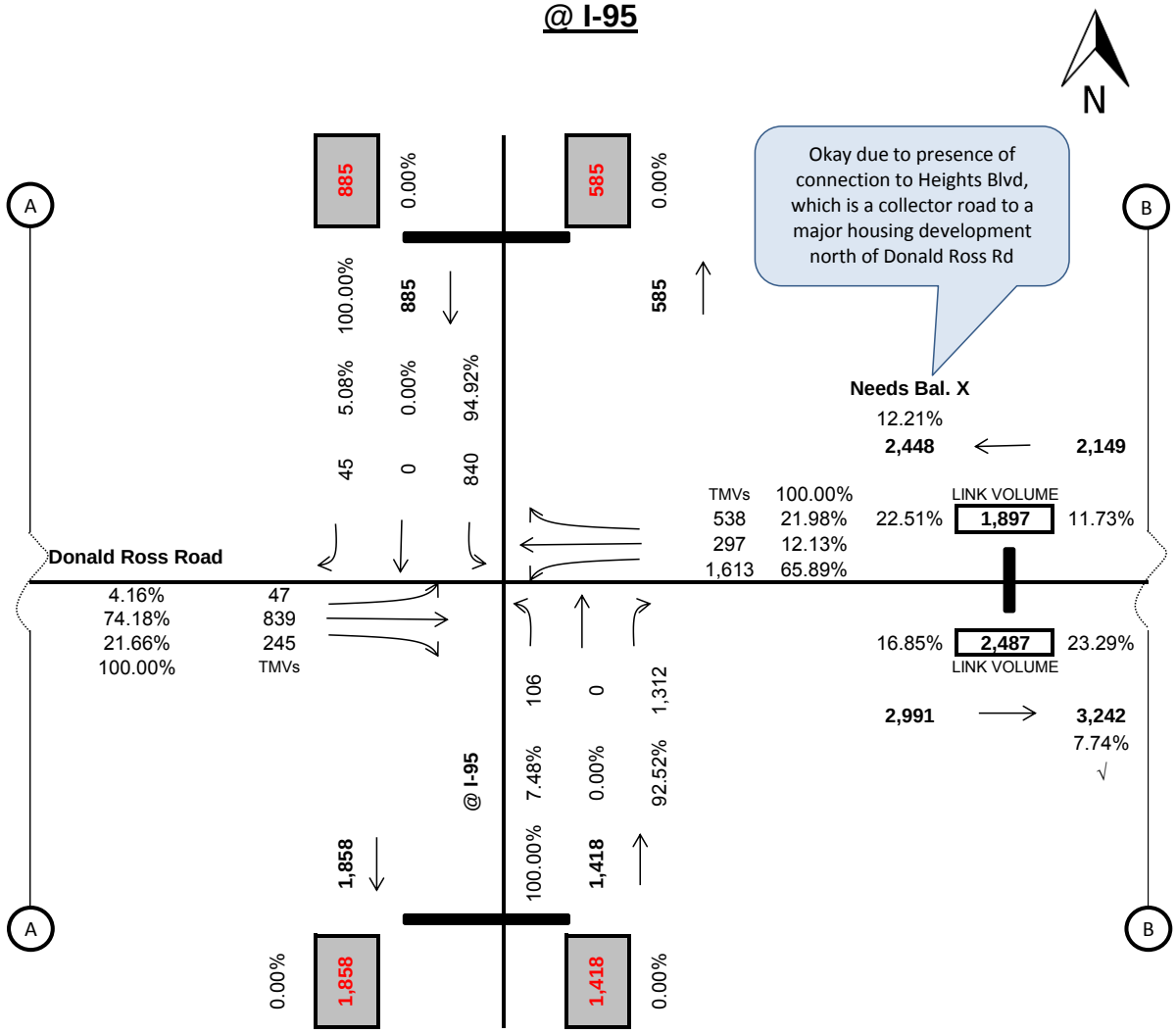
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413455-22-01	*Exhibit Name:* **Donald Ross Road** **Turning Movement Volume Development** **2040 No Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **1 of 5** *Date:* 9/24/15

@ I-95



Turning Movement Volumes
@ I-95

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**1,897**			**1,418**			**1,062**			**885**		
TM Pk Hr Counts	1882	434	453	140	0	1728	45	1411	329	854	0	46
% Turns	68%	16%	16%	7%	0%	93%	3%	79%	18%	95%	0%	5%
Calc. Pk Hr Volumes	1289	297	310	106	0	1312	27	839	196	840	0	45
Adjustments	324		228		0		20		49			
Bal Pk Hr Volumes	**1613**	**297**	**538**	**106**	**0**	**1312**	**47**	**839**	**245**	**840**	**0**	**45**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

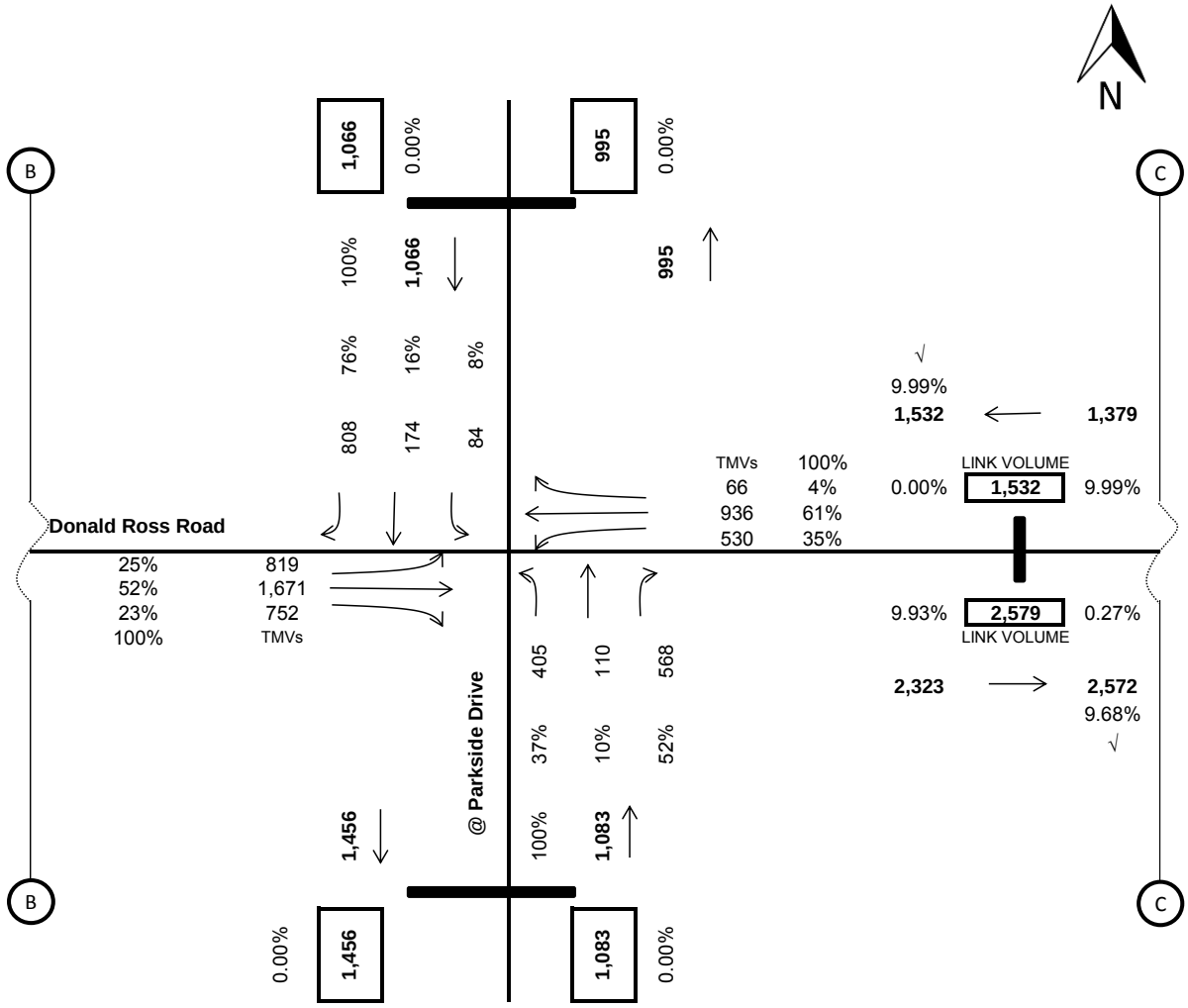
66 — Turning Movement Volumes (Balanced)

A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

@ Parkside Drive



Turning Movement Volumes
@ Parkside Drive

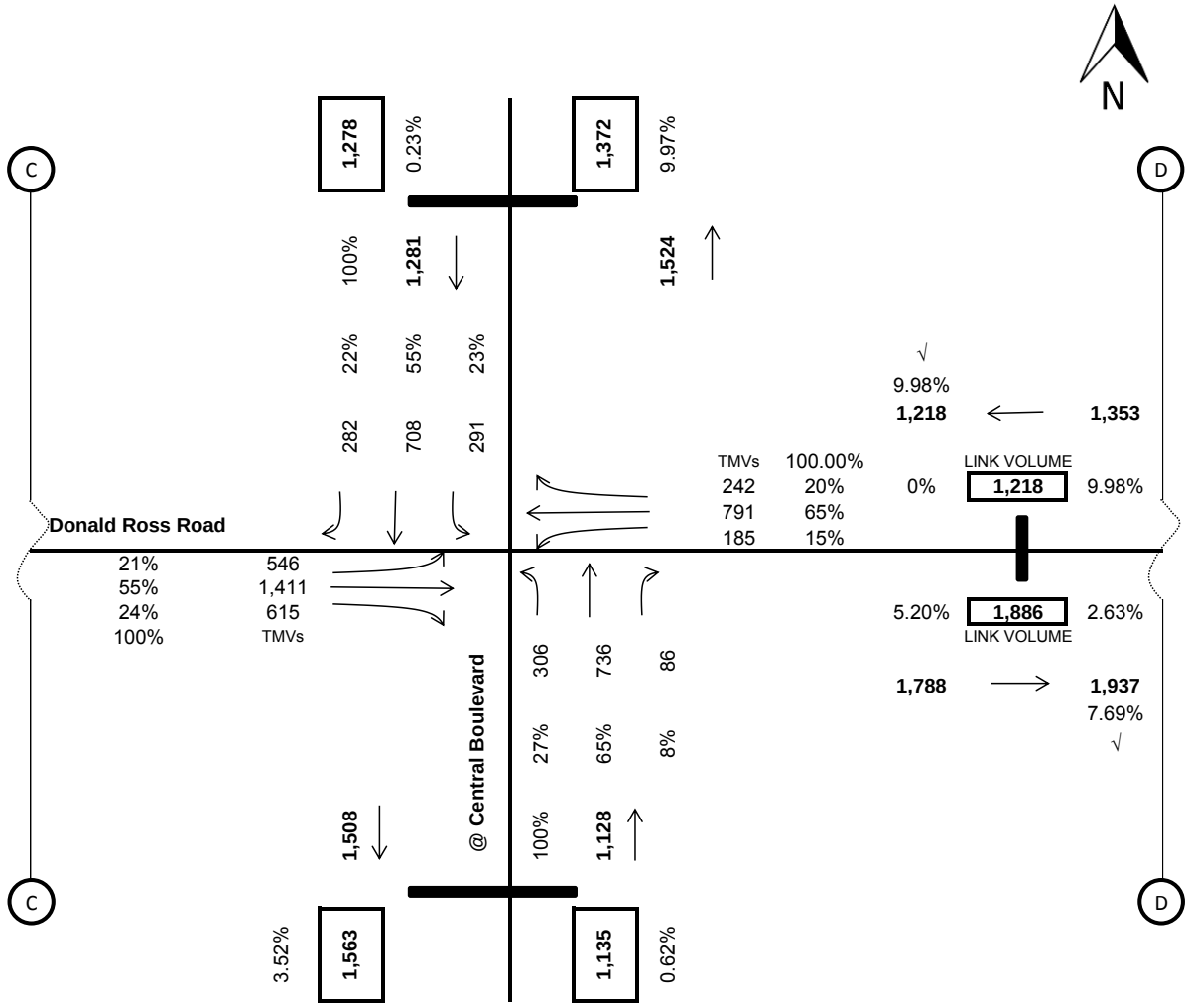
Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,532**			**1,083**			**2,487**			**1,066**	
TM Pk Hr Counts	736	1301	92	405	110	568	817	1671	785	84	174	808
% Turns	35%	61%	4%	37%	10%	52%	25%	51%	24%	8%	16%	76%
Calc. Pk Hr Volumes	530	936	66	405	110	568	621	1270	596	84	174	808
Adjustments							198	401	156			
Bal Pk Hr Volumes	**530**	**936**	**66**	**405**	**110**	**568**	**819**	**1671**	**752**	**84**	**174**	**808**

LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

@ Central Boulevard



Turning Movement Volumes
@ Central Boulevard

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes												
TM Pk Hr Counts												
% Turns												
Calc. Pk Hr Volumes												
Adjustments												
Bal Pk Hr Volumes	**185**	**791**	**242**	**306**	**736**	**86**	**546**	**1411**	**615**	**291**	**708**	**282**

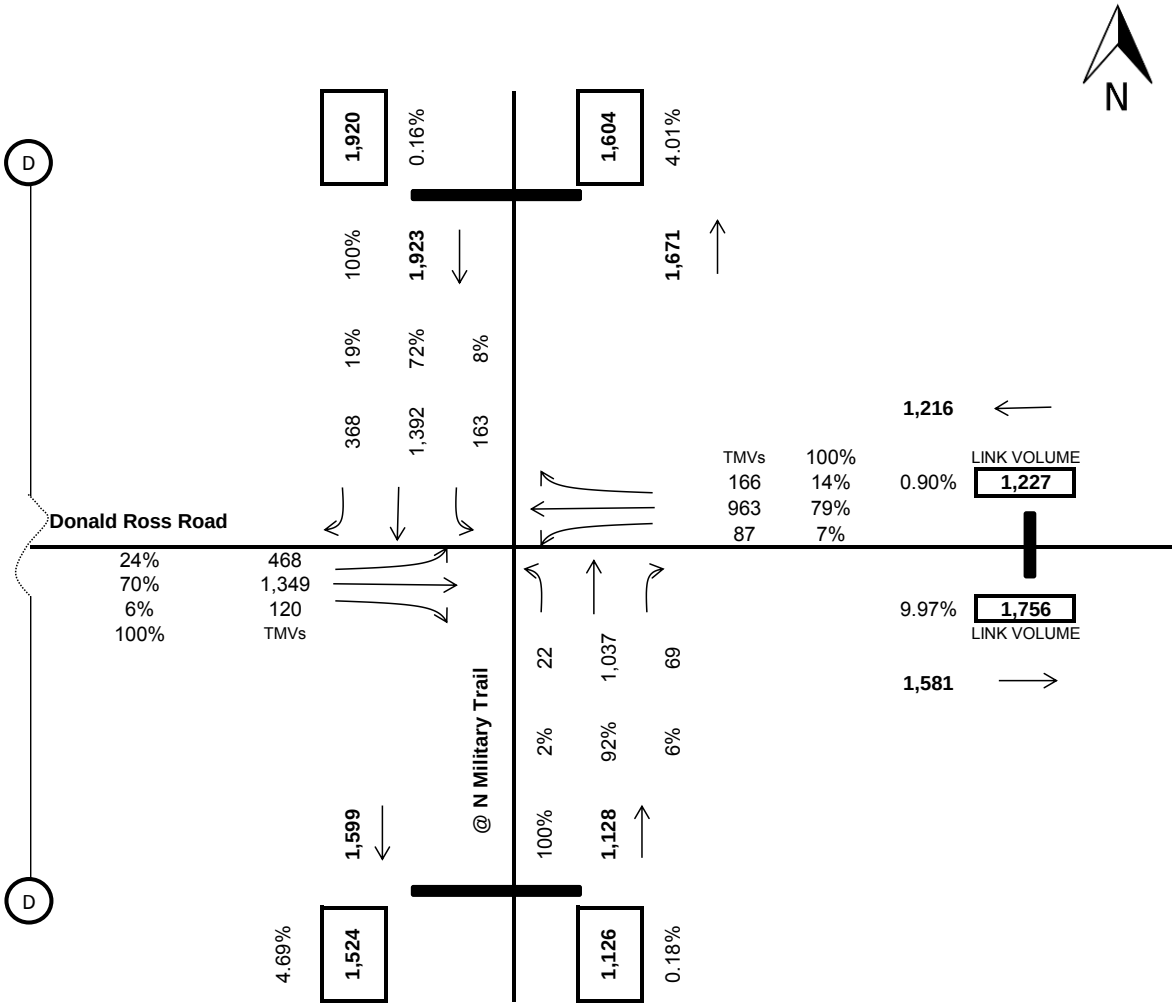
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

For consistency, balanced peak hour volumes from major street arterial (aka Central Boulevard) were used. See Central Boulevard Arterial for details

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

@ N Military Trail



Turning Movement Volumes
@ N Military Trail

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes												
TM Pk Hr Counts												
% Turns												
Calc. Pk Hr Volumes												
Adjustments												
Bal Pk Hr Volumes	**87**	**963**	**166**	**22**	**1037**	**69**	**468**	**1349**	**120**	**163**	**1392**	**368**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

A — Match Line

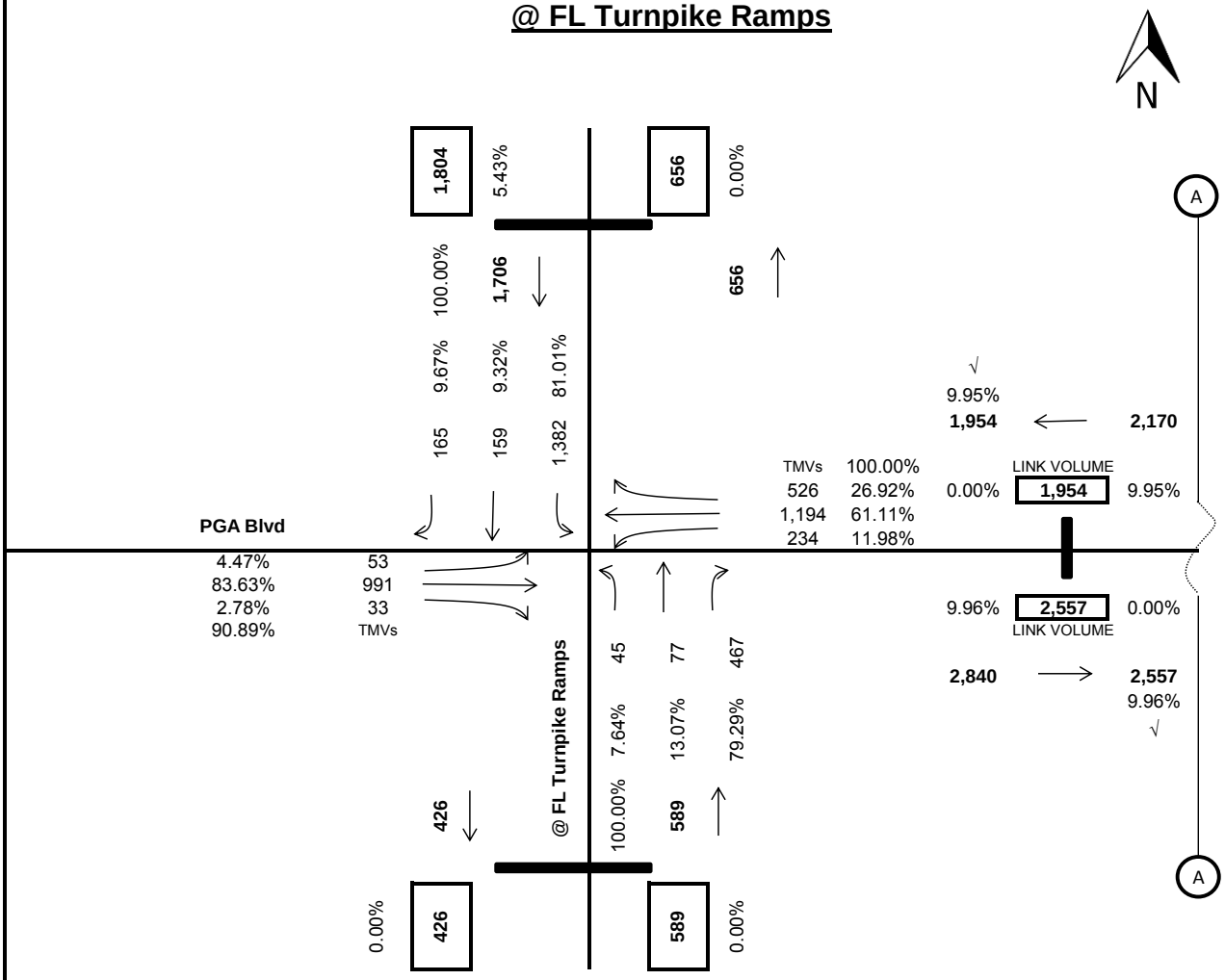
A

For consistency, balanced peak hour volumes from major street arterial (aka N Military Trail) were used. See N Military Trail Arterial for details

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FPID No. 413215-1-22-01	*Exhibit Name:* **Donald Ross Road** **Turning Movement Volume Development** **2040 No Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **5 of 5** *Date:* 9/24/15

@ FL Turnpike Ramps



Turning Movement Volumes
@ FL Turnpike Ramps

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,954**			**623**			**1,142**			**1,804**	
TM Pk Hr Counts	410	2089	920	45	77	501	95	1880	53	1480	159	165
% Turns	12%	61%	27%	7%	12%	80%	5%	93%	3%	82%	9%	9%
Calc. Pk Hr Volumes	234	1194	526	45	77	501	53	1059	30	1480	159	165
Adjustments						-34		-68	3	-98		
Bal Pk Hr Volumes	**234**	**1194**	**526**	**45**	**77**	**467**	**53**	**991**	**33**	**1382**	**159**	**165**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

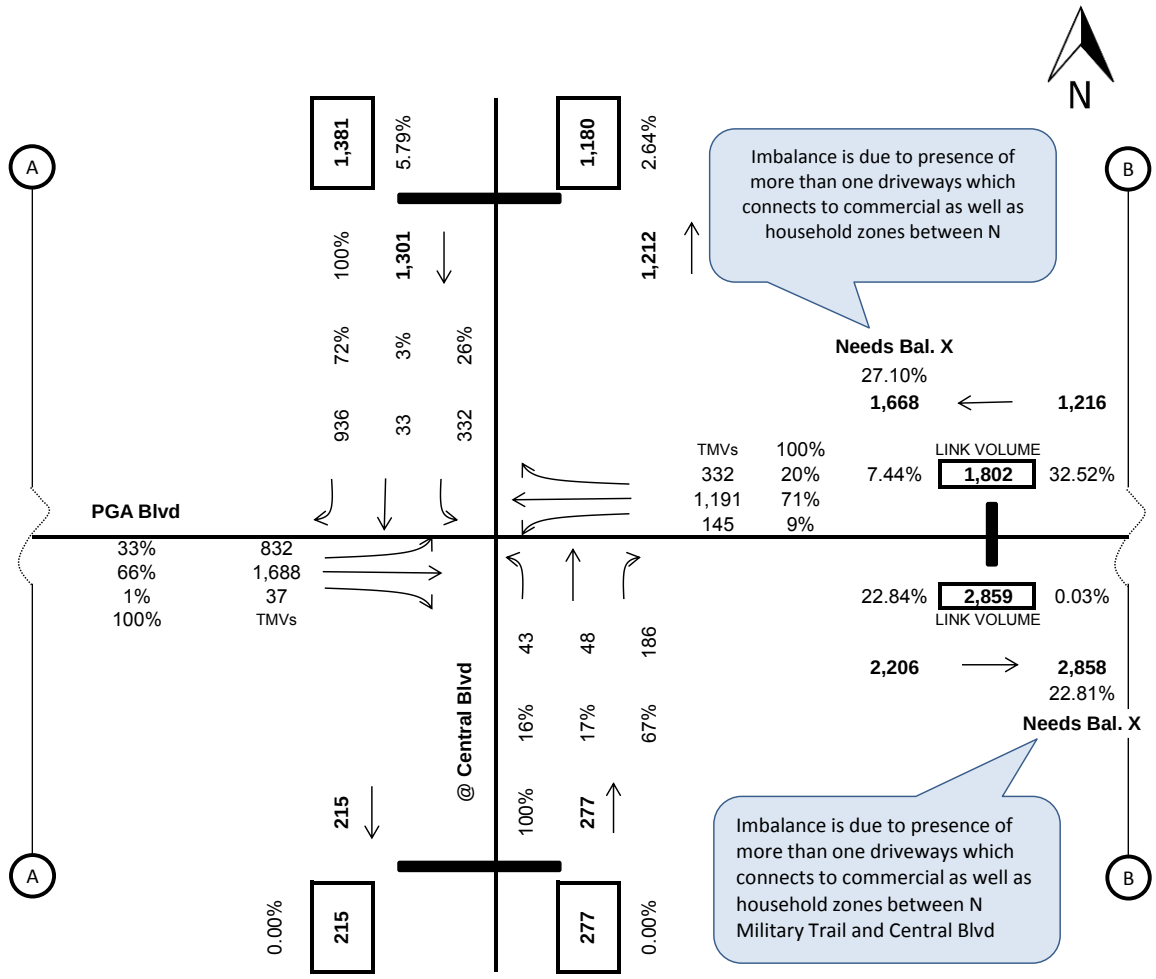
66 → Turning Movement Volumes (Balanced)

A … A — Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard** **Turning Movement Volume Development** **2040 No Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **1 of 8** *Date:* 9/24/15

@ Central Blvd



Turning Movement Volumes
@ Central Blvd

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**1,802**			**277**			**2,557**			**1,381**		
TM Pk Hr Counts	170	1411	388	43	48	186	1109	2251	50	558	55	1709
% Turns	9%	72%	20%	16%	17%	67%	33%	66%	1%	24%	2%	74%
Calc. Pk Hr Volumes	156	1291	355	43	48	186	832	1688	37	332	33	1016
Adjustments	-11	-100	-23									-80
Bal Pk Hr Volumes	**145**	**1191**	**332**	**43**	**48**	**186**	**832**	**1688**	**37**	**332**	**33**	**936**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

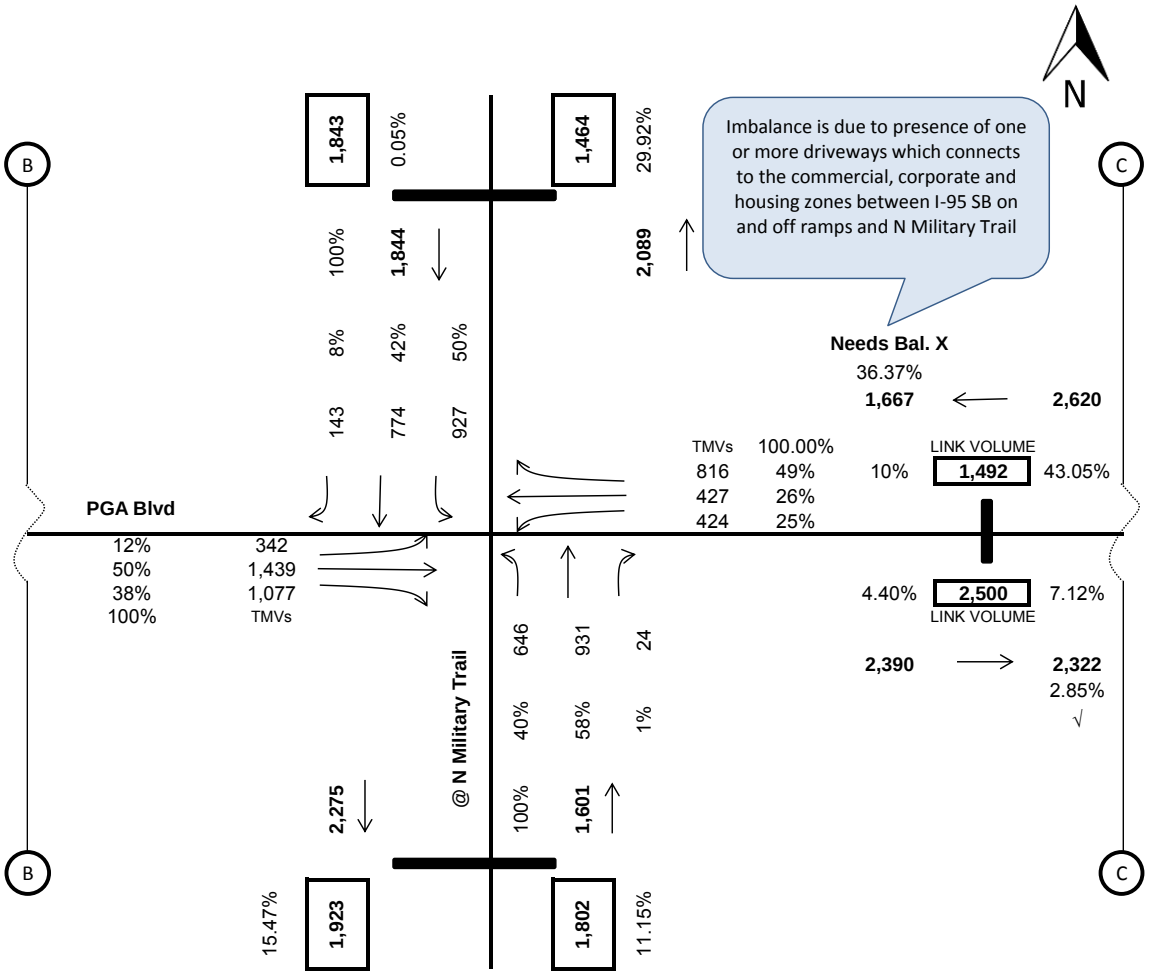
66 → — Turning Movement Volumes (Balanced)

A … A — Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name:	Exhibit Name:		
SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	**PGA Boulevard** **Turning Movement Volume Development** **2040 No Build AM Peak Hour**	Exhibit No:	**TBD**
		Page No:	**2 of 8**
		Date:	9/24/15

@ N Military Trail



Turning Movement Volumes
@ N Military Trail

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**1,492**			**1,802**			**2,859**			**1,843**		
TM Pk Hr Counts	736	742	1459	987	1728	37	362	1523	1140	1807	1509	278
% Turns	25%	25%	50%	36%	63%	1%	12%	50%	38%	50%	42%	8%
Calc. Pk Hr Volumes	374	377	741	646	1131	24	342	1439	1077	927	774	143
Adjustments	50	50	75		-200							
Bal Pk Hr Volumes	**424**	**427**	**816**	**646**	**931**	**24**	**342**	**1439**	**1077**	**927**	**774**	**143**

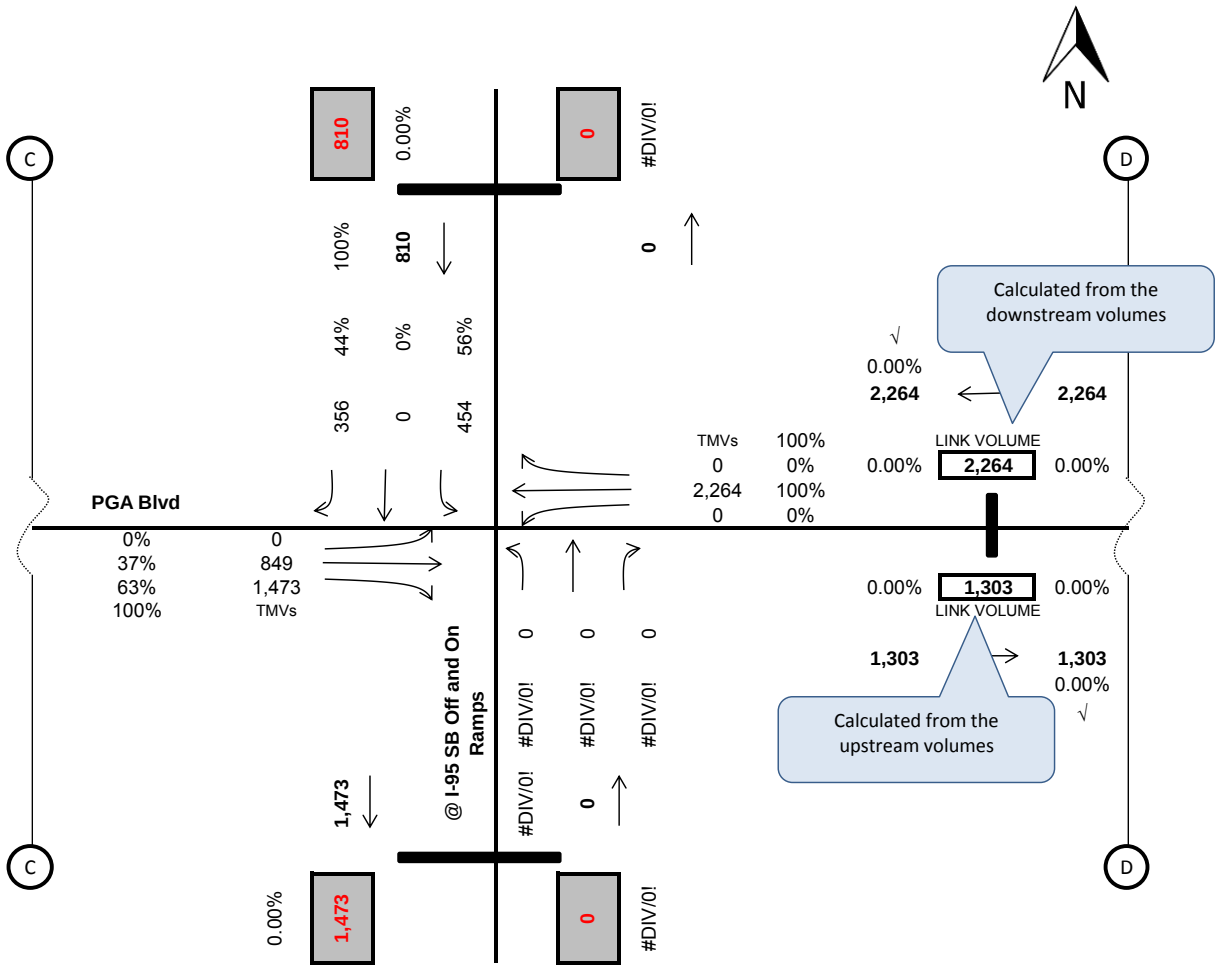
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A … A	Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard** **Turning Movement Volume Development** **2040 No Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **3 of 8** *Date:* 9/24/15

@ I-95 SB Off and On Ramps



Turning Movement Volumes
@ I-95 SB Off and On Ramps

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**2,264**			**0**			**2,500**			**810**	
TM Pk Hr Counts	0	2620	0	0	0	0	0	1112	2164	437	0	342
% Turns	0%	100%	0%	0%	0%	0%	0%	34%	66%	56%	0%	44%
Calc. Pk Hr Volumes	0	2264	0	0	0	0	0	849	1651	454	0	356
Adjustments									-178			
Bal Pk Hr Volumes	**0**	**2264**	**0**	**0**	**0**	**0**	**0**	**849**	**1473**	**454**	**0**	**356**

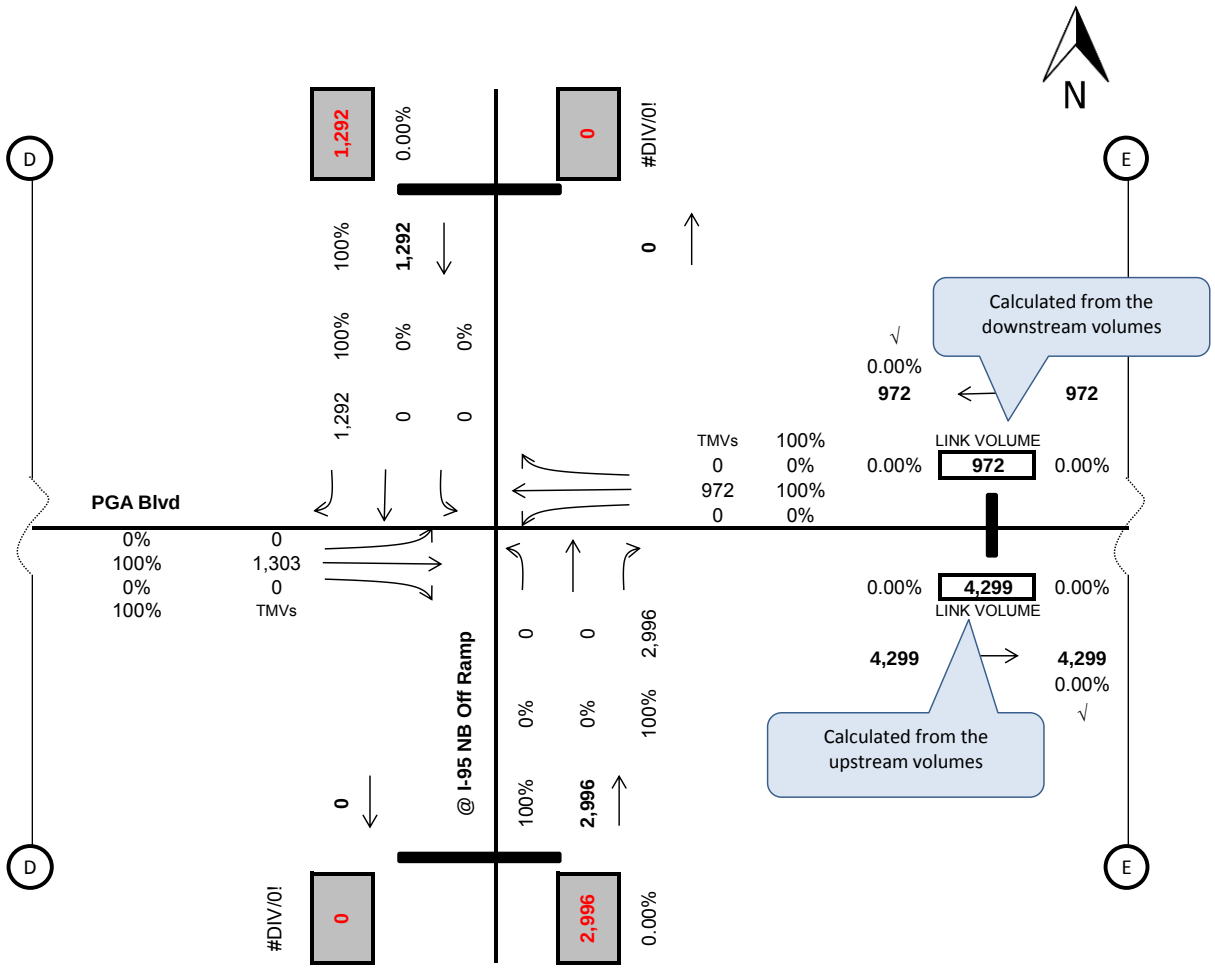
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A … A	Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard** **Turning Movement Volume Development** **2040 No Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **4 of 8** *Date:* 9/24/15

@ I-95 NB Off Ramp



Turning Movement Volumes
@ I-95 NB Off Ramp

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**972**			**2,996**			**1,303**			**1,292**	
TM Pk Hr Counts	0	2620	0	0	0	2700	0	1550	0	0	0	0
% Turns	0%	100%	0%	0%	0%	100%	0%	100%	0%	0%	0%	100%
Calc. Pk Hr Volumes	0	972	0	0	0	2996	0	1303	0	0	0	1292
Adjustments												
Bal Pk Hr Volumes	**0**	**972**	**0**	**0**	**0**	**2996**	**0**	**1303**	**0**	**0**	**0**	**1292**

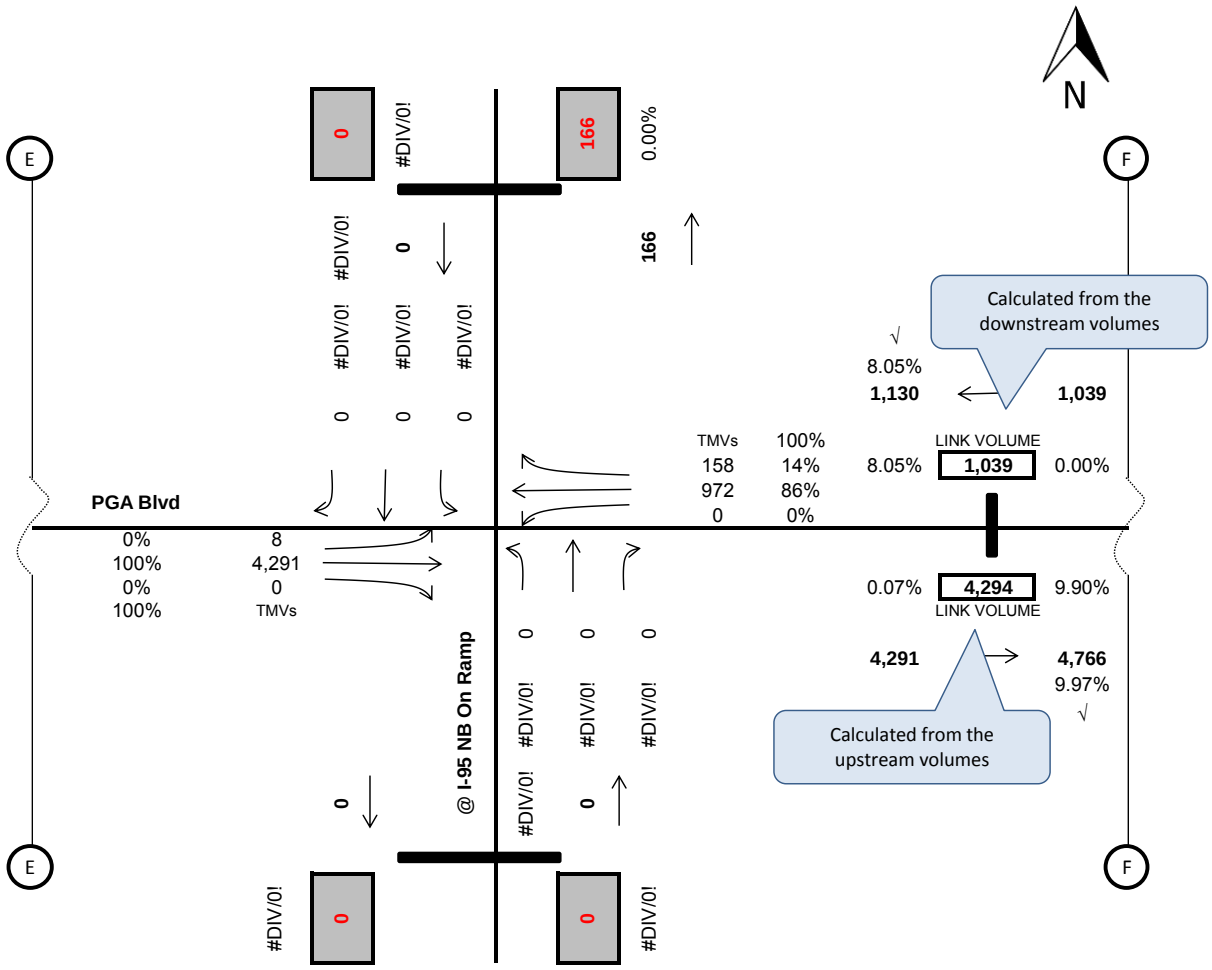
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A … A	Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard** **Turning Movement Volume Development** **2040 No Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **5 of 8** *Date:* 9/24/15

@ I-95 NB On Ramp



Turning Movement Volumes
@ I-95 NB On Ramp

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,039**			**0**			**4,299**			**0**	
TM Pk Hr Counts	0	798	132	0	0	0	5	4245	0	0	0	1822
% Turns	0%	86%	14%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Calc. Pk Hr Volumes	0	892	147	0	0	0	5	4294	0	0	0	0
Adjustments		80	11		0		3	-3				
Bal Pk Hr Volumes	**0**	**972**	**158**	**0**	**0**	**0**	**8**	**4291**	**0**	**0**	**0**	**0**

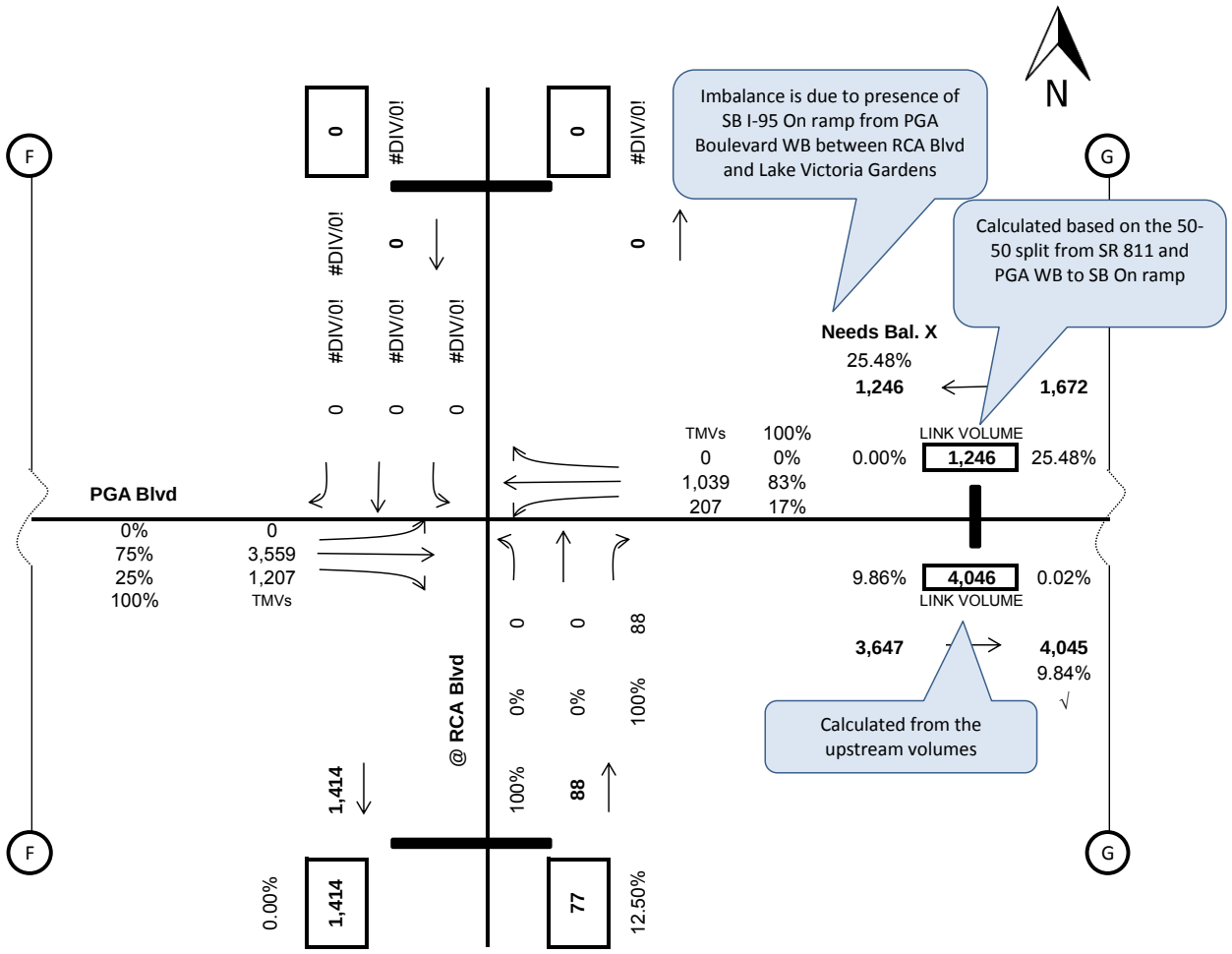
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard** **Turning Movement Volume Development** **2040 No Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **6 of 8** *Date:* 9/24/15

@ RCA Blvd



Turning Movement Volumes
@ RCA Blvd

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,246**			**77**			**4,294**			**0**	
TM Pk Hr Counts	186	931	0	0	0	77	0	2829	1416	0	0	0
% Turns	17%	83%	0%	0%	0%	100%	0%	67%	33%	0%	0%	0%
Calc. Pk Hr Volumes	207	1039	0	0	0	77	0	2862	1432	0	0	0
Adjustments						11		697	-225			
Bal Pk Hr Volumes	**207**	**1039**	**0**	**0**	**0**	**88**	**0**	**3559**	**1207**	**0**	**0**	**0**

Adjustments were made to achieve balance between upstream and downstream intersection volumes as well as reasonable split between movements

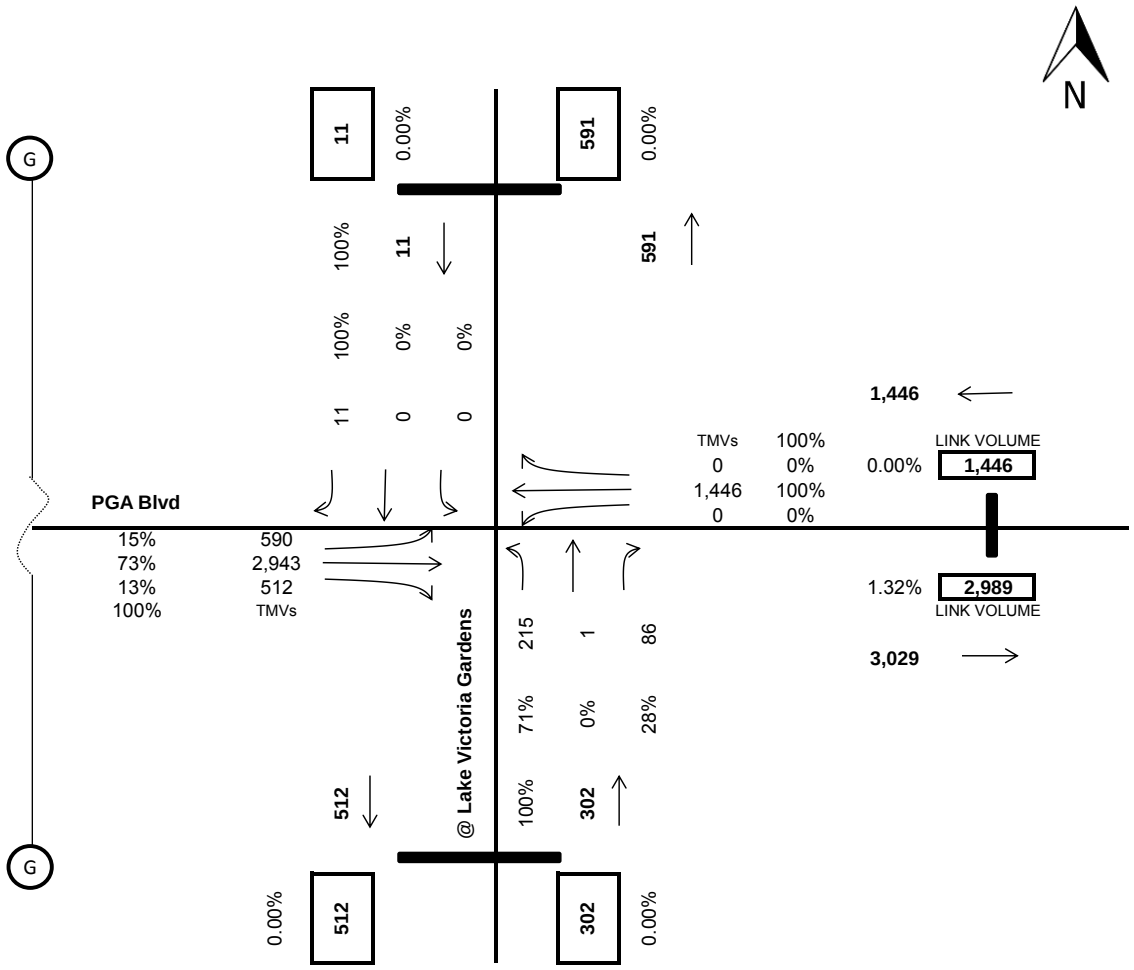
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard** **Turning Movement Volume Development** **2040 No Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **7 of 8** *Date:* 9/24/15

@ Lake Victoria Gardens



Turning Movement Volumes
@ Lake Victoria Gardens

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,446**			**302**			**4,046**			**11**	
TM Pk Hr Counts	0	1593	0	215	1	86	424	2114	368	0	0	11
% Turns	0%	100%	0%	71%	0%	28%	15%	73%	13%	0%	0%	100%
Calc. Pk Hr Volumes	0	1446	0	215	1	86	590	2943	512	0	0	11
Adjustments												
Bal Pk Hr Volumes	**0**	**1446**	**0**	**215**	**1**	**86**	**590**	**2943**	**512**	**0**	**0**	**11**

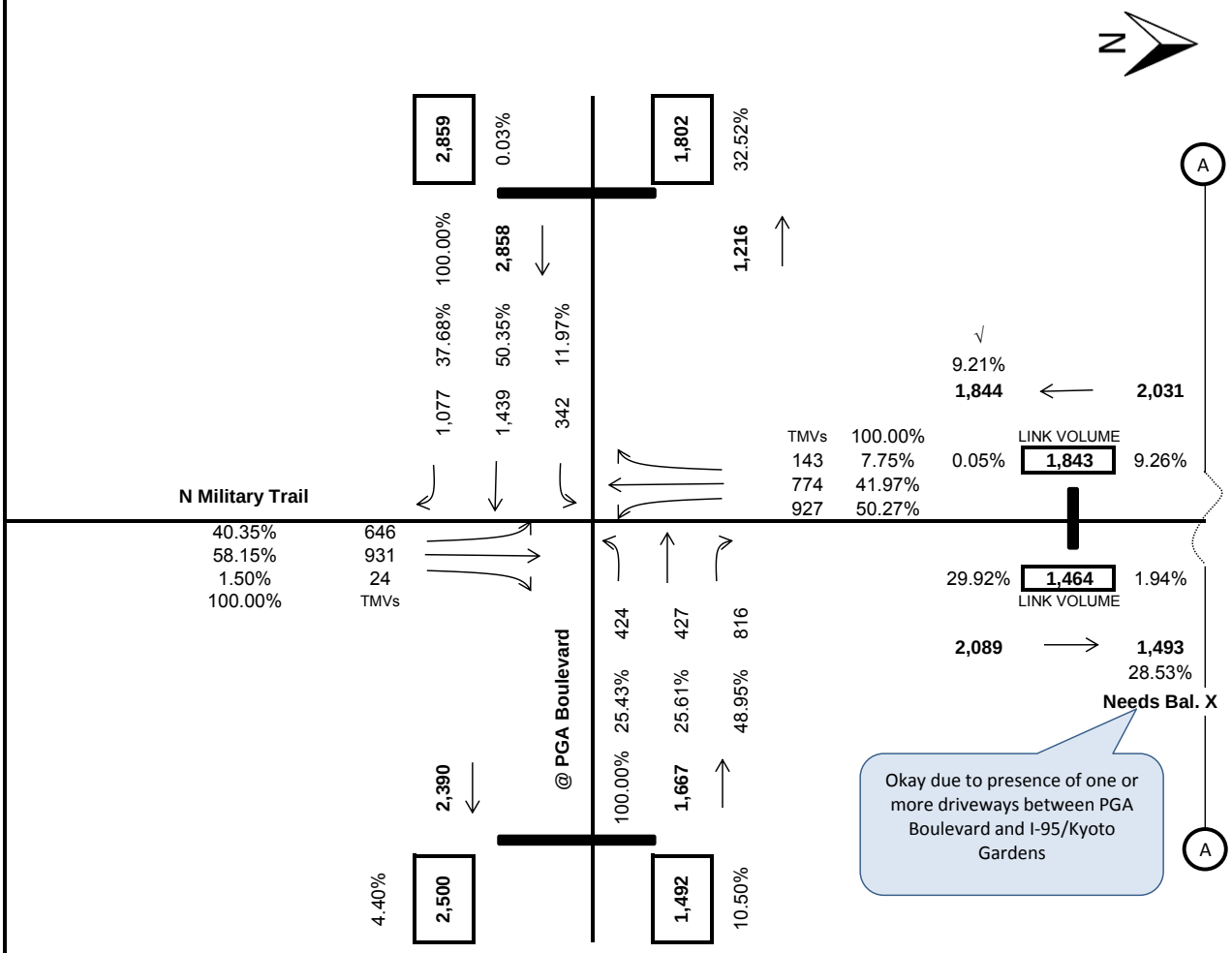
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard** **Turning Movement Volume Development** **2040 No Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **8 of 8** *Date:* 9/24/15

@ PGA Boulevard



Turning Movement Volumes
@ PGA Boulevard

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes												
TM Pk Hr Counts												
% Turns												
Calc. Pk Hr Volumes												
Adjustments												
Bal Pk Hr Volumes	**927**	**774**	**143**	**424**	**427**	**816**	**646**	**931**	**24**	**342**	**1439**	**1077**

For consistency, balanced peak hour volumes from major street arterial (aka PGA Boulevard) were used. See PGA Boulevard Arterial for details

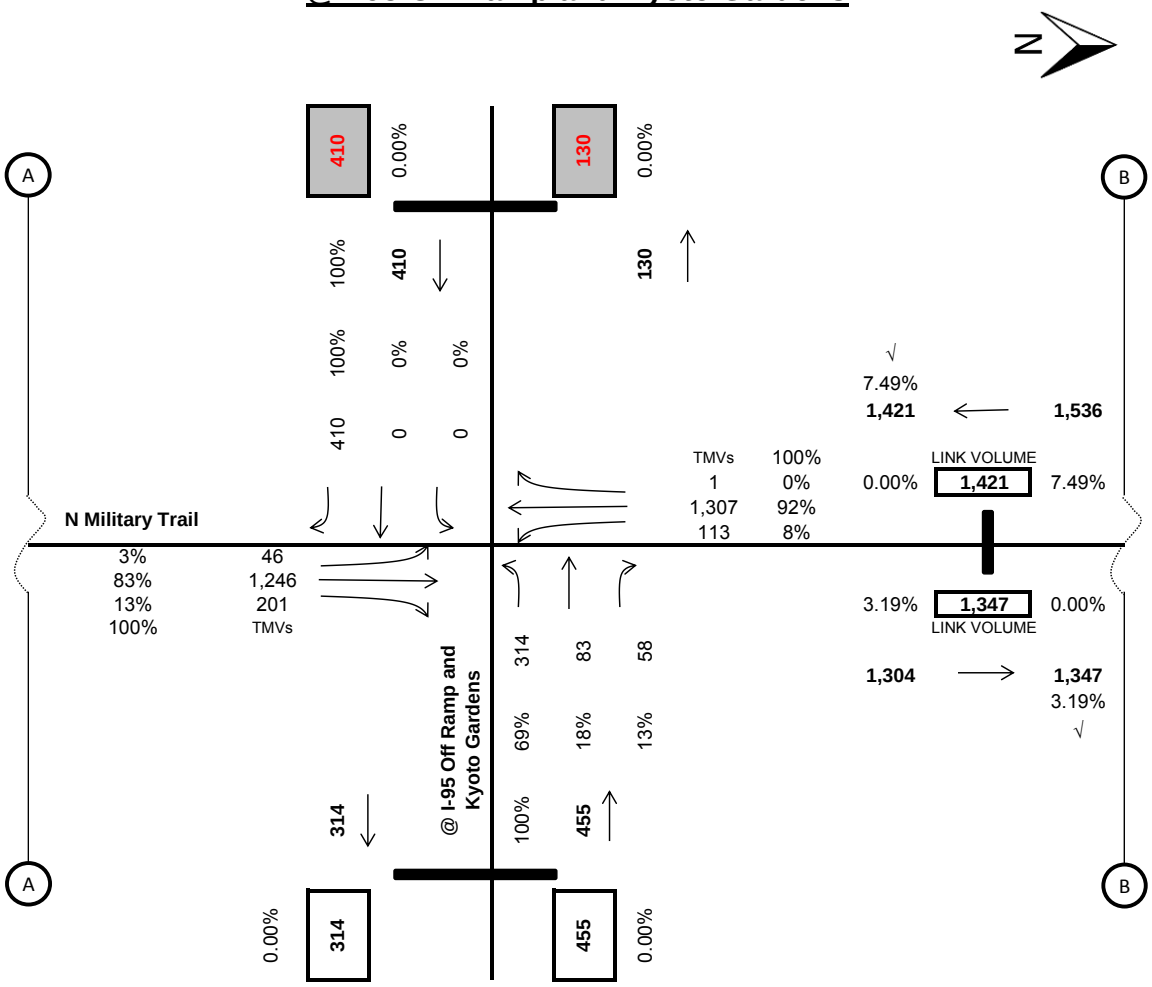
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A / A	Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **N Military Trail** **Turning Movement Volume Development** **2040 No Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **1 of 4** *Date:* 9/24/15

@ I-95 Off Ramp and Kyoto Gardens



Turning Movement Volumes
@ I-95 Off Ramp and Kyoto

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,421**			**455**			**1,464**			**410**	
TM Pk Hr Counts	285	3283	2	314	83	58	37	2853	461	0	0	80
% Turns	8%	92%	0%	69%	18%	13%	1%	85%	14%	0%	0%	100%
Calc. Pk Hr Volumes	113	1307	1	314	83	58	16	1246	201	0	0	410
Adjustments							30					
Bal Pk Hr Volumes	**113**	**1307**	**1**	**314**	**83**	**58**	**46**	**1246**	**201**	**0**	**0**	**410**

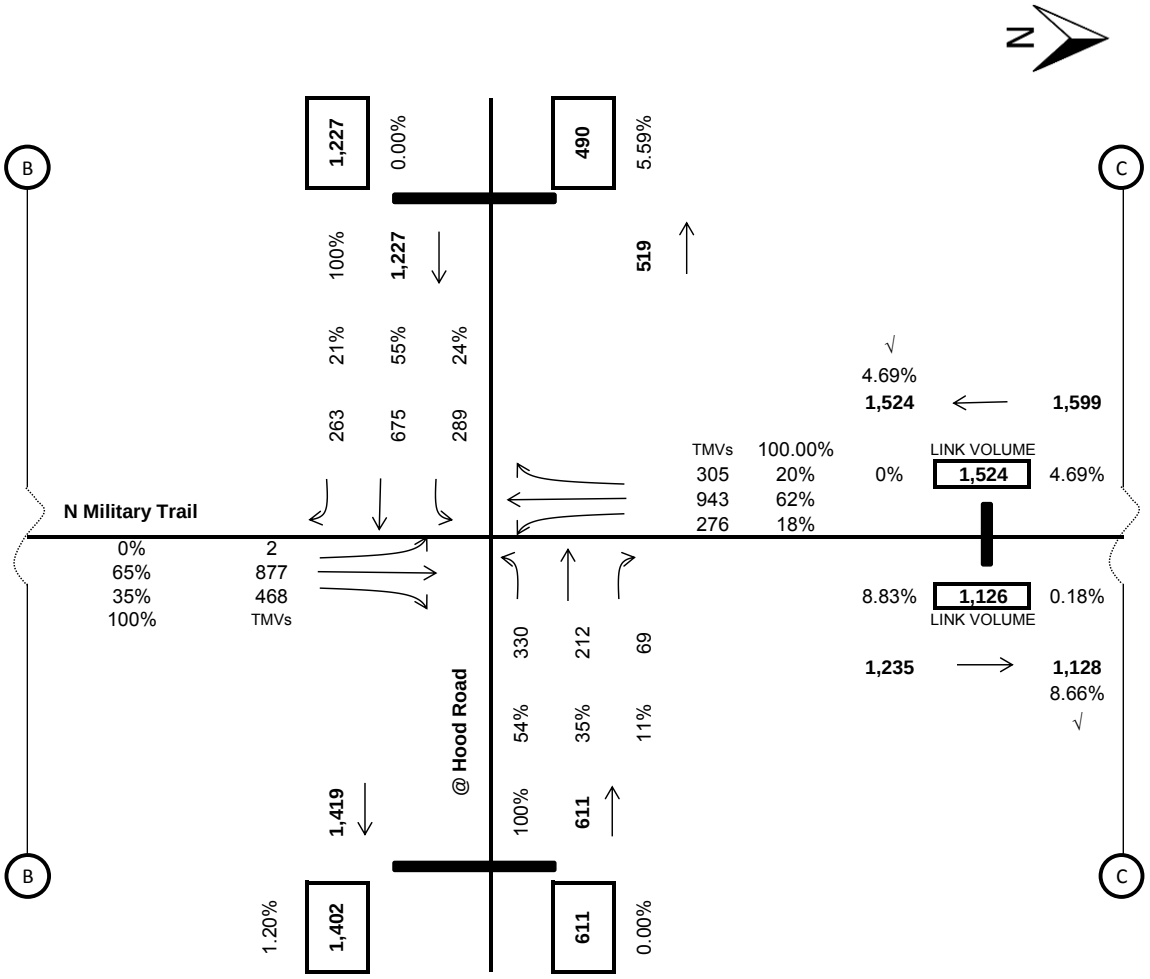
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66 →	Turning Movement Volumes (Balanced)
A … A	Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard, Project Development & Environmental Study, FM No. 413265-1-22-01	*Exhibit Name:* **N Military Trail, Turning Movement Volume Development, 2040 No Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **2 of 4** *Date:* 9/24/15

@ Hood Road



Turning Movement Volumes
@ Hood Road

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,524**			**611**			**1,347**			**1,227**	
TM Pk Hr Counts	492	1680	543	932	598	195	4	1592	849	479	1120	437
% Turns	18%	62%	20%	54%	35%	11%	0%	65%	35%	24%	55%	21%
Calc. Pk Hr Volumes	276	943	305	330	212	69	2	877	468	289	675	263
Adjustments												
Bal Pk Hr Volumes	**276**	**943**	**305**	**330**	**212**	**69**	**2**	**877**	**468**	**289**	**675**	**263**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

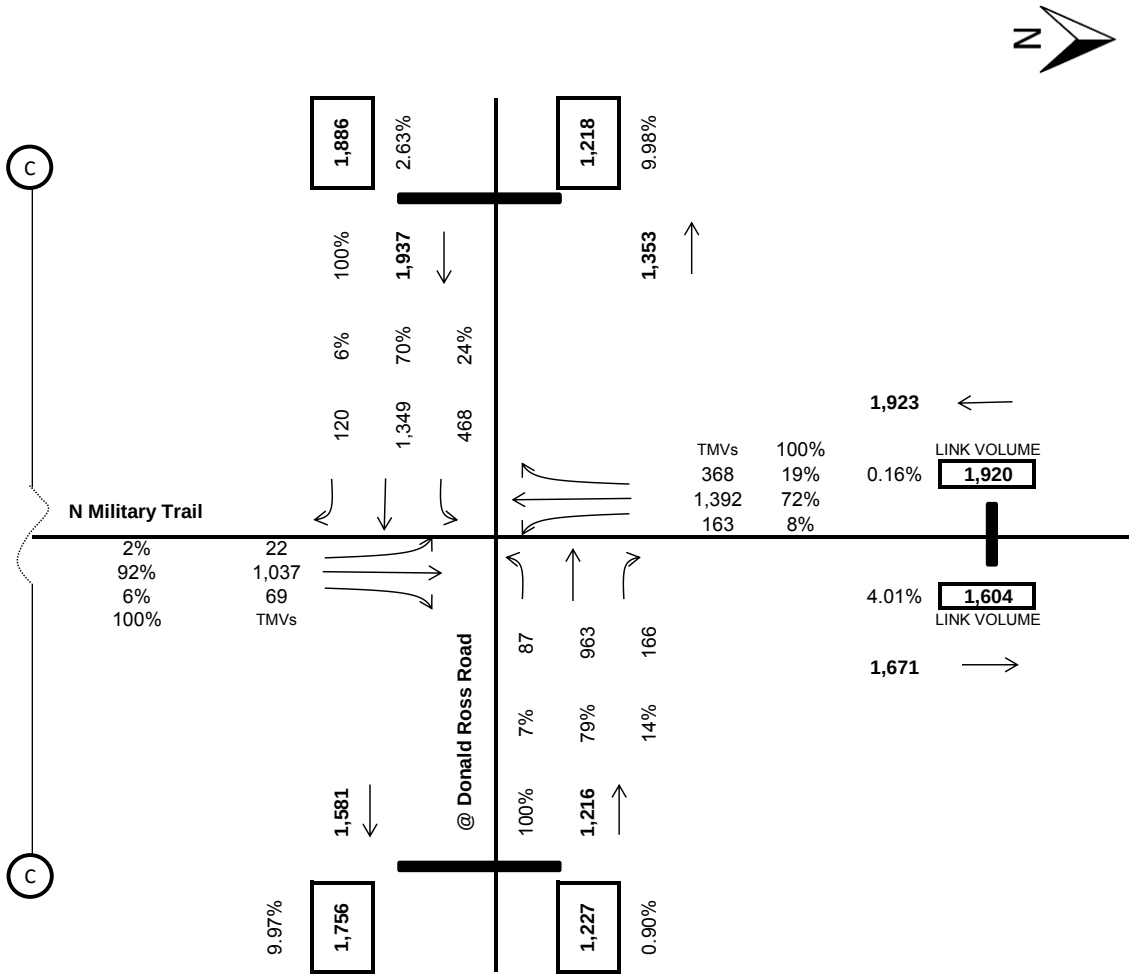
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **N Military Trail** **Turning Movement Volume Development** **2040 No Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **3 of 4** *Date:* 9/24/15

@ Donald Ross Road



Turning Movement Volumes
@ Donald Ross Road

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,920**			**1,227**			**1,126**			**1,886**	
TM Pk Hr Counts	250	2212	590	85	952	162	39	1785	114	470	1304	121
% Turns	8%	72%	19%	7%	79%	14%	2%	92%	6%	25%	69%	6%
Calc. Pk Hr Volumes	157	1392	371	87	974	166	23	1037	66	468	1298	120
Adjustments	6		-3		-11		-1		3		51	
Bal Pk Hr Volumes	**163**	**1392**	**368**	**87**	**963**	**166**	**22**	**1037**	**69**	**468**	**1349**	**120**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

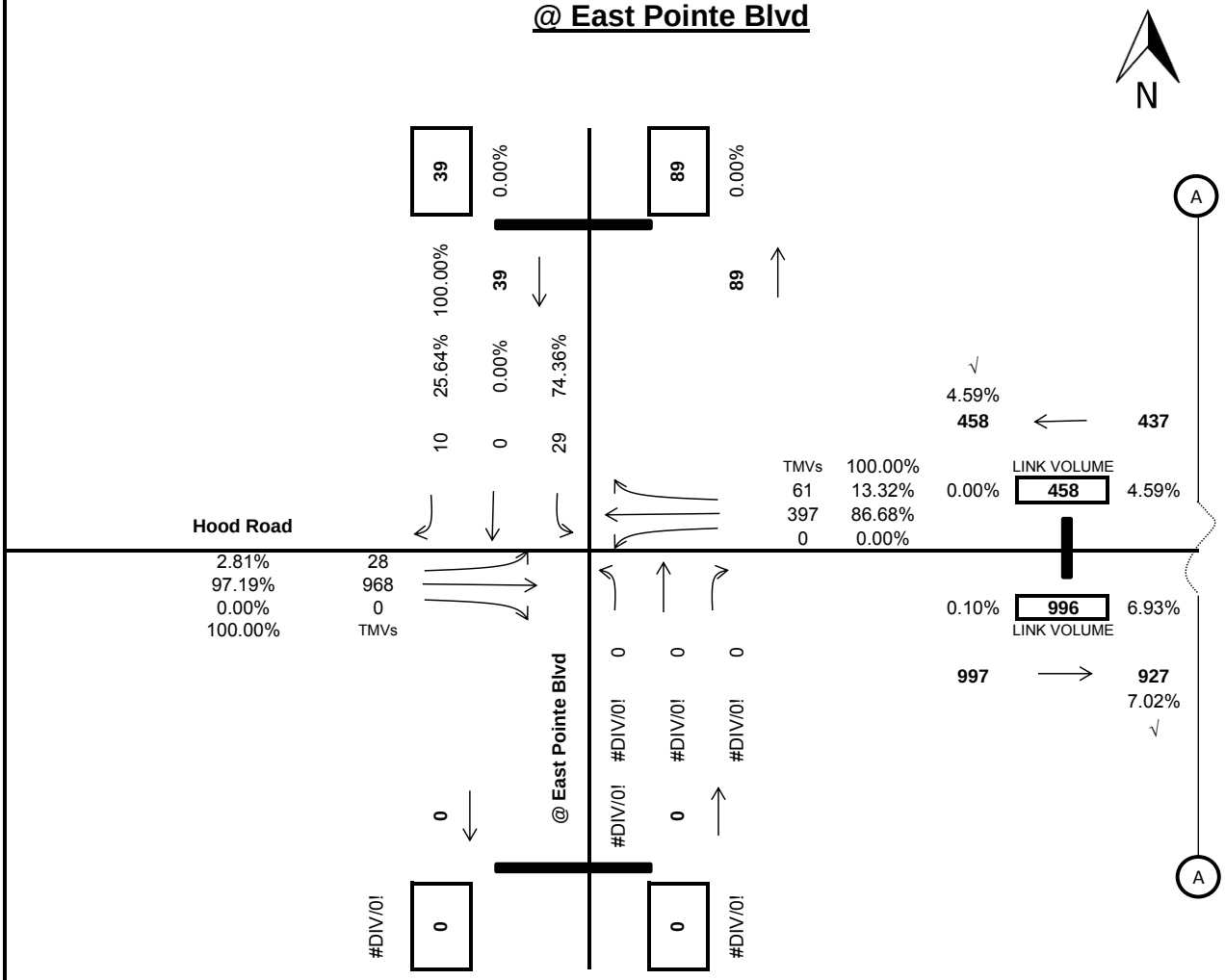
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **N Military Trail** **Turning Movement Volume Development** **2040 No Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **4 of 4** *Date:* 9/24/15

@ East Pointe Blvd



Turning Movement Volumes
@ East Pointe Blvd

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**458**			**0**			**996**			**39**	
TM Pk Hr Counts	0	195	30	0	0	0	10	346	0	29	0	10
% Turns	0%	87%	13%	0%	0%	0%	3%	97%	0%	74%	0%	26%
Calc. Pk Hr Volumes	0	397	61	0	0	0	28	968	0	29	0	10
Adjustments												
Bal Pk Hr Volumes	**0**	**397**	**61**	**0**	**0**	**0**	**28**	**968**	**0**	**29**	**0**	**10**

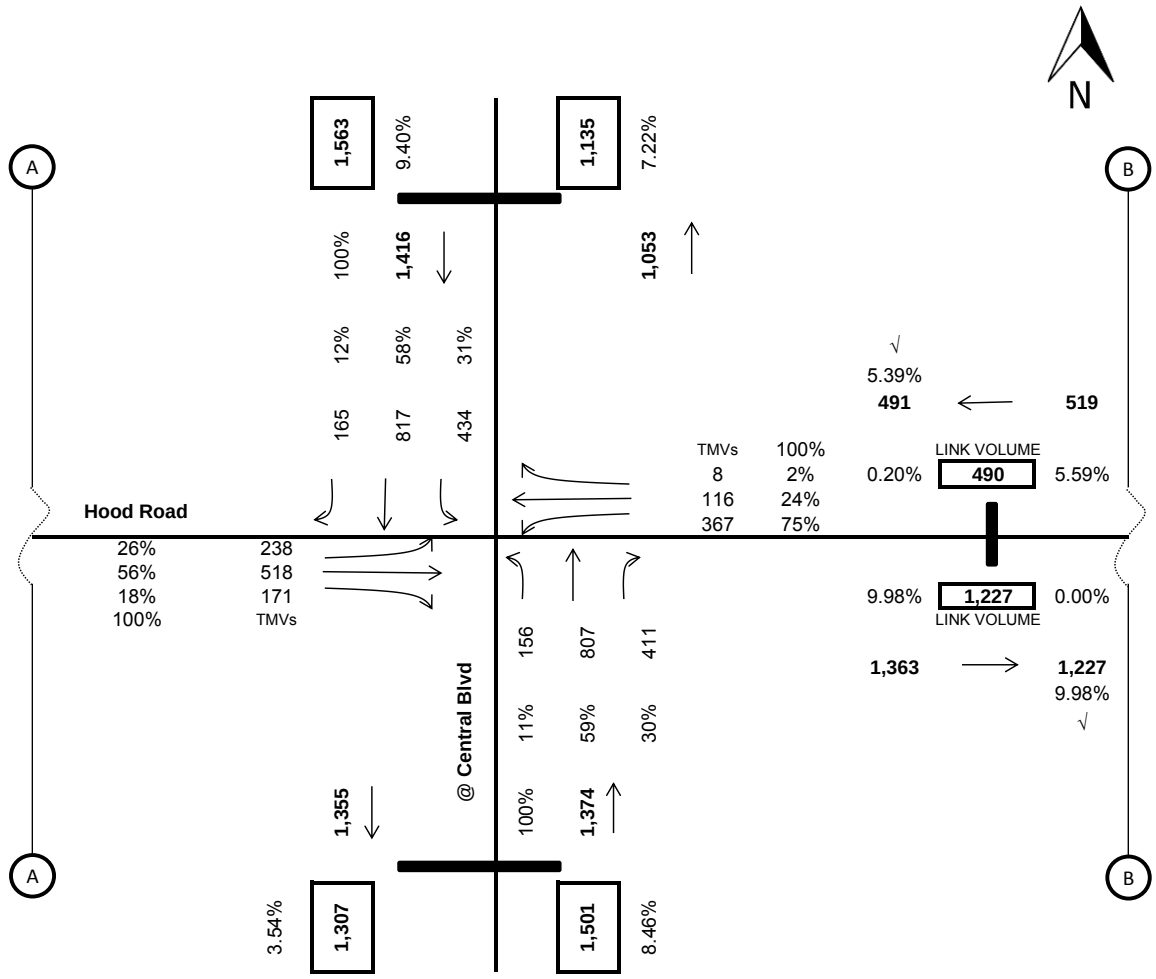
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A / A	Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Hood Road** **Turning Movement Volume Development** **2040 No Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **1 of 3** *Date:* 9/24/15

@ Central Blvd



Turning Movement Volumes
@ Central Blvd

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes												
TM Pk Hr Counts												
% Turns												
Calc. Pk Hr Volumes												
Adjustments												
Bal Pk Hr Volumes	**367**	**116**	**8**	**156**	**807**	**411**	**238**	**518**	**171**	**434**	**817**	**165**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 → Turning Movement Volumes (Balanced)

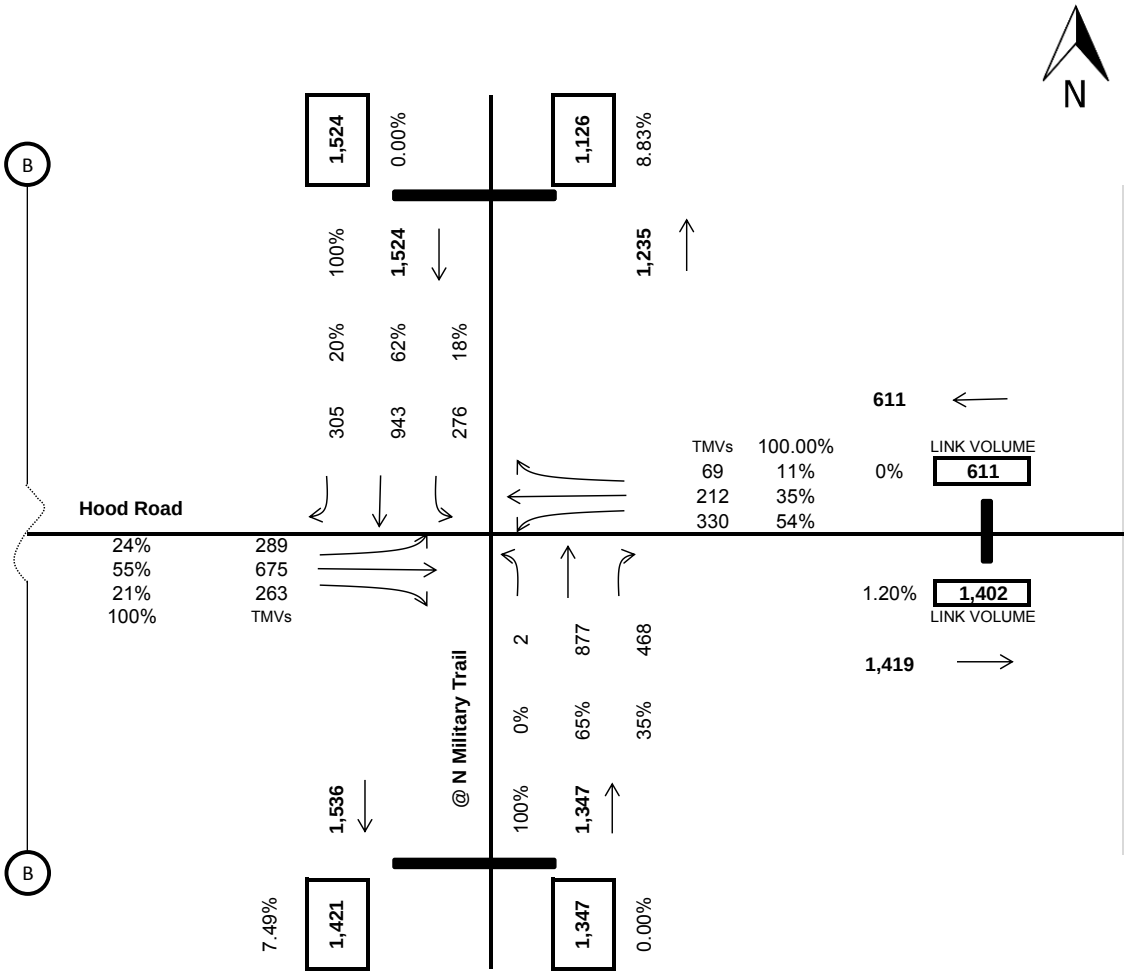
A — Match Line — A

For consistency, balanced peak hour volumes from major street arterial (aka Central Boulevard) were used. See Central Boulevard Arterial for details

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name:	Exhibit Name:		
SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	**Hood Road** **Turning Movement Volume Development** **2040 No Build AM Peak Hour**	*Exhibit No:*	**TBD**
		Page No:	**2 of 3**
		Date:	9/24/15

@ N Military Trail



Turning Movement Volumes
@ N Military Trail

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes												
TM Pk Hr Counts												
% Turns												
Calc. Pk Hr Volumes												
Adjustments												
Bal Pk Hr Volumes	**330**	**212**	**69**	**2**	**877**	**468**	**289**	**675**	**263**	**276**	**943**	**305**

LEGEND

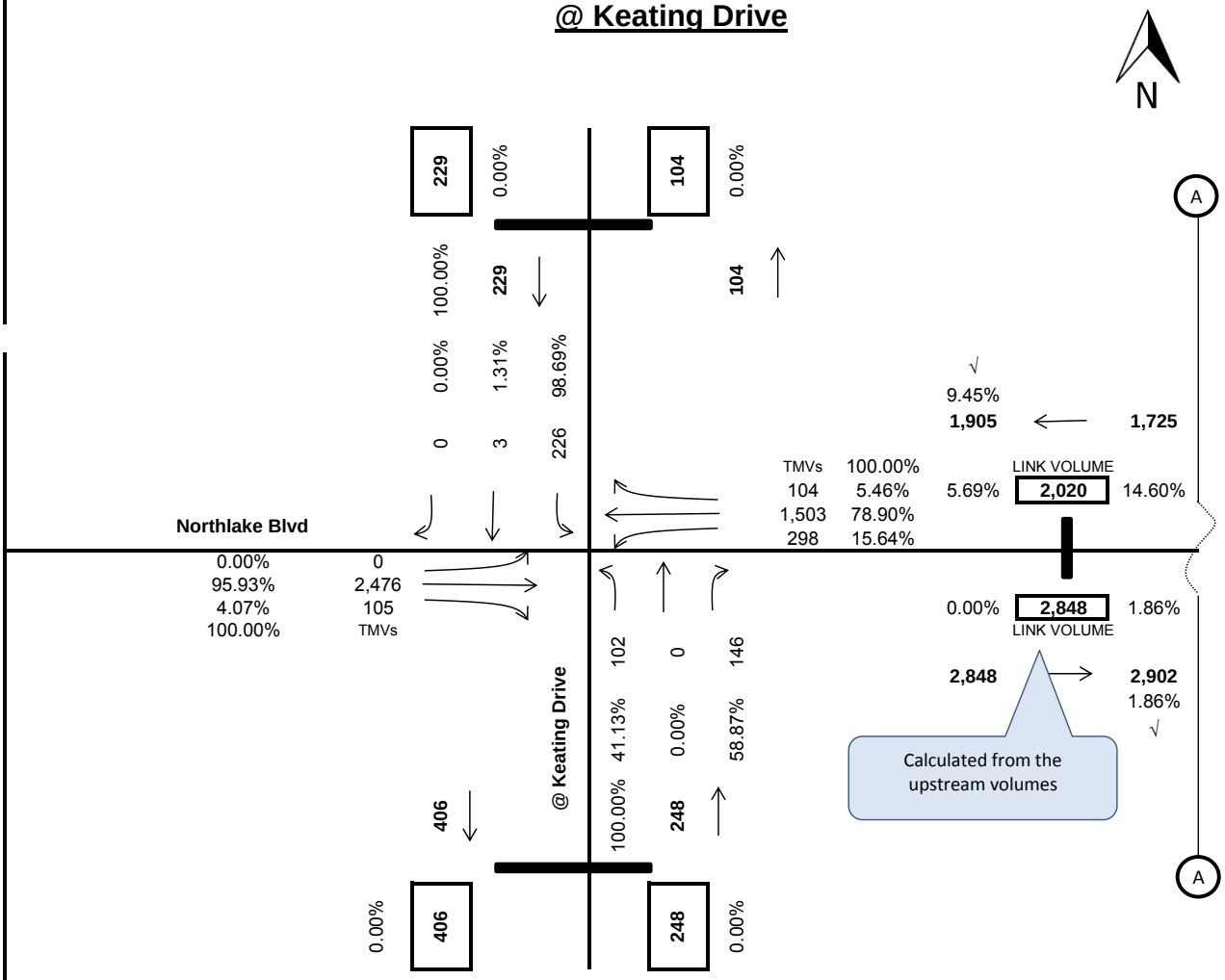
1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

For consistency, balanced peak hour volumes from major street arterial (aka N Military Trail) were used. See N Military Trail Arterial for details

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard, Project Development & Environmental Study, FM No. 413265-1-22-01	*Exhibit Name:* **Hood Road, Turning Movement Volume Development, 2040 No Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **3 of 3** *Date:* 9/24/15

@ Keating Drive



Turning Movement Volumes
@ Keating Drive

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**2,020**			**248**			**2,581**			**229**		
TM Pk Hr Counts	301	1522	106	102	0	146	0	3128	132	226	3	0
% Turns	16%	79%	5%	41%	0%	59%	0%	96%	4%	99%	1%	0%
Calc. Pk Hr Volumes	315	1594	111	102	0	146	0	2476	105	226	3	0
Adjustments	-17	-91	-7									
Bal Pk Hr Volumes	**298**	**1503**	**104**	**102**	**0**	**146**	**0**	**2476**	**105**	**226**	**3**	**0**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

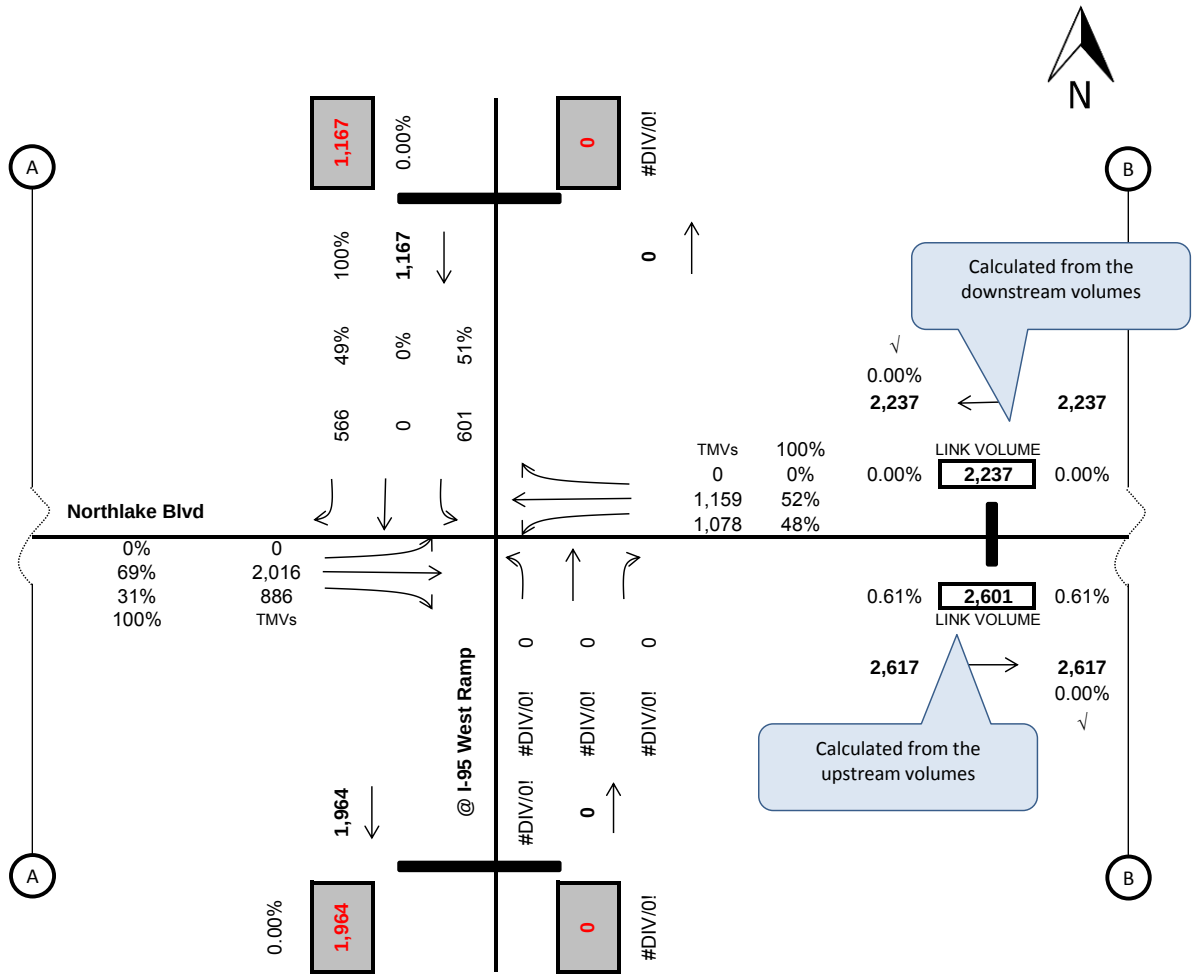
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Northlake Boulevard** **Turning Movement Volume Development** **2040 No Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **1 of 5** *Date:* 9/24/15

@ I-95 West Ramp



Turning Movement Volumes
@ I-95 West Ramp

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**2,237**			**0**			**2,848**			**1,167**		
TM Pk Hr Counts	1001	1049	0	0	0	0	0	2396	1104	1112	0	880
% Turns	49%	51%	0%	0%	0%	0%	0%	68%	32%	56%	0%	44%
Calc. Pk Hr Volumes	1092	1145	0	0	0	0	0	1950	898	651	0	516
Adjustments	-14	14						66	-12	-50	0	50
Bal Pk Hr Volumes	**1078**	**1159**	**0**	**0**	**0**	**0**	**0**	**2016**	**886**	**601**	**0**	**566**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 → — Turning Movement Volumes (Balanced)

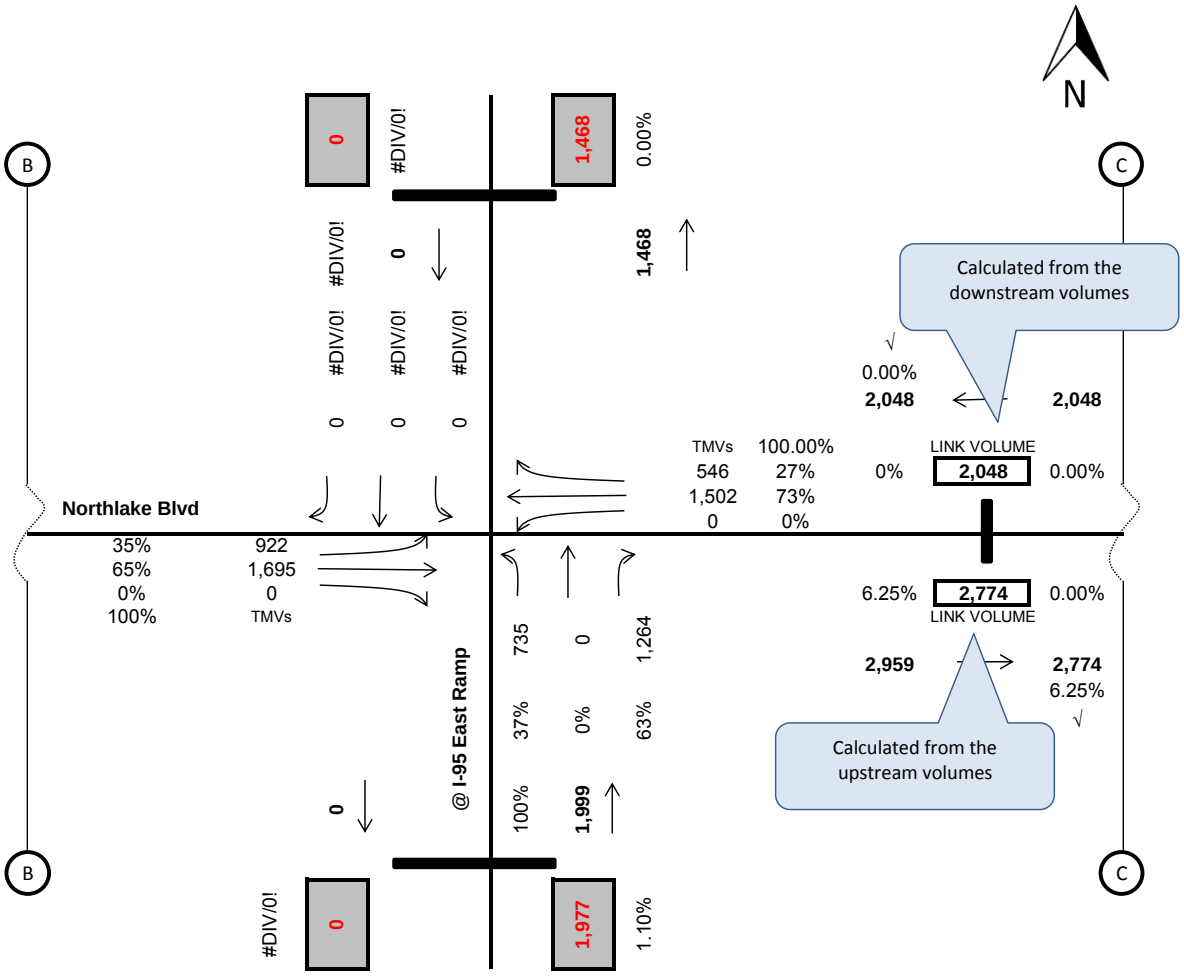
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Northlake Boulevard** **Turning Movement Volume Development** **2040 No Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **2 of 5** *Date:* 9/24/15

@ I-95 East Ramp



Turning Movement Volumes
@ I-95 East Ramp

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**2,048**			**1,977**			**2,601**			**0**	
TM Pk Hr Counts	0	1440	512	609	0	1079	1221	2286	0	0	0	0
% Turns	0%	74%	26%	36%	0%	64%	35%	65%	0%	0%	0%	0%
Calc. Pk Hr Volumes	0	1511	537	713	0	1264	906	1695	0	0	0	0
Adjustments		-9	9	22	0		16					
Bal Pk Hr Volumes	**0**	**1502**	**546**	**735**	**0**	**1264**	**922**	**1695**	**0**	**0**	**0**	**0**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

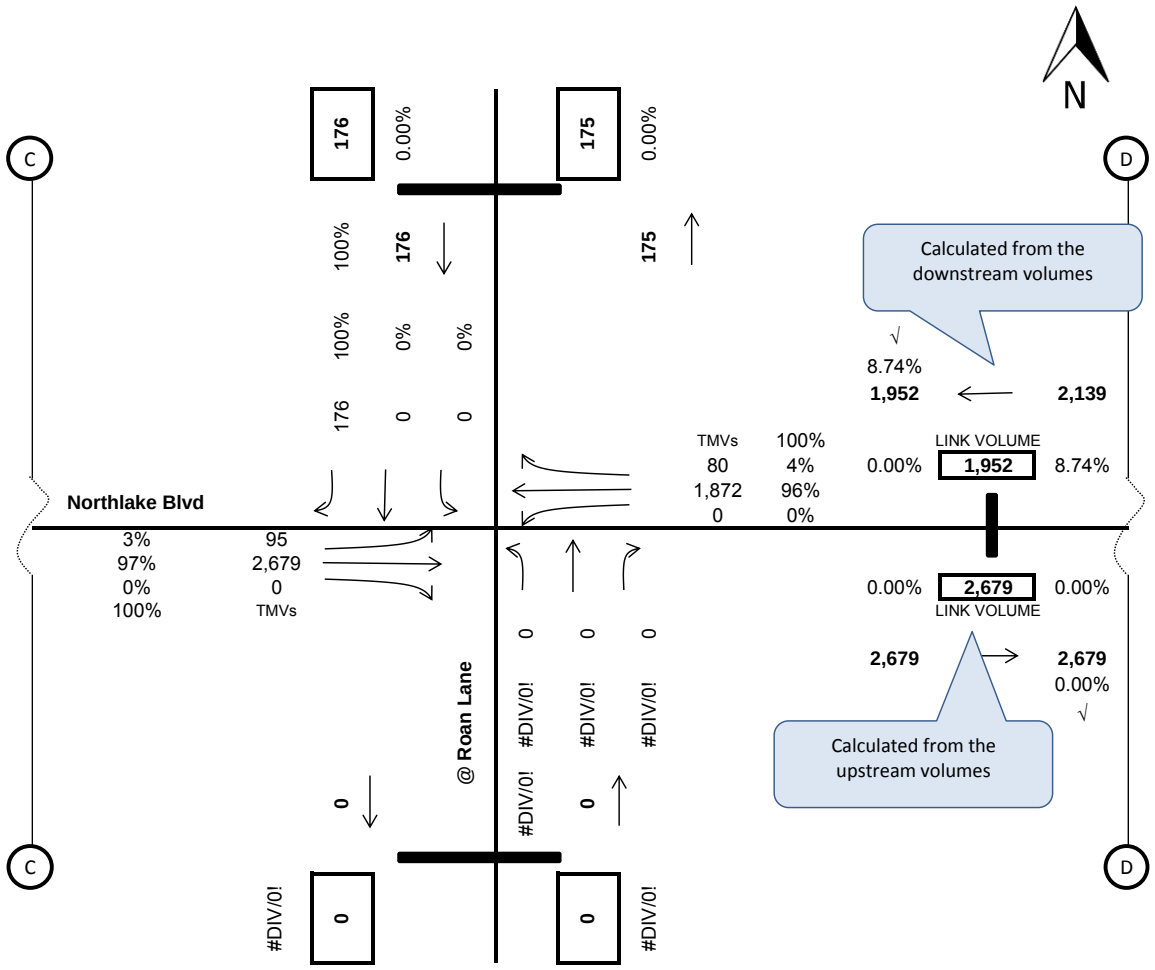
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Northlake Boulevard** **Turning Movement Volume Development** **2040 No Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **3 of 5** *Date:* 9/24/15

@ Roan Lane



Turning Movement Volumes
@ Roan Lane

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,952**			**0**			**2,774**			**176**	
TM Pk Hr Counts	0	1876	80	0	0	0	118	3310	0	0	0	176
% Turns	0%	96%	4%	0%	0%	0%	3%	97%	0%	0%	0%	100%
Calc. Pk Hr Volumes	0	1872	80	0	0	0	95	2679	0	0	0	176
Adjustments												
Bal Pk Hr Volumes	**0**	**1872**	**80**	**0**	**0**	**0**	**95**	**2679**	**0**	**0**	**0**	**176**

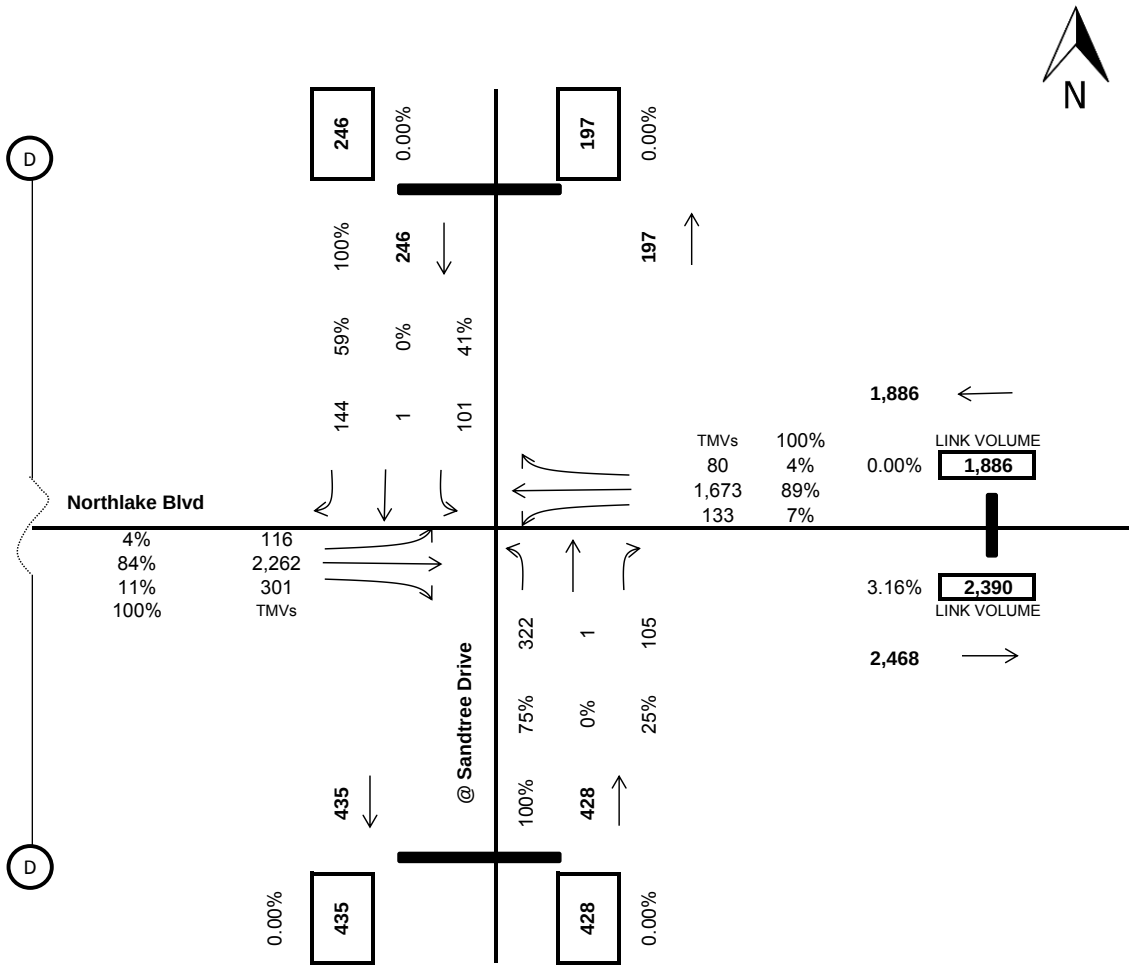
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A … A	Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Northlake Boulevard Turning Movement Volume Development 2040 No Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **4 of 5** *Date:* 9/24/15

@ Sandtree Drive



Turning Movement Volumes
@ Sandtree Drive

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,886**			**428**			**2,679**			**246**	
TM Pk Hr Counts	118	1486	71	322	1	105	146	2841	378	101	1	144
% Turns	7%	89%	4%	75%	0%	25%	4%	84%	11%	41%	0%	59%
Calc. Pk Hr Volumes	133	1673	80	322	1	105	116	2262	301	101	1	144
Adjustments												
Bal Pk Hr Volumes	**133**	**1673**	**80**	**322**	**1**	**105**	**116**	**2262**	**301**	**101**	**1**	**144**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

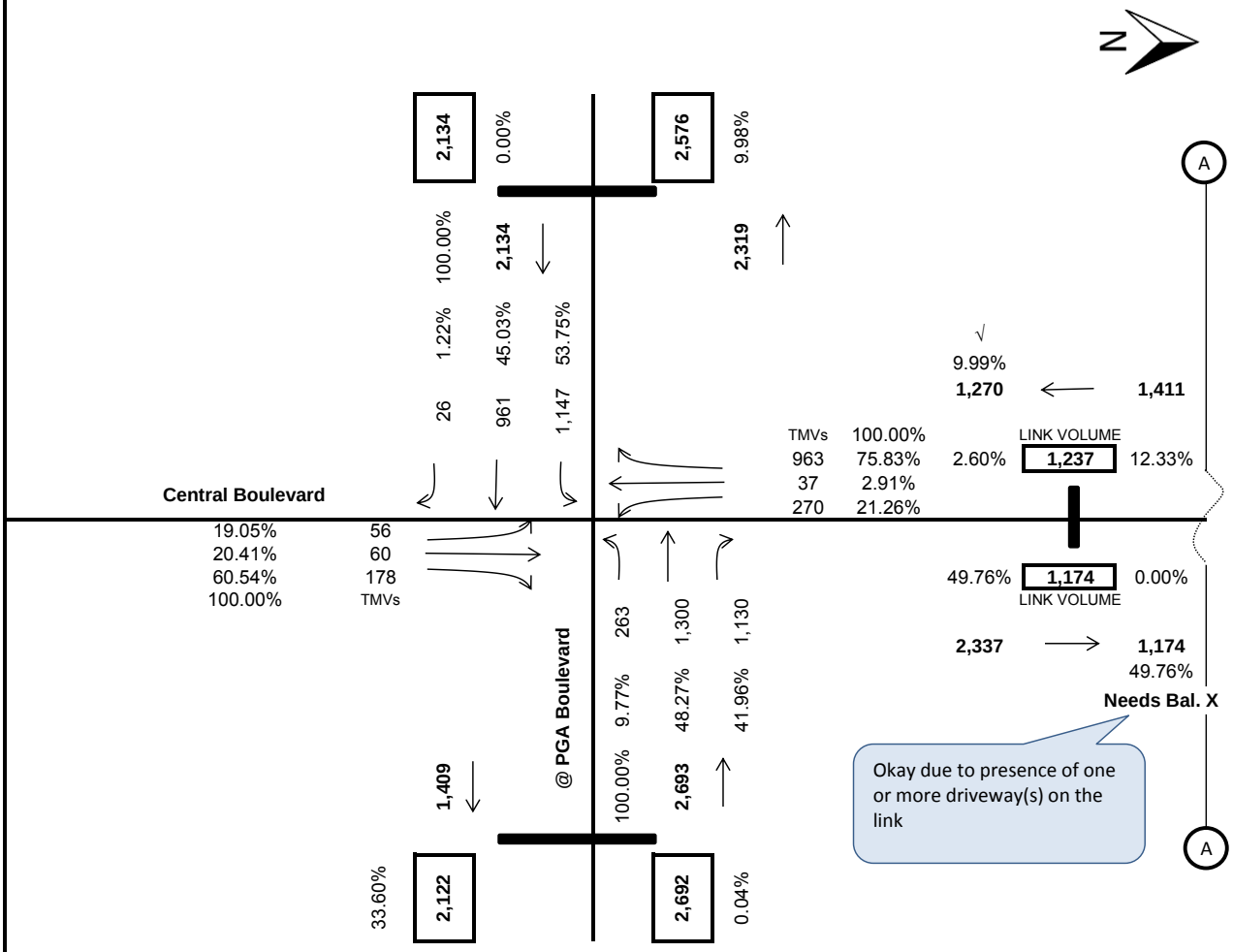
Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Northlake Boulevard Turning Movement Volume Development 2040 No Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **5 of 5** *Date:* 9/24/15

APPENDIX AB

BALANCED TURNING MOVEMENT DEVELOPMENT SHEETS

2040 NO BUILD PM PEAK HOUR

@ PGA Boulevard



Turning Movement Volumes
@ PGA Boulevard

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes												
TM Pk Hr Counts												
% Turns												
Calc. Pk Hr Volumes												
Adjustments												
Bal Pk Hr Volumes	**270**	**37**	**963**	**263**	**1300**	**1130**	**56**	**60**	**178**	**1147**	**961**	**26**

LEGEND

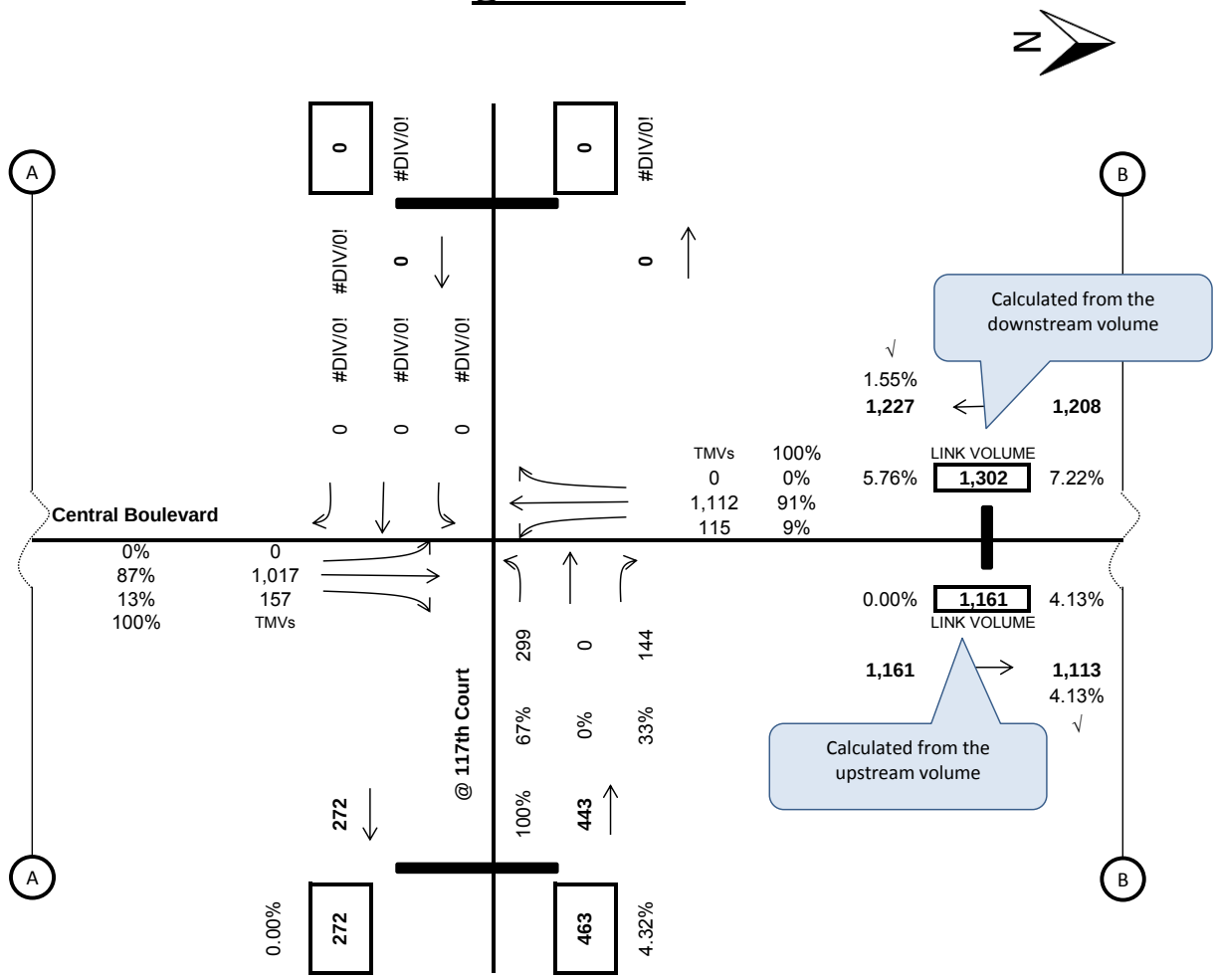
1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

For consistency, balanced peak hour volumes from major street arterial (aka PGA Boulevard) were used. See PGA Boulevard Arterial for details

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Central Boulevard** **Turning Movement Volume Development** **2040 No Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **1 of 5** *Date:* 9/24/15

@ 117th Court



Turning Movement Volumes
@ 117th Court

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,302**			**463**			**1,174**			**0**	
TM Pk Hr Counts	163	1688	0	319	0	144	0	2116	326	0	0	0
% Turns	9%	91%	0%	69%	0%	31%	0%	87%	13%	0%	0%	0%
Calc. Pk Hr Volumes	115	1187	0	319	0	144	0	1017	157	0	0	0
Adjustments		-75		-20								
Bal Pk Hr Volumes	**115**	**1112**	**0**	**299**	**0**	**144**	**0**	**1017**	**157**	**0**	**0**	**0**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

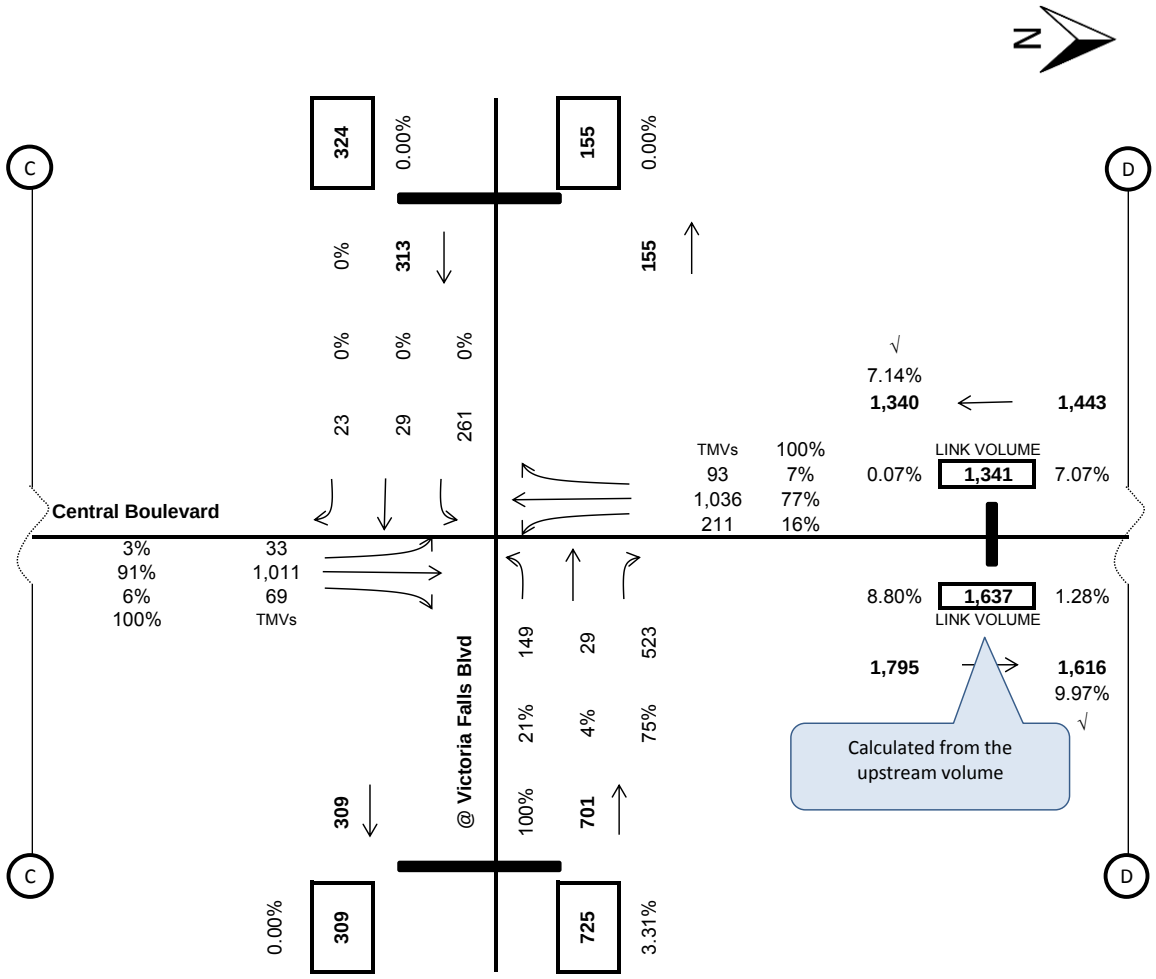
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Central Boulevard Turning Movement Volume Development 2040 No Build PM Peak Hour**	*Exhibit No:* **TBD**
		Page No: **2 of 5**
		Date: 9/24/15

@ Victoria Falls Blvd



Turning Movement Volumes
@ Victoria Falls Blvd

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,341**			**725**			**1,161**			**324**	
TM Pk Hr Counts	360	1765	159	149	29	547	67	2157	141	272	30	22
% Turns	16%	77%	7%	21%	4%	75%	3%	91%	6%	84%	9%	7%
Calc. Pk Hr Volumes	211	1036	93	149	29	547	33	1059	69	272	29	23
Adjustments						-24		-48		-11		
Bal Pk Hr Volumes	**211**	**1036**	**93**	**149**	**29**	**523**	**33**	**1011**	**69**	**261**	**29**	**23**

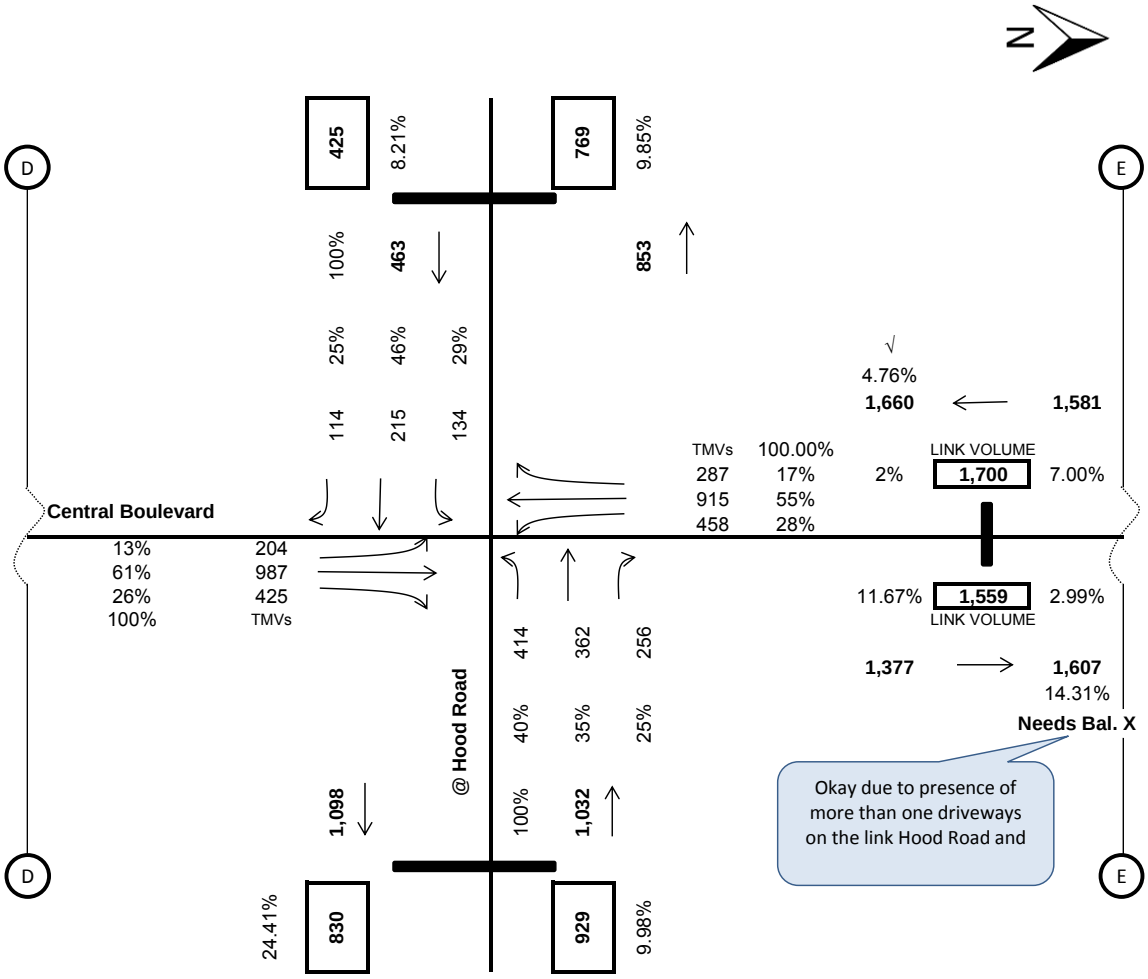
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A / A	Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Central Boulevard** **Turning Movement Volume Development** **2040 No Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **3 of 5** *Date:* 9/24/15

@ Hood Road



Turning Movement Volumes
@ Hood Road

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**1,700**			**929**			**1,637**			**425**		
TM Pk Hr Counts	619	1137	356	793	685	476	342	1582	781	231	437	194
% Turns	29%	54%	17%	41%	35%	24%	13%	58%	29%	27%	51%	23%
Calc. Pk Hr Volumes	498	915	287	377	326	226	207	957	473	114	215	96
Adjustments	-40			37	36	30	-3	30	-48	20		18
Bal Pk Hr Volumes	**458**	**915**	**287**	**414**	**362**	**256**	**204**	**987**	**425**	**134**	**215**	**114**

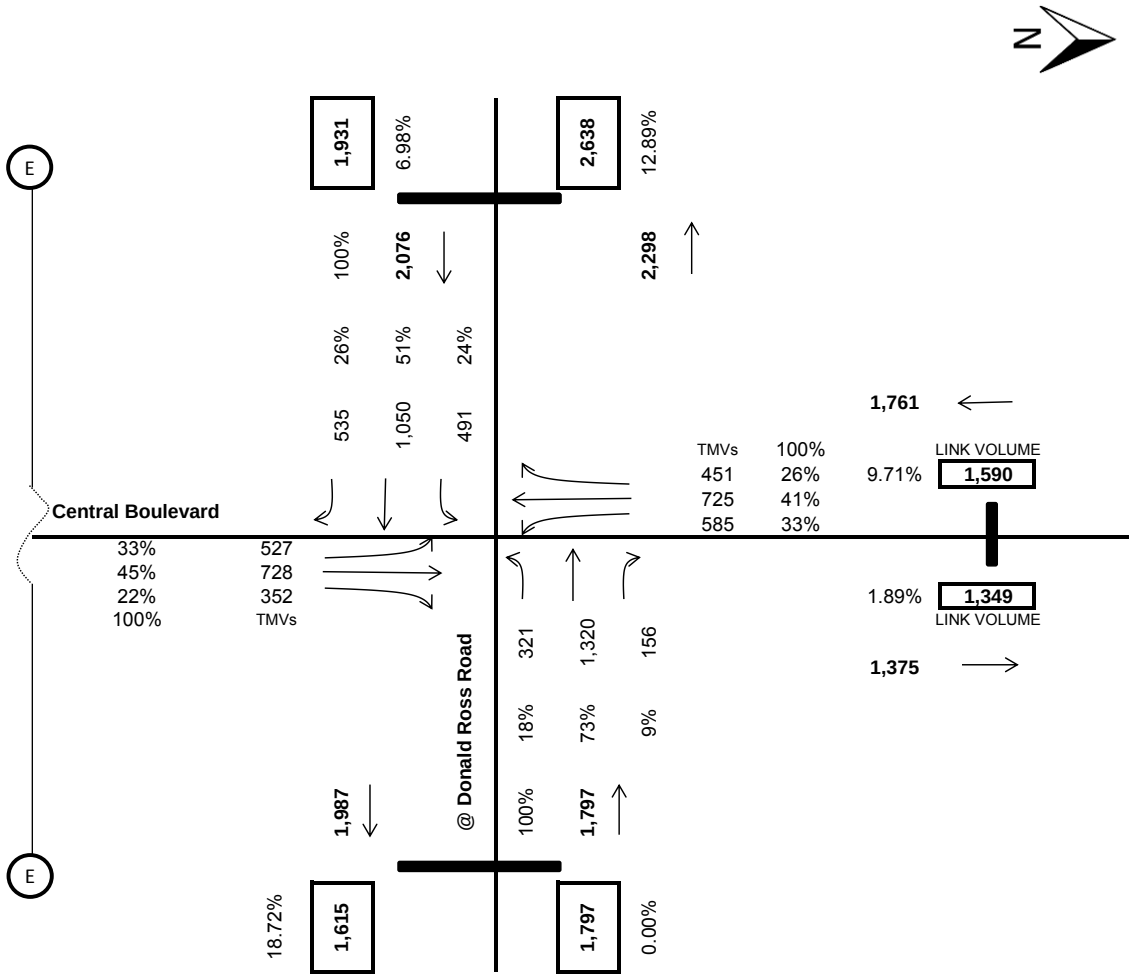
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Central Boulevard** **Turning Movement Volume Development** **2040 No Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **4 of 5** *Date:* 9/24/15

@ Donald Ross Road



Turning Movement Volumes
@ Donald Ross Road

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**1,590**			**1,797**			**1,559**			**1,931**		
TM Pk Hr Counts	194	243	150	296	1219	144	197	332	136	652	1175	737
% Turns	33%	41%	26%	18%	73%	9%	30%	50%	20%	25%	46%	29%
Calc. Pk Hr Volumes	525	658	406	321	1320	156	462	778	319	491	885	555
Adjustments	60	67	45				65	-50	33		165	-20
Bal Pk Hr Volumes	**585**	**725**	**451**	**321**	**1320**	**156**	**527**	**728**	**352**	**491**	**1050**	**535**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

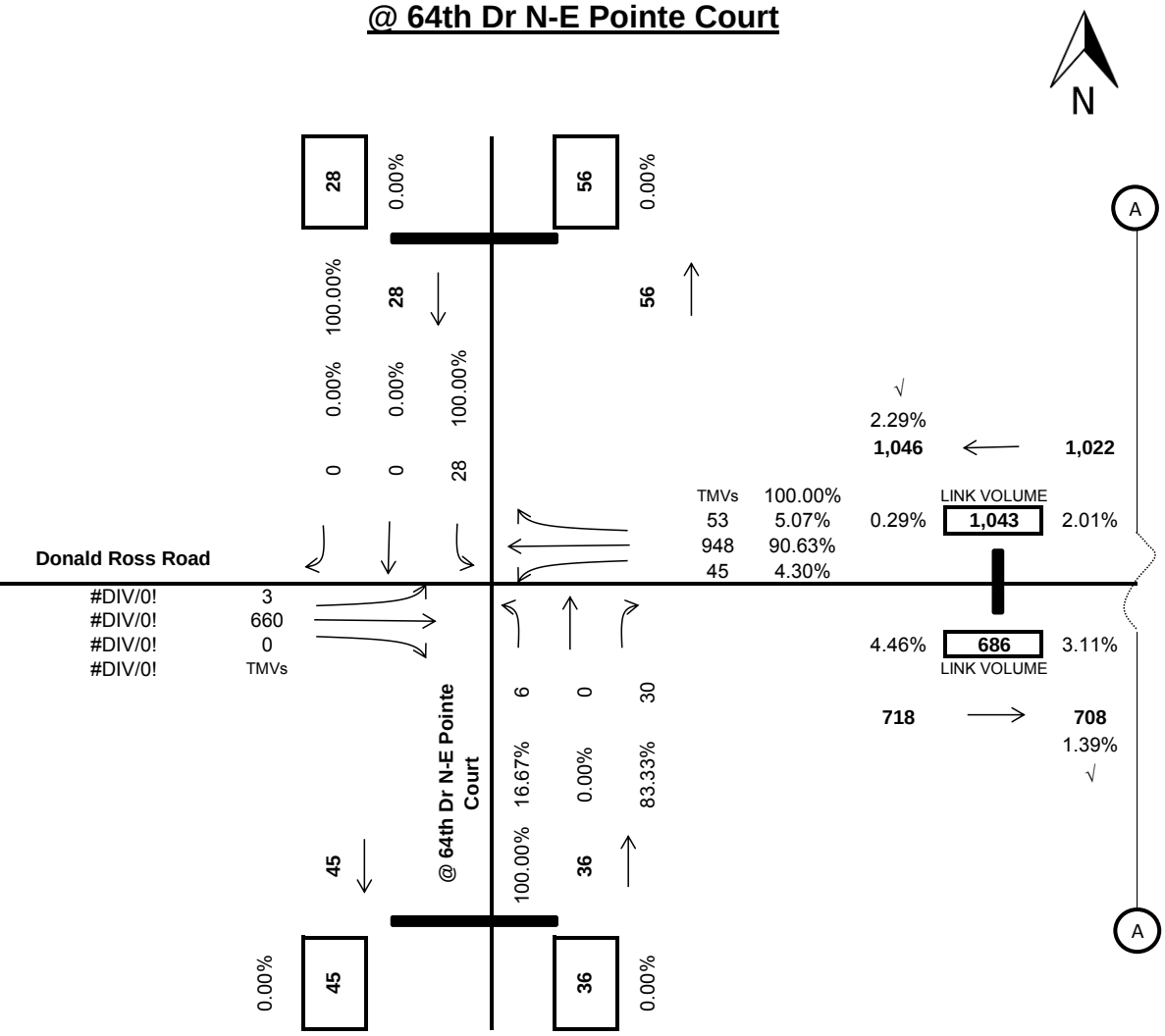
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Central Boulevard** **Turning Movement Volume Development** **2040 No Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **5 of 5** *Date:* 9/24/15

@ 64th Dr N-E Pointe Court



Turning Movement Volumes
@ 64th Dr N-E Pointe Court

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,043**			**36**			**663**			**28**	
TM Pk Hr Counts	39	865	48	6	0	30	3	660	0	28	0	0
% Turns	4%	91%	5%	17%	0%	83%	0%	100%	0%	100%	0%	0%
Calc. Pk Hr Volumes	45	948	53	6	0	30	3	660	0	28	0	0
Adjustments												
Bal Pk Hr Volumes	**45**	**948**	**53**	**6**	**0**	**30**	**3**	**660**	**0**	**28**	**0**	**0**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 → — Turning Movement Volumes (Balanced)

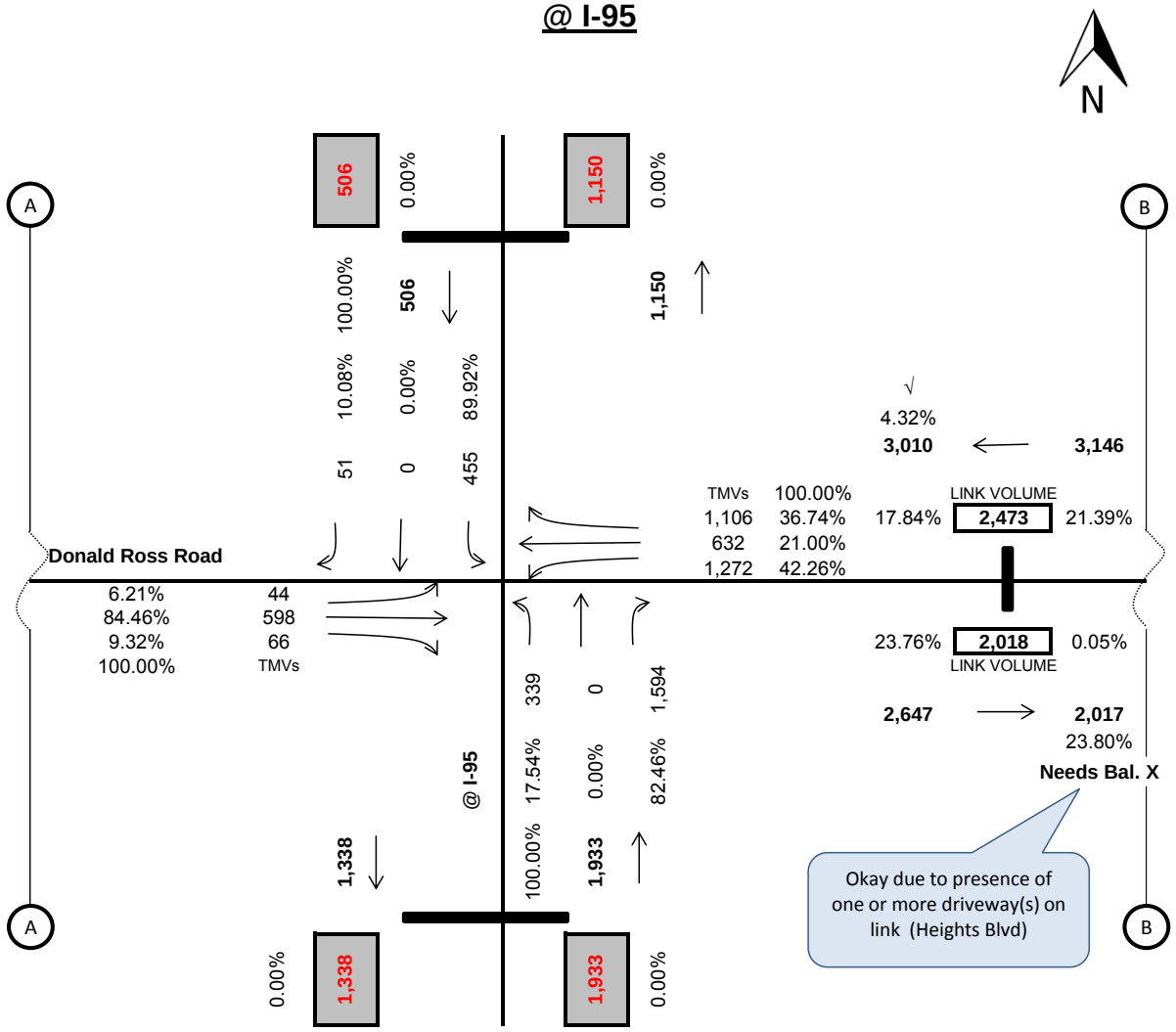
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 435522-01	*Exhibit Name:* **Donald Ross Road** **Turning Movement Volume Development** **2040 No Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **1 of 5** *Date:* 9/24/15

@ I-95



Turning Movement Volumes
@ I-95

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**2,473**			**1,933**			**686**			**506**	
TM Pk Hr Counts	1656	829	760	371	0	1744	47	1242	136	786	0	89
% Turns	51%	26%	23%	18%	0%	82%	3%	87%	10%	90%	0%	10%
Calc. Pk Hr Volumes	1262	632	579	339	0	1594	23	598	65	455	0	51
Adjustments	10		527		0		21		1			
Bal Pk Hr Volumes	**1272**	**632**	**1106**	**339**	**0**	**1594**	**44**	**598**	**66**	**455**	**0**	**51**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 → — Turning Movement Volumes (Balanced)

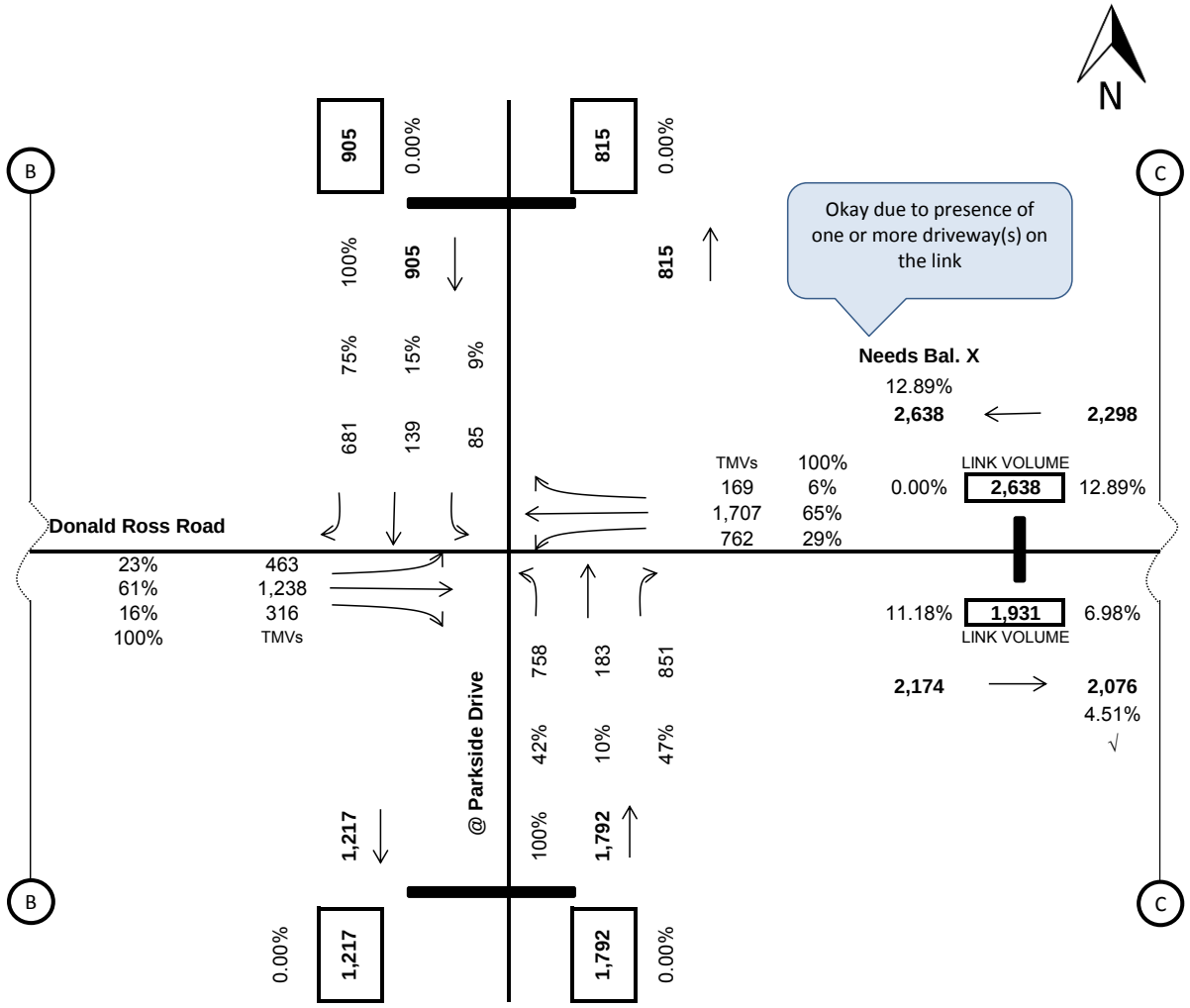
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard, Project Development & Environmental Study, FM No. 436571-1-22-01	*Exhibit Name:* **Donald Ross Road, Turning Movement Volume Development, 2040 No Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **2 of 5** *Date:* 9/24/15

@ Parkside Drive



Turning Movement Volumes
@ Parkside Drive

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**2,638**			**1,792**			**2,018**			**905**	
TM Pk Hr Counts	698	1564	155	758	183	851	640	1710	437	85	139	681
% Turns	29%	65%	6%	42%	10%	47%	23%	61%	16%	9%	15%	75%
Calc. Pk Hr Volumes	762	1707	169	758	183	851	463	1238	316	85	139	681
Adjustments												
Bal Pk Hr Volumes	**762**	**1707**	**169**	**758**	**183**	**851**	**463**	**1238**	**316**	**85**	**139**	**681**

LEGEND

1,500 — Control Volumes (Peak Hour)*

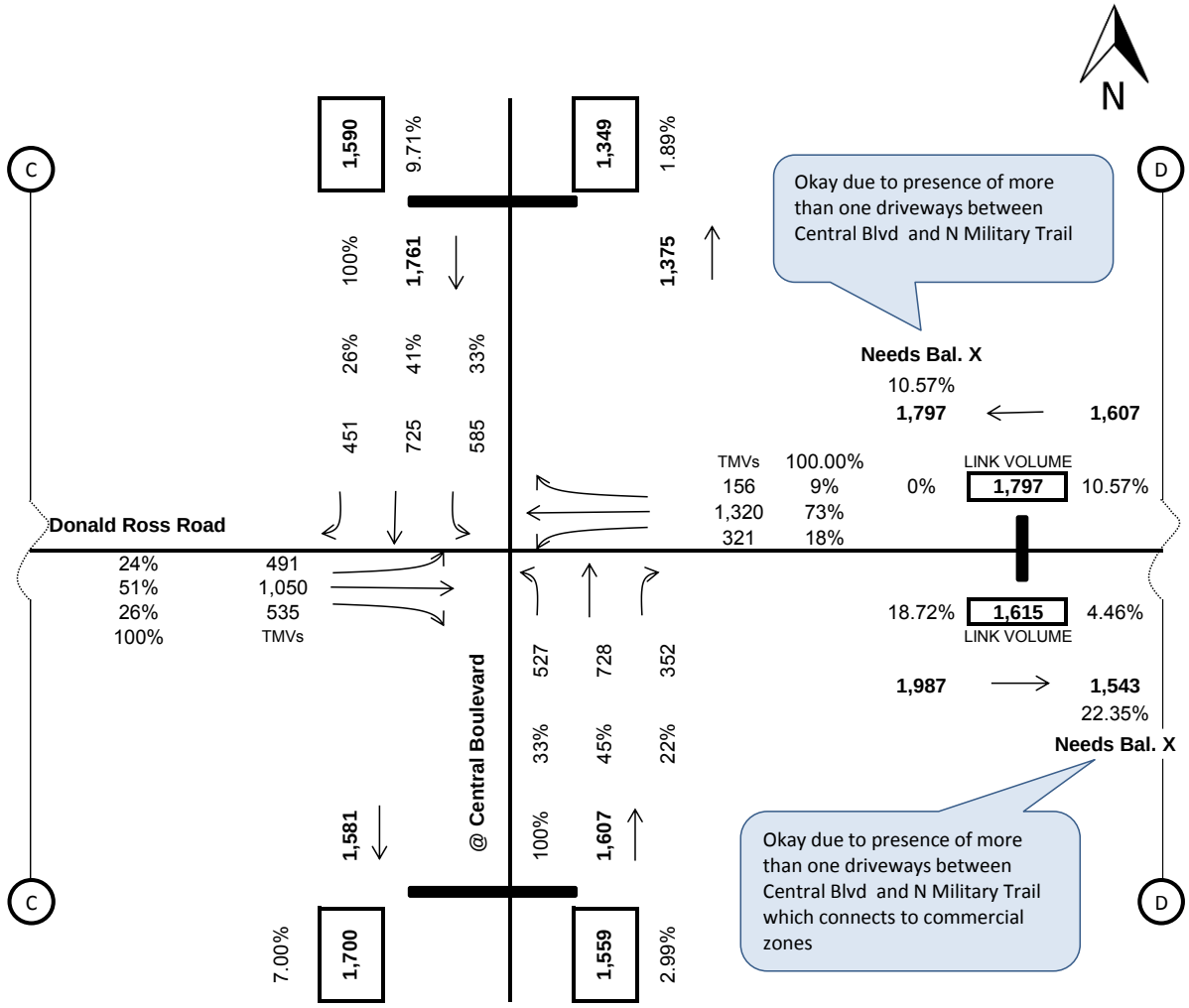
1,300 — Link Volumes (Peak Hour)

66 → — Turning Movement Volumes (Balanced)

A … A — Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

@ Central Boulevard



Turning Movement Volumes
@ Central Boulevard

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes												
TM Pk Hr Counts												
% Turns												
Calc. Pk Hr Volumes												
Adjustments												
Bal Pk Hr Volumes	**321**	**1320**	**156**	**527**	**728**	**352**	**491**	**1050**	**535**	**585**	**725**	**451**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 → Turning Movement Volumes (Balanced)

A — Match Line

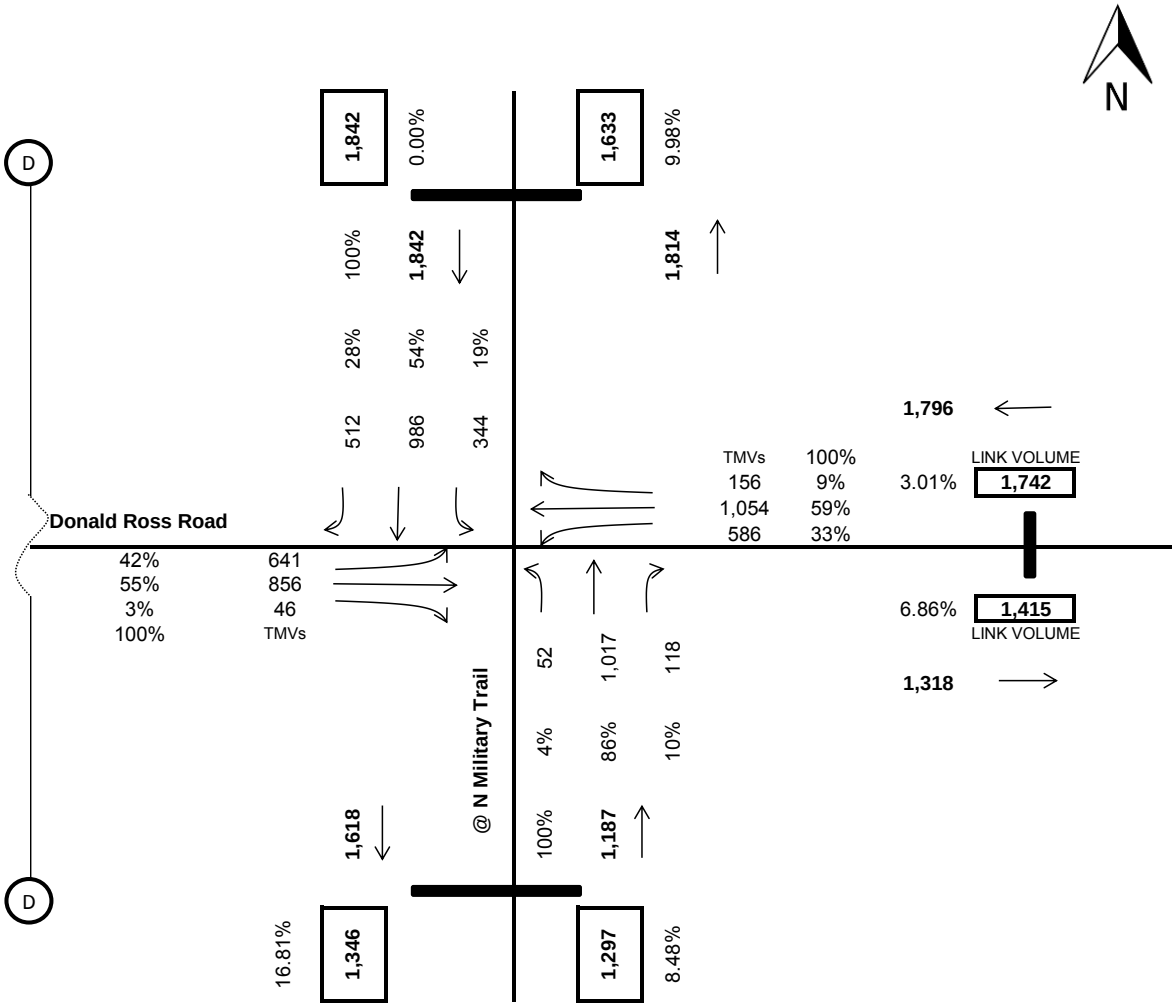
A

For consistency, balanced peak hour volumes from major street arterial (aka Central Boulevard) were used. See Central Boulevard Arterial for details

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 435422-01	*Exhibit Name:* **Donald Ross Road** **Turning Movement Volume Development** **2040 No Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **4 of 5** *Date:* 9/24/15

@ N Military Trail



Turning Movement Volumes
@ N Military Trail

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes												
TM Pk Hr Counts												
% Turns												
Calc. Pk Hr Volumes												
Adjustments												
Bal Pk Hr Volumes	**586**	**1054**	**156**	**52**	**1017**	**118**	**641**	**856**	**46**	**344**	**986**	**512**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 → Turning Movement Volumes (Balanced)

A — Match Line

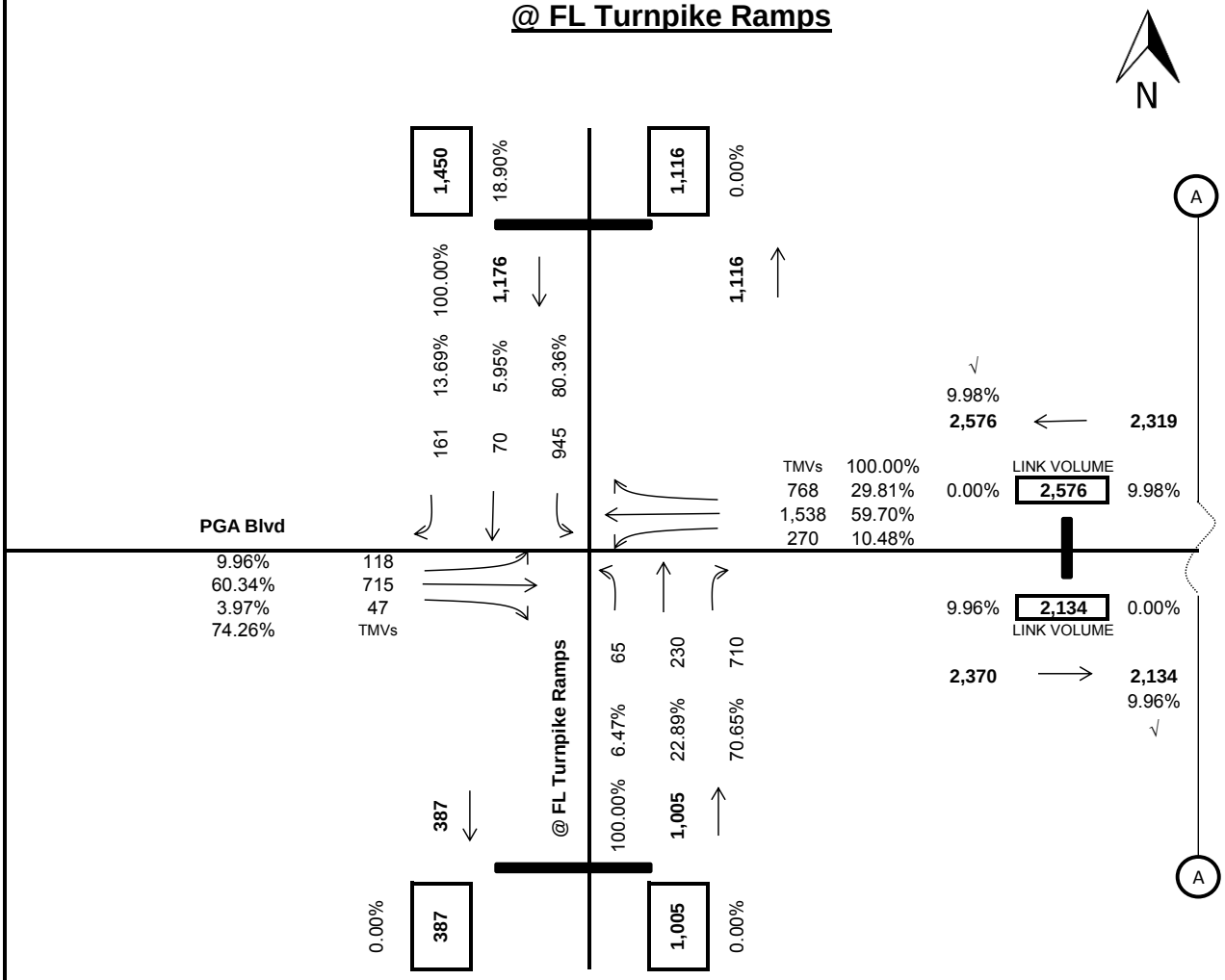
A

For consistency, balanced peak hour volumes from major street arterial (aka N Military Trail) were used. See N Military Trail Arterial for details

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FPID No. 413655-1-22-01	*Exhibit Name:* **Donald Ross Road** **Turning Movement Volume Development** **2040 No Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **5 of 5** *Date:* 9/24/15

@ FL Turnpike Ramps



Turning Movement Volumes
@ FL Turnpike Ramps

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**2,576**			**1,100**			**1,042**			**1,450**		
TM Pk Hr Counts	389	2391	1180	65	230	805	258	1927	97	961	55	127
% Turns	10%	60%	30%	6%	21%	73%	11%	84%	4%	84%	5%	11%
Calc. Pk Hr Volumes	253	1555	768	65	230	805	118	880	44	1219	70	161
Adjustments	17	-17				-95		-165	3	-274		
Bal Pk Hr Volumes	**270**	**1538**	**768**	**65**	**230**	**710**	**118**	**715**	**47**	**945**	**70**	**161**

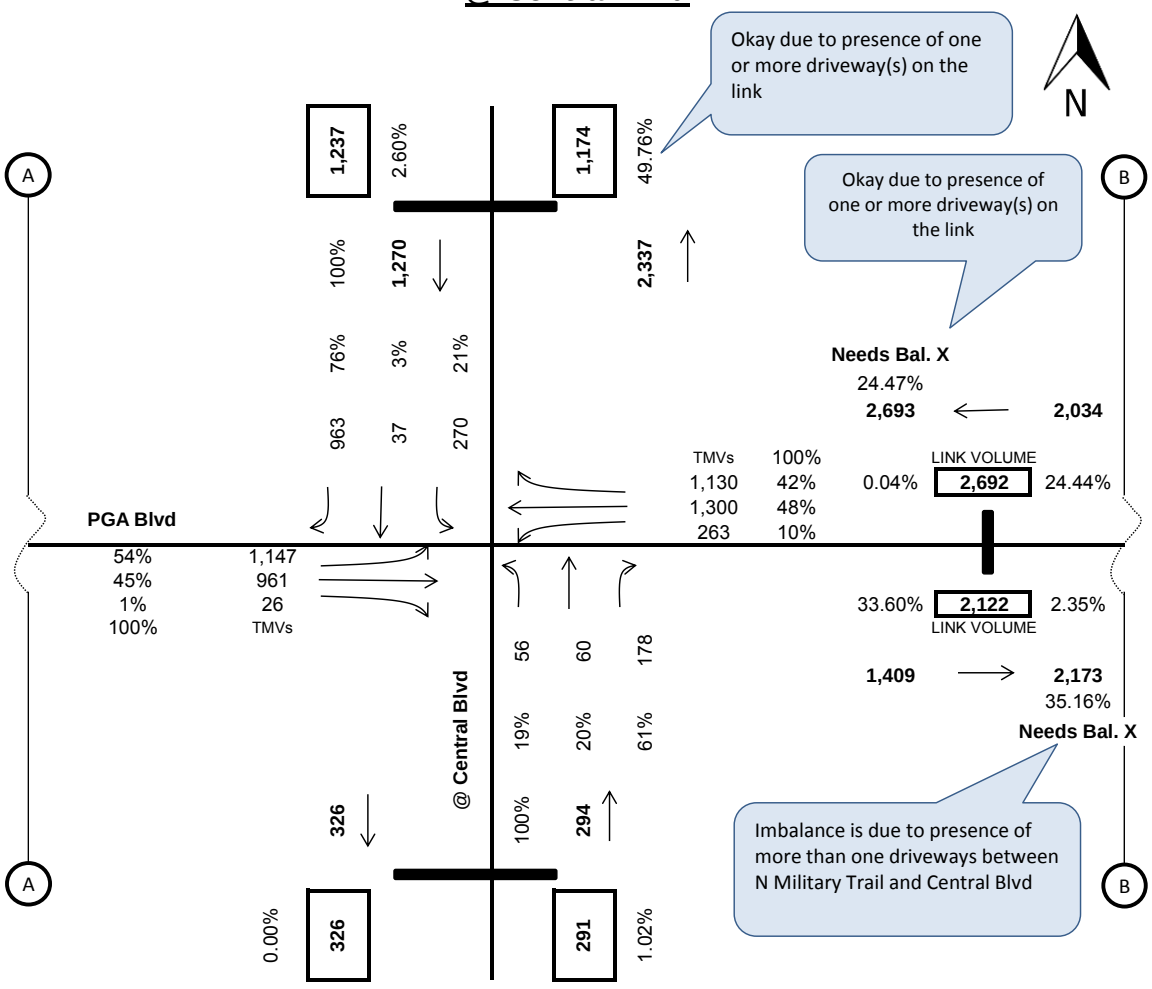
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66 →	Turning Movement Volumes (Balanced)
A … A	Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard** **Turning Movement Volume Development** **2040 No Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **1 of 8** *Date:* 9/24/15

@ Central Blvd



Turning Movement Volumes
@ Central Blvd

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**2,692**			**291**			**2,134**			**1,237**		
TM Pk Hr Counts	219	1052	972	53	60	178	1626	1362	37	454	62	1561
% Turns	10%	47%	43%	18%	21%	61%	54%	45%	1%	22%	3%	75%
Calc. Pk Hr Volumes	263	1263	1167	53	60	178	1147	961	26	270	37	930
Adjustments		37	-37	3								33
Bal Pk Hr Volumes	**263**	**1300**	**1130**	**56**	**60**	**178**	**1147**	**961**	**26**	**270**	**37**	**963**

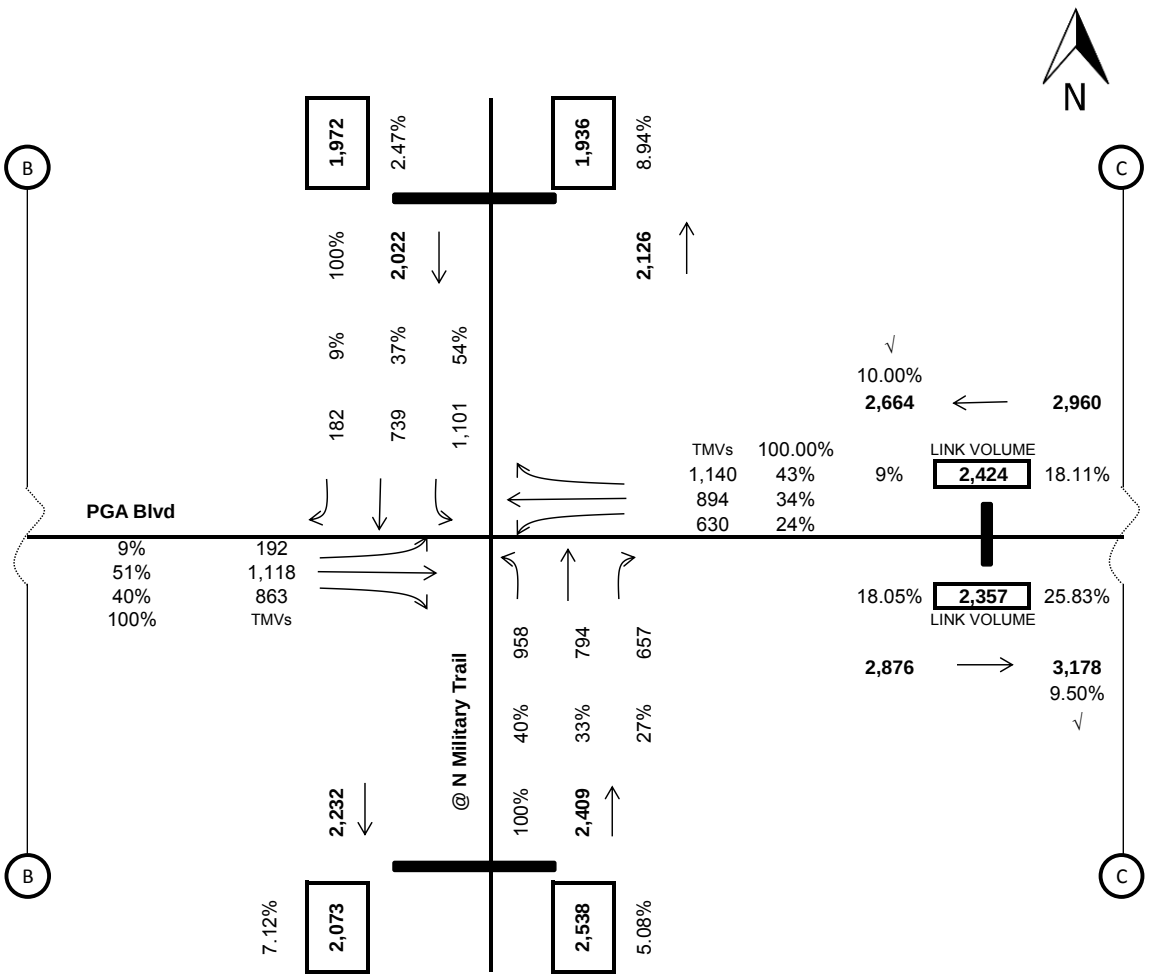
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard Turning Movement Volume Development 2040 No Build PM Peak Hour**	*Exhibit No:* **TBD**
		Page No: **2 of 8**
		Date: 9/24/15

@ N Military Trail



Turning Movement Volumes
@ N Military Trail

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**2,424**			**2,538**			**2,122**			**1,972**		
TM Pk Hr Counts	830	1158	1600	674	649	462	182	1011	818	1855	1305	321
% Turns	23%	32%	45%	38%	36%	26%	9%	50%	41%	53%	37%	9%
Calc. Pk Hr Volumes	561	782	1081	958	923	657	192	1067	863	1051	739	182
Adjustments	69	112	59		-129			51		50		
Bal Pk Hr Volumes	**630**	**894**	**1140**	**958**	**794**	**657**	**192**	**1118**	**863**	**1101**	**739**	**182**

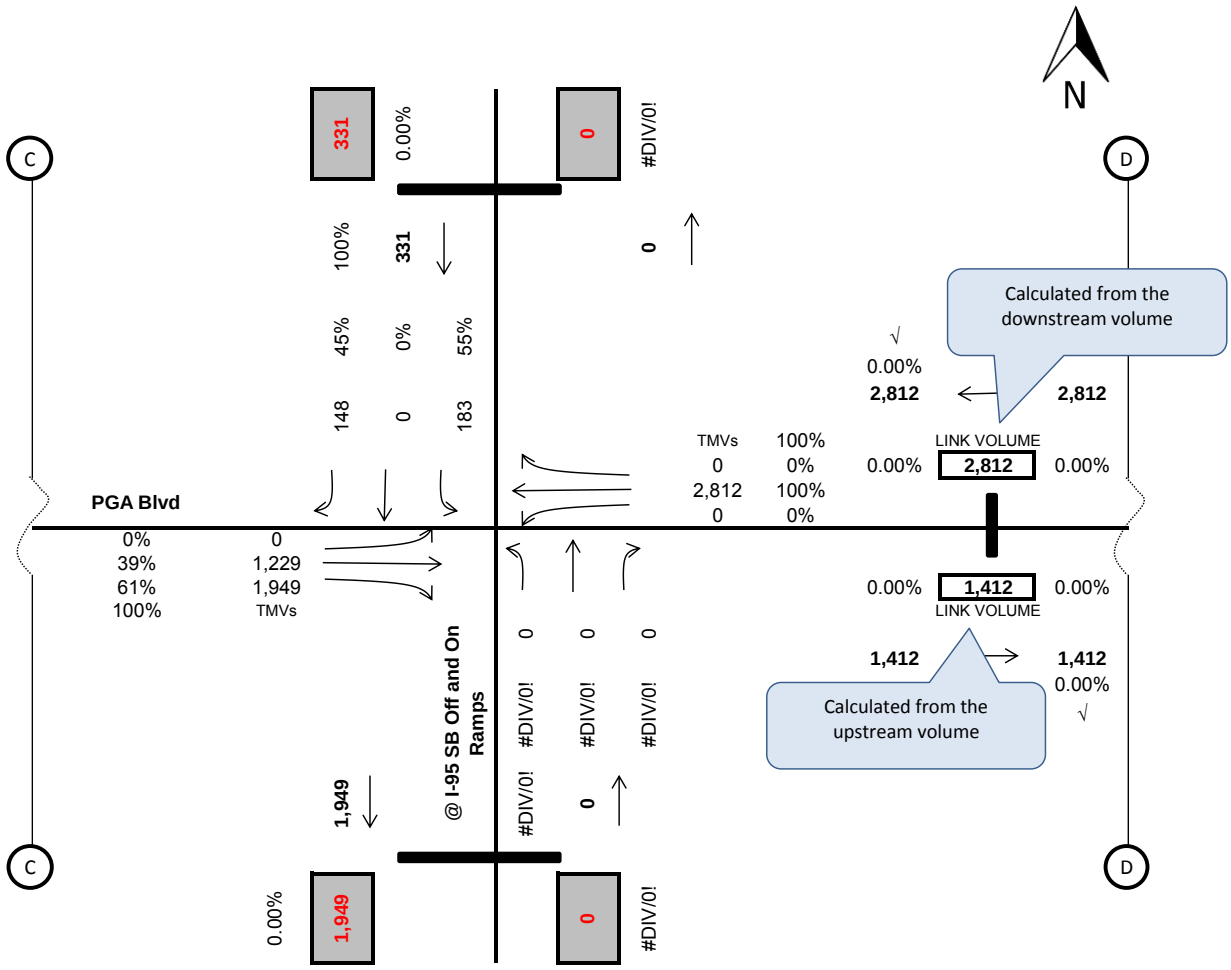
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66 →	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard** **Turning Movement Volume Development** **2040 No Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **3 of 8** *Date:* 9/24/15

@ I-95 SB Off and On Ramps



Turning Movement Volumes
@ I-95 SB Off and On Ramps

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**2,812**			**0**			**2,357**			**331**	
TM Pk Hr Counts	0	3404	0	0	0	0	0	777	2111	185	0	184
% Turns	0%	100%	0%	0%	0%	0%	0%	27%	73%	50%	0%	50%
Calc. Pk Hr Volumes	0	2812	0	0	0	0	0	634	1723	166	0	165
Adjustments								595	226	17		-17
Bal Pk Hr Volumes	**0**	**2812**	**0**	**0**	**0**	**0**	**0**	**1229**	**1949**	**183**	**0**	**148**

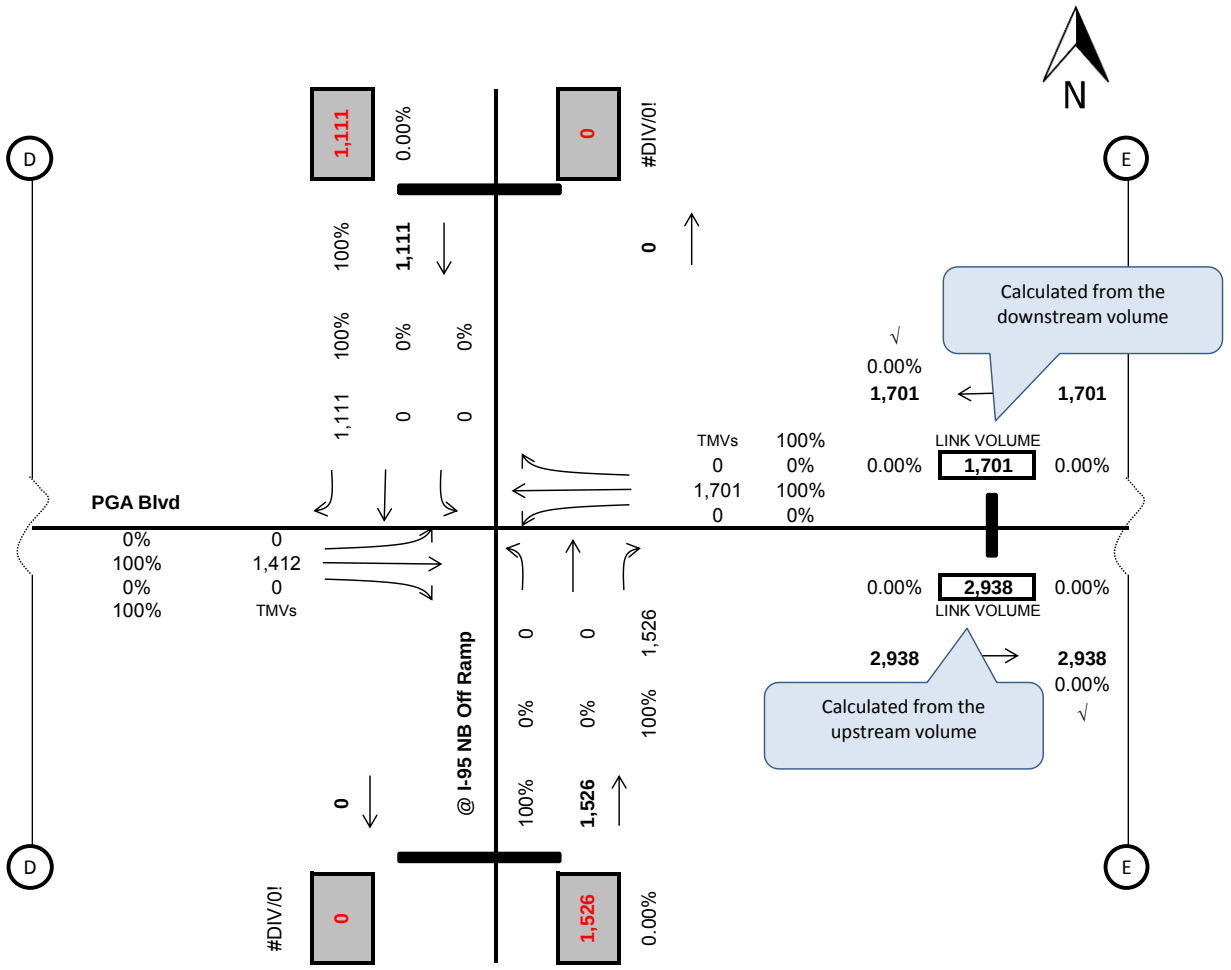
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A … A	Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard, Project Development & Environmental Study, FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard, Turning Movement Volume Development, 2040 No Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **4 of 8** *Date:* 9/24/15

@ I-95 NB Off Ramp



Turning Movement Volumes
@ I-95 NB Off Ramp

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,701**			**1,526**			**1,412**			**1,111**	
TM Pk Hr Counts	0	3404	0	0	0	2510	0	962	0	0	0	1926
% Turns	0%	100%	0%	0%	0%	100%	0%	100%	0%	0%	0%	100%
Calc. Pk Hr Volumes	0	1701	0	0	0	1526	0	1412	0	0	0	1111
Adjustments												
Bal Pk Hr Volumes	**0**	**1701**	**0**	**0**	**0**	**1526**	**0**	**1412**	**0**	**0**	**0**	**1111**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

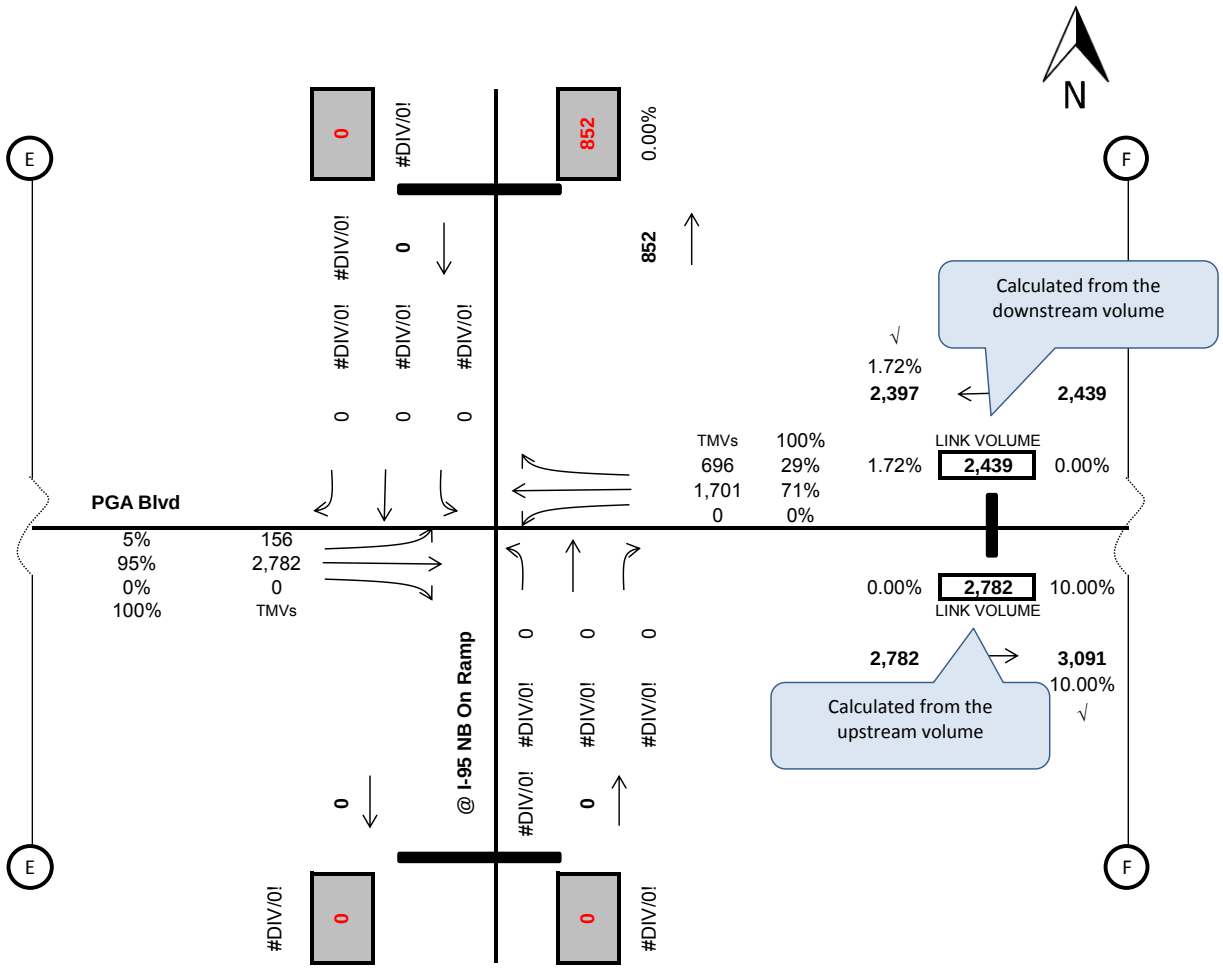
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard** **Turning Movement Volume Development** **2040 No Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **5 of 8** *Date:* 9/24/15

@ I-95 NB On Ramp



Turning Movement Volumes
@ I-95 NB On Ramp

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**2,439**			**0**			**2,938**			**0**	
TM Pk Hr Counts	0	1479	642	0	0	0	188	3284	0	0	0	0
% Turns	0%	70%	30%	0%	0%	0%	5%	95%	0%	0%	0%	100%
Calc. Pk Hr Volumes	0	1701	738	0	0	0	159	2779	0	0	0	0
Adjustments			-42		0		-3	3				
Bal Pk Hr Volumes	**0**	**1701**	**696**	**0**	**0**	**0**	**156**	**2782**	**0**	**0**	**0**	**0**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

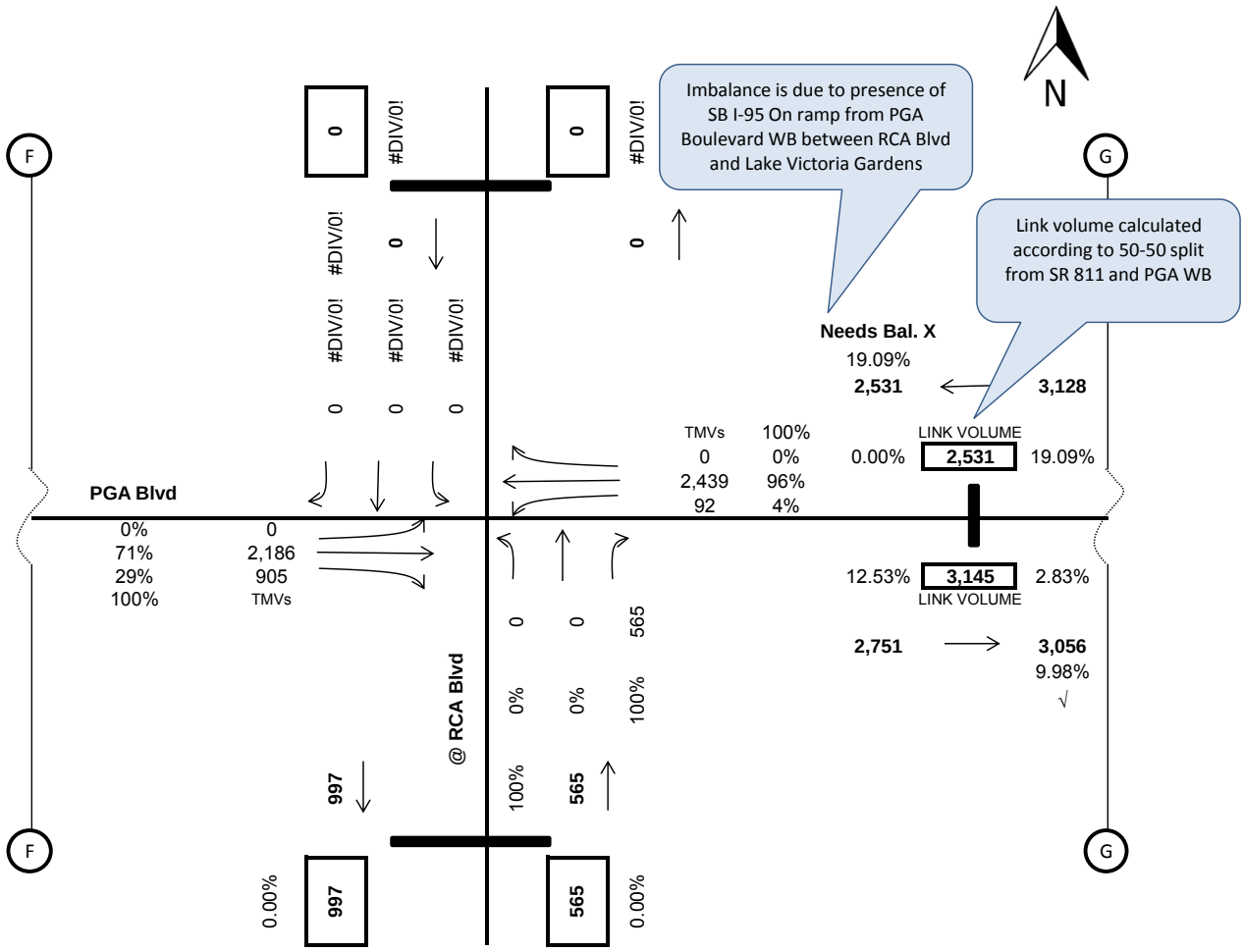
66 → — Turning Movement Volumes (Balanced)

A … A — Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard** **Turning Movement Volume Development** **2040 No Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **6 of 8** *Date:* 9/24/15

@ RCA Blvd



Turning Movement Volumes
@ RCA Blvd

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**2,531**			**565**			**2,782**			**0**	
TM Pk Hr Counts	80	2121	0	0	0	565	0	2112	1171	0	0	0
% Turns	4%	96%	0%	0%	0%	100%	0%	64%	36%	0%	0%	0%
Calc. Pk Hr Volumes	92	2439	0	0	0	565	0	1790	992	0	0	0
Adjustments								396	-87			
Bal Pk Hr Volumes	**92**	**2439**	**0**	**0**	**0**	**565**	**0**	**2186**	**905**	**0**	**0**	**0**

Given no-build condition, adjustment is made so that split is closer to the existing no-build condition

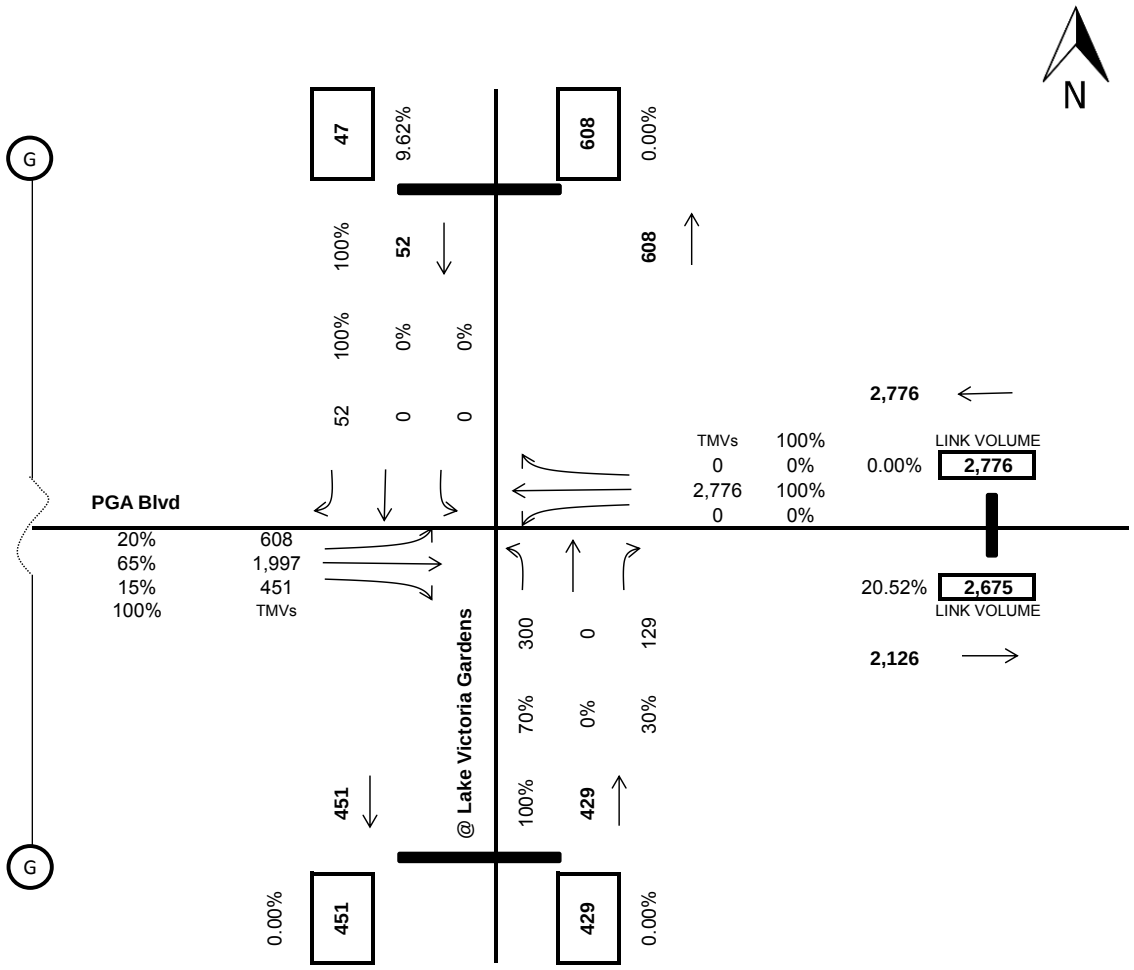
LEGEND

- 1,500 — Control Volumes (Peak Hour)*
- 1,300 — Link Volumes (Peak Hour)
- 66 — Turning Movement Volumes (Balanced)
- A — Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard** **Turning Movement Volume Development** **2040 No Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **7 of 8** *Date:* 9/24/15

@ Lake Victoria Gardens



Turning Movement Volumes
@ Lake Victoria Gardens

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**2,776**			**429**			**3,145**			**47**	
TM Pk Hr Counts	0	3132	0	300	0	129	507	1797	373	0	0	47
% Turns	0%	100%	0%	70%	0%	30%	19%	67%	14%	0%	0%	100%
Calc. Pk Hr Volumes	0	2776	0	300	0	129	596	2111	438	0	0	47
Adjustments							12	-114	13			5
Bal Pk Hr Volumes	**0**	**2776**	**0**	**300**	**0**	**129**	**608**	**1997**	**451**	**0**	**0**	**52**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

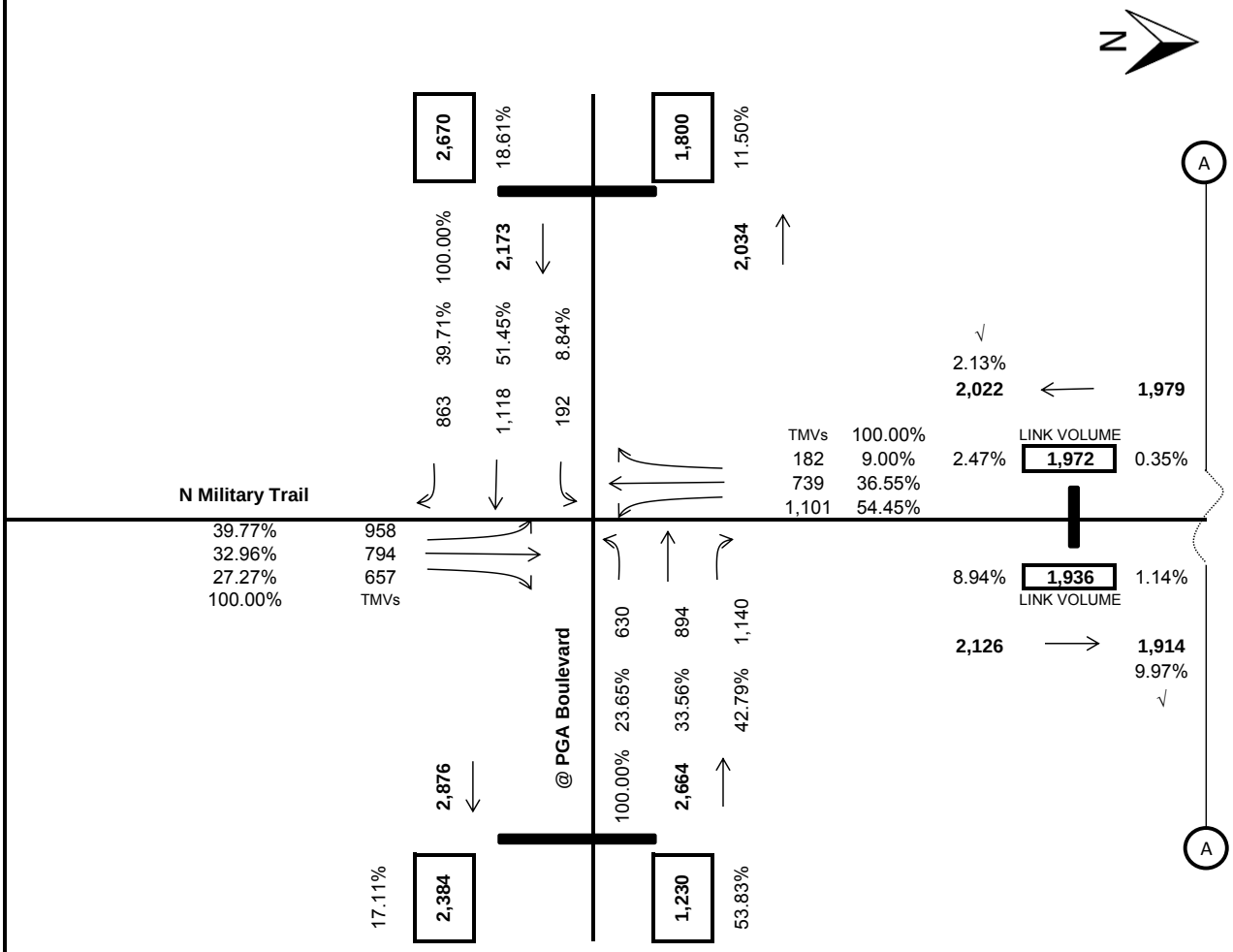
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard Turning Movement Volume Development 2040 No Build PM Peak Hour**	*Exhibit No:*	**TBD**
		Page No:	**8 of 8**
		Date:	9/24/15

@ PGA Boulevard



Turning Movement Volumes
@ PGA Boulevard

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes												
TM Pk Hr Counts												
% Turns												
Calc. Pk Hr Volumes												
Adjustments												
Bal Pk Hr Volumes	**1101**	**739**	**182**	**630**	**894**	**1140**	**958**	**794**	**657**	**192**	**1118**	**863**

LEGEND

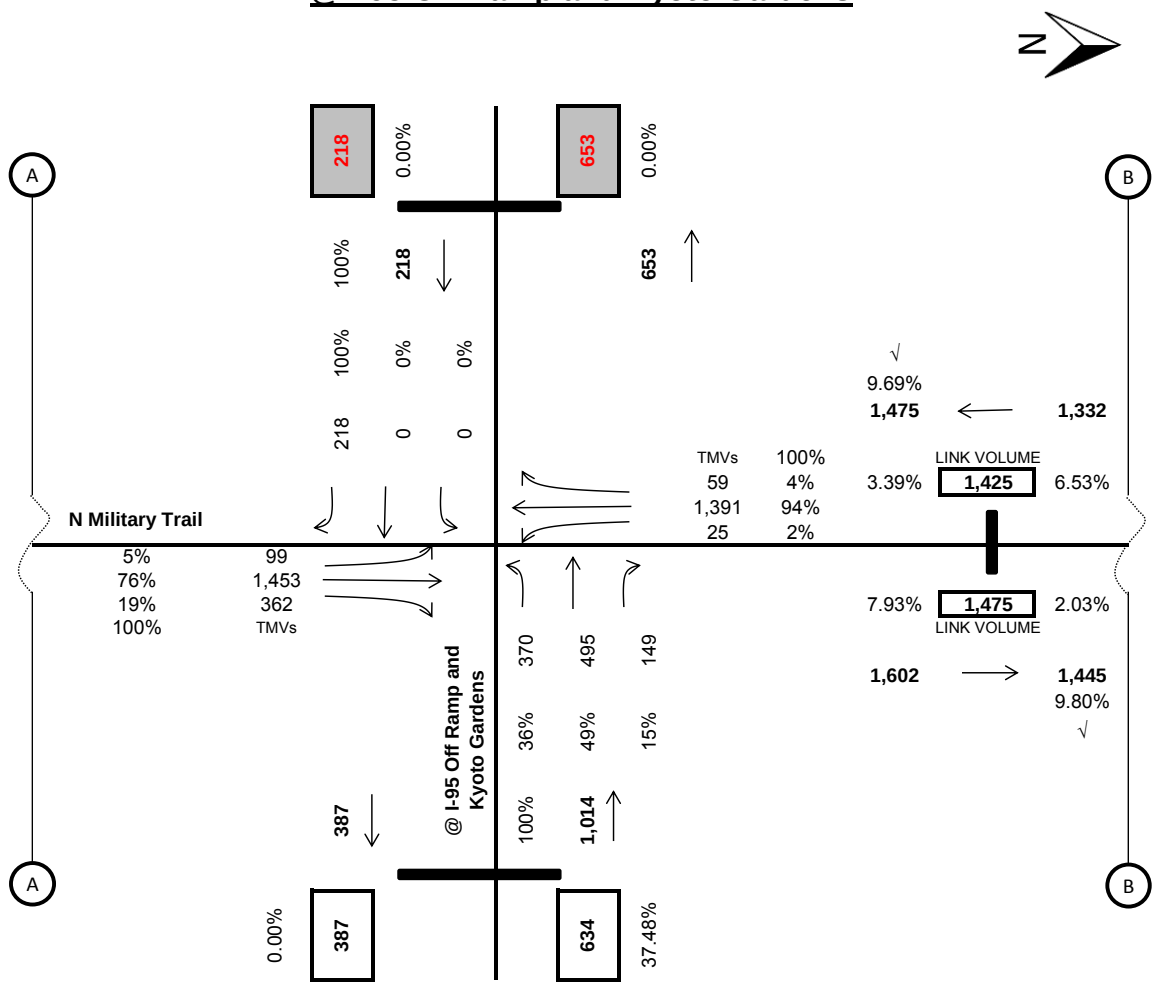
1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A … A	Match Line

For consistency, balanced peak hour volumes from major street arterial (aka PGA Boulevard) were used. See PGA Boulevard Arterial for details

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **N Military Trail** **Turning Movement Volume Development** **2040 No Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **1 of 4** *Date:* 9/24/15

@ I-95 Off Ramp and Kyoto Gardens



Turning Movement Volumes
@ I-95 Off Ramp and Kyoto

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**1,425**			**634**			**1,936**			**218**		
TM Pk Hr Counts	50	2788	19	370	75	189	31	3133	728	0	0	78
% Turns	2%	98%	1%	58%	12%	30%	1%	80%	19%	0%	0%	100%
Calc. Pk Hr Volumes	25	1391	9	370	75	189	15	1558	362	0	0	218
Adjustments			50		420	-40	84	-105				
Bal Pk Hr Volumes	**25**	**1391**	**59**	**370**	**495**	**149**	**99**	**1453**	**362**	**0**	**0**	**218**

Had to make this drastic change to the WB through adjustment in order to make up the ramp control

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

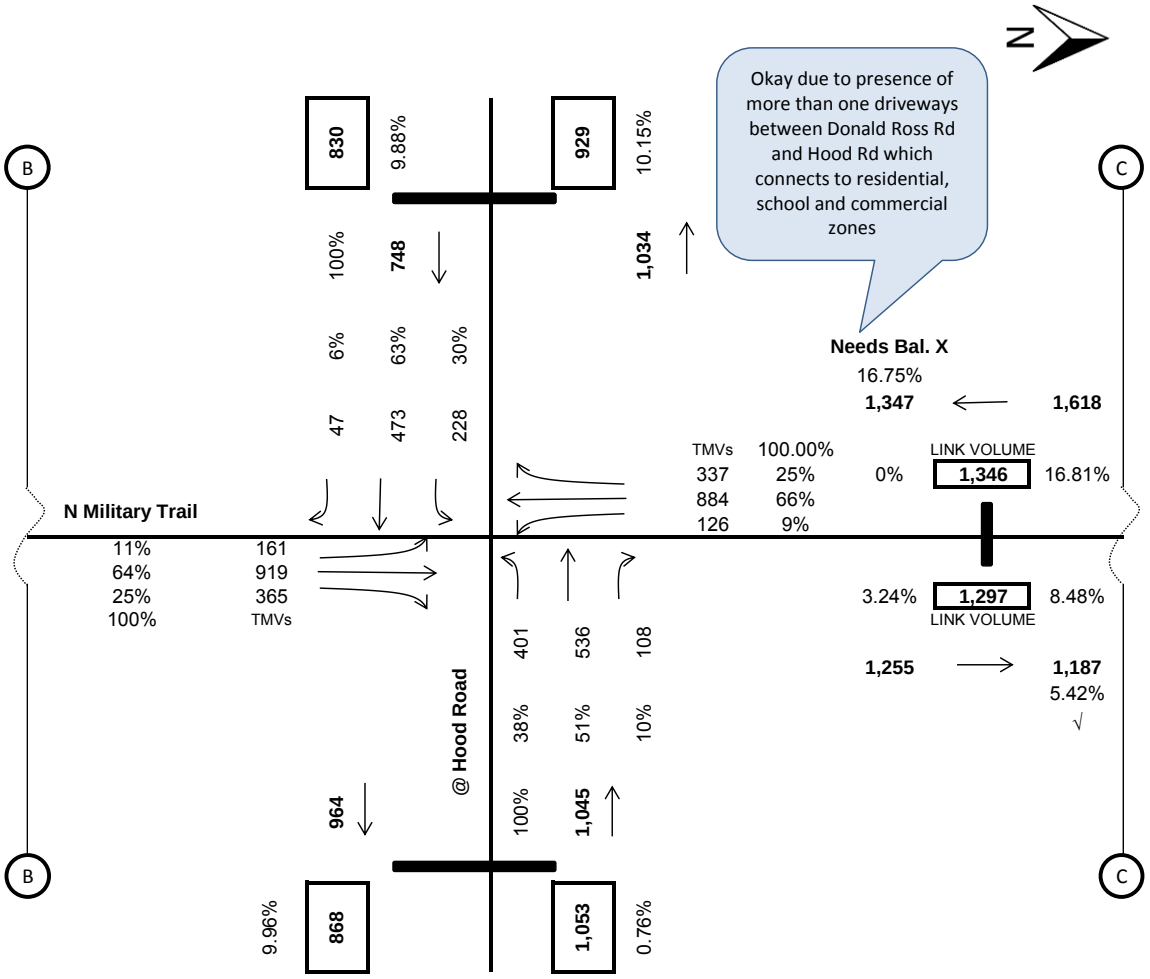
66 → Turning Movement Volumes (Balanced)

A — Match Line — A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name:	Exhibit Name:		
SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	**N Military Trail** **Turning Movement Volume Development** **2040 No Build PM Peak Hour**	Exhibit No:	TBD
		Page No:	2 of 4
		Date:	9/24/15

@ Hood Road



Turning Movement Volumes
@ Hood Road

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**1,346**			**1,053**			**1,475**			**830**		
TM Pk Hr Counts	215	1510	575	790	1073	214	306	1748	776	467	1266	104
% Turns	9%	66%	25%	38%	52%	10%	11%	62%	27%	25%	69%	6%
Calc. Pk Hr Volumes	126	884	337	401	544	108	159	911	404	211	572	47
Adjustments					-8		2	8	-39	17	-99	
Bal Pk Hr Volumes	**126**	**884**	**337**	**401**	**536**	**108**	**161**	**919**	**365**	**228**	**473**	**47**

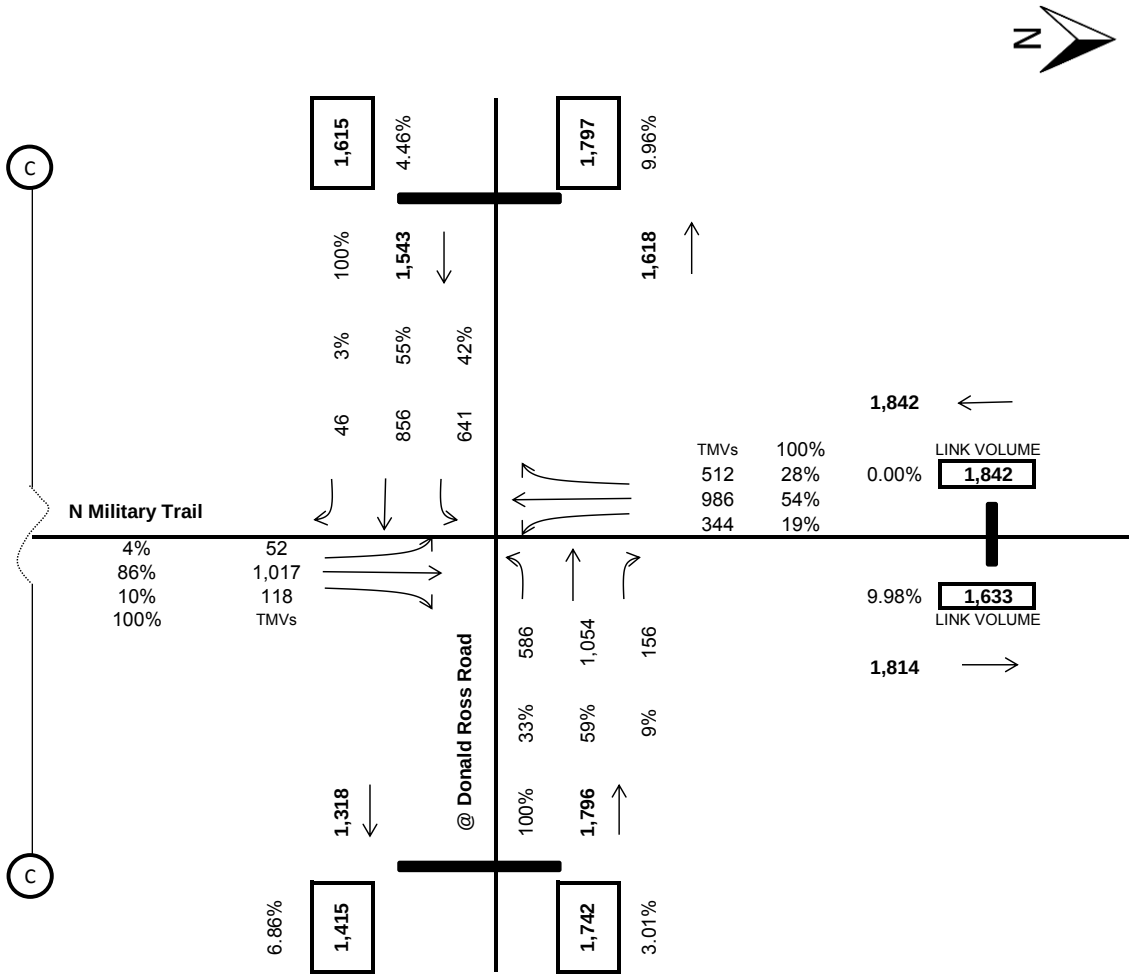
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **N Military Trail** **Turning Movement Volume Development** **2040 No Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **3 of 4** *Date:* 9/24/15

@ Donald Ross Road



Turning Movement Volumes
@ Donald Ross Road

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**1,842**			**1,742**			**1,297**			**1,615**		
TM Pk Hr Counts	451	1292	671	715	1219	190	84	1798	206	717	958	52
% Turns	19%	54%	28%	34%	57%	9%	4%	86%	10%	42%	55%	3%
Calc. Pk Hr Volumes	344	986	512	586	1000	156	52	1117	128	671	896	49
Adjustments					54			-100	-10	-30	-40	-3
Bal Pk Hr Volumes	**344**	**986**	**512**	**586**	**1054**	**156**	**52**	**1017**	**118**	**641**	**856**	**46**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

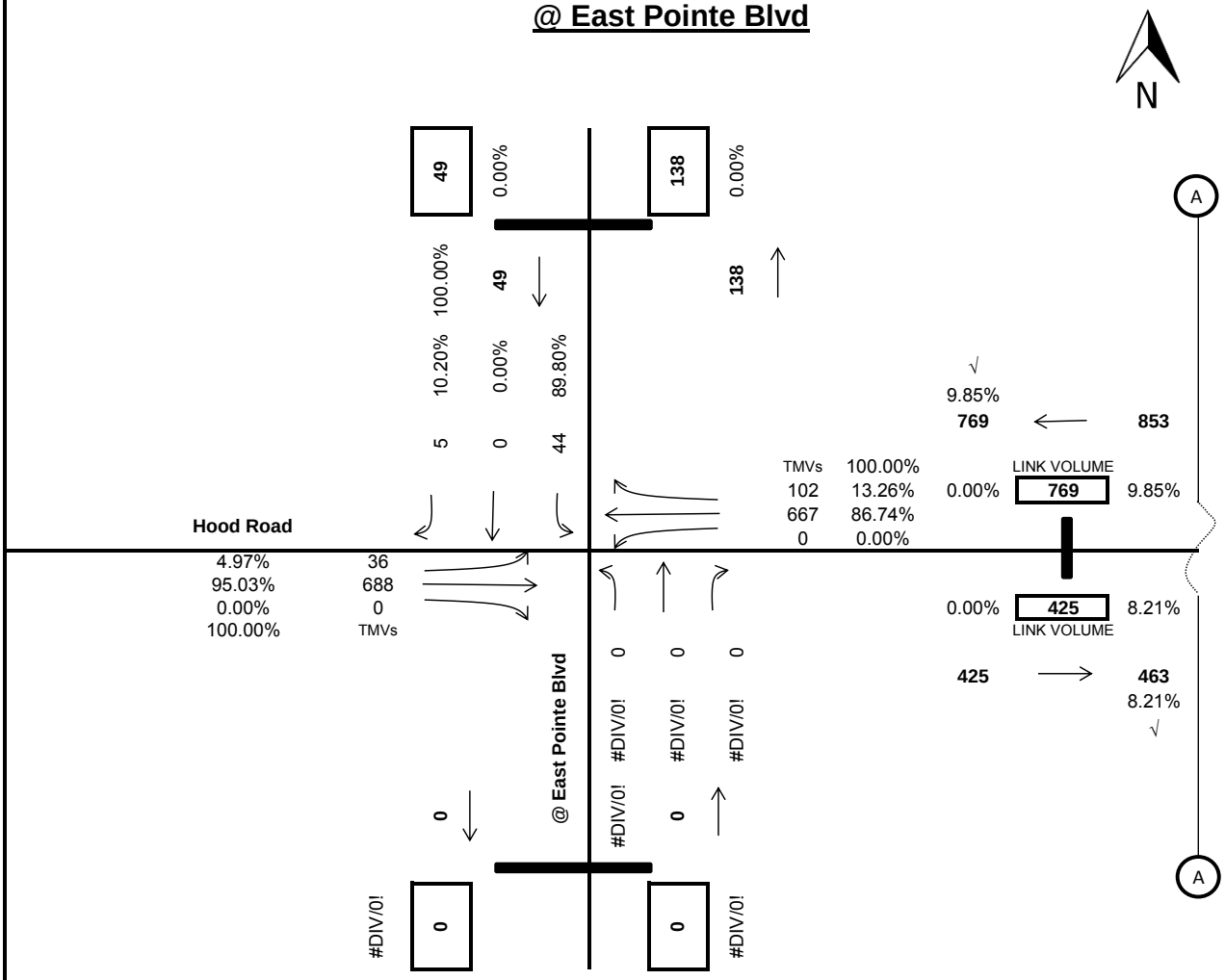
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **N Military Trail** **Turning Movement Volume Development** **2040 No Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **4 of 4** *Date:* 9/24/15

@ East Pointe Blvd



Turning Movement Volumes
@ East Pointe Blvd

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**769**			**0**			**724**			**49**	
TM Pk Hr Counts	0	333	51	0	0	0	13	250	0	44	0	5
% Turns	0%	87%	13%	0%	0%	0%	5%	95%	0%	90%	0%	10%
Calc. Pk Hr Volumes	0	667	102	0	0	0	36	688	0	44	0	5
Adjustments												
Bal Pk Hr Volumes	**0**	**667**	**102**	**0**	**0**	**0**	**36**	**688**	**0**	**44**	**0**	**5**

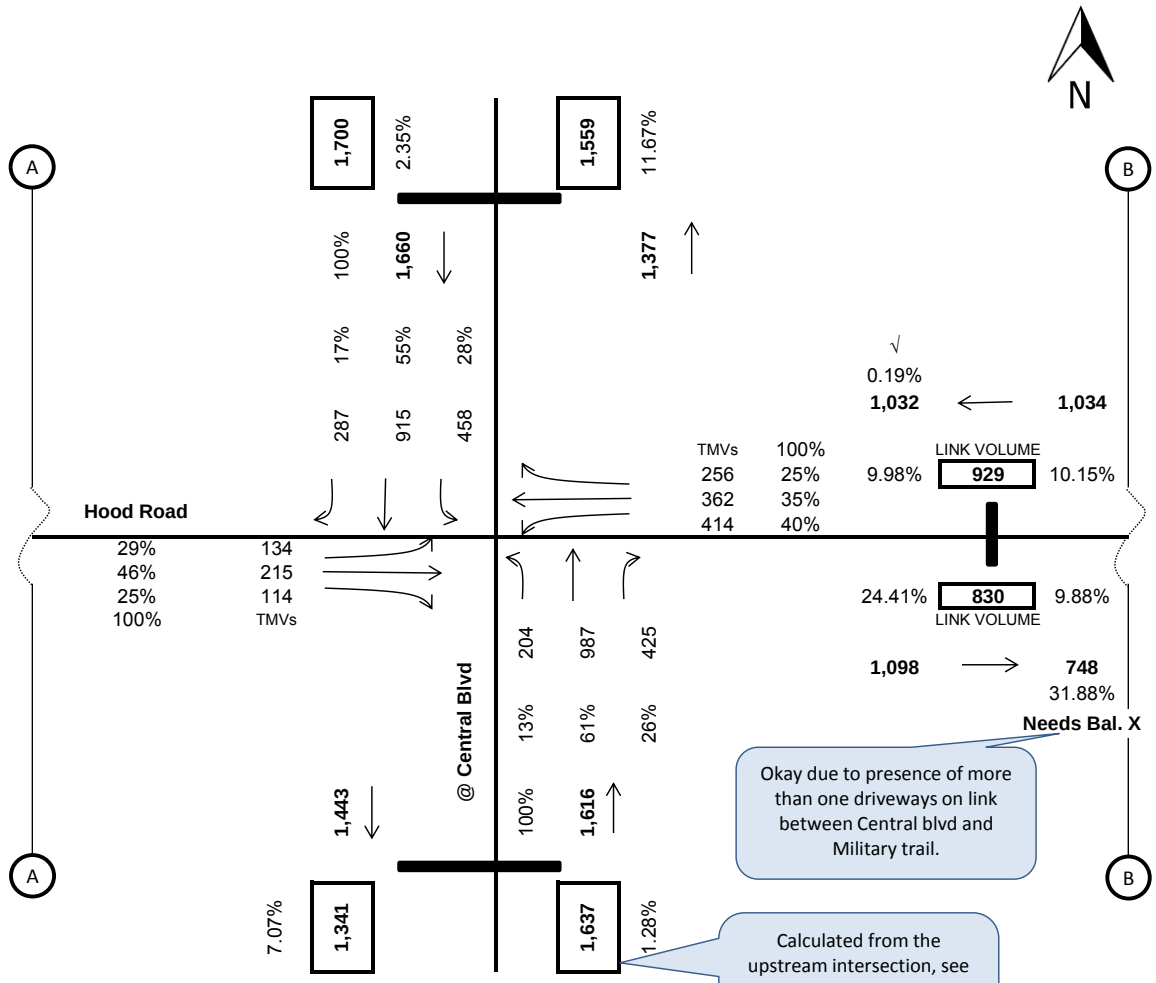
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66 →	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Hood Road** **Turning Movement Volume Development** **2040 No Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **1 of 3** *Date:* 9/24/15

@ Central Blvd



Turning Movement Volumes
@ Central Blvd

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes												
TM Pk Hr Counts												
% Turns												
Calc. Pk Hr Volumes												
Adjustments												
Bal Pk Hr Volumes	**414**	**362**	**256**	**204**	**987**	**425**	**134**	**215**	**114**	**458**	**915**	**287**

For consistency, balanced peak hour volumes from major street arterial (aka Central Boulevard) were used. See Central Boulevard Arterial for details

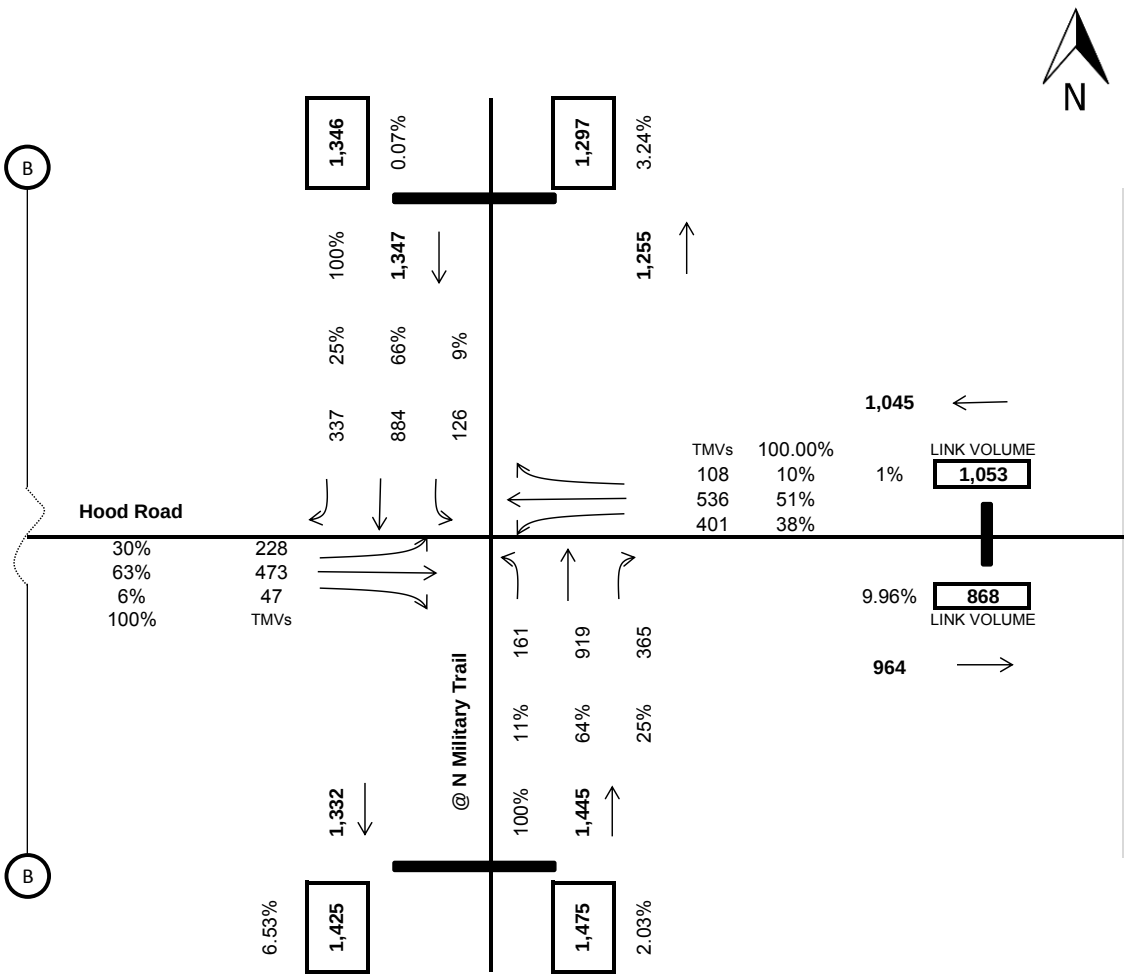
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Hood Road** **Turning Movement Volume Development** **2040 No Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **2 of 3** *Date:* 9/24/15

@ N Military Trail



Turning Movement Volumes
@ N Military Trail

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes												
TM Pk Hr Counts												
% Turns												
Calc. Pk Hr Volumes												
Adjustments												
Bal Pk Hr Volumes	**401**	**536**	**108**	**161**	**919**	**365**	**228**	**473**	**47**	**126**	**884**	**337**

For consistency, balanced peak hour volumes from major street arterial (aka N Military Trail) were used. See N Military Trail Arterial for details

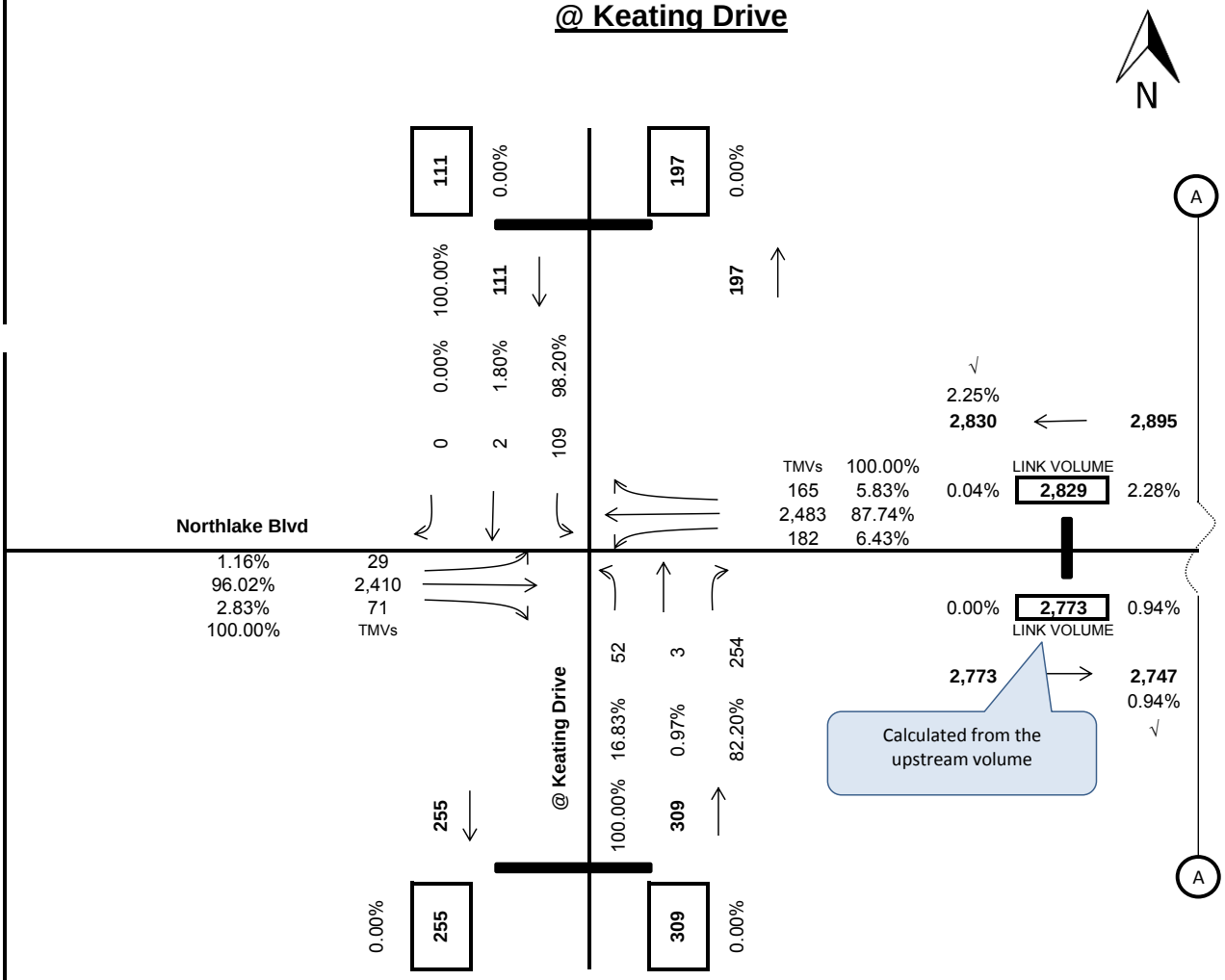
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66 →	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Hood Road** **Turning Movement Volume Development** **2040 No Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **3 of 3** *Date:* 9/24/15

@ Keating Drive



Turning Movement Volumes
@ Keating Drive

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**2,829**			**309**			**2,510**			**111**	
TM Pk Hr Counts	215	2940	195	52	3	254	25	2097	62	109	2	0
% Turns	6%	88%	6%	17%	1%	82%	1%	96%	3%	98%	2%	0%
Calc. Pk Hr Volumes	182	2483	165	52	3	254	29	2410	71	109	2	0
Adjustments												
Bal Pk Hr Volumes	**182**	**2483**	**165**	**52**	**3**	**254**	**29**	**2410**	**71**	**109**	**2**	**0**

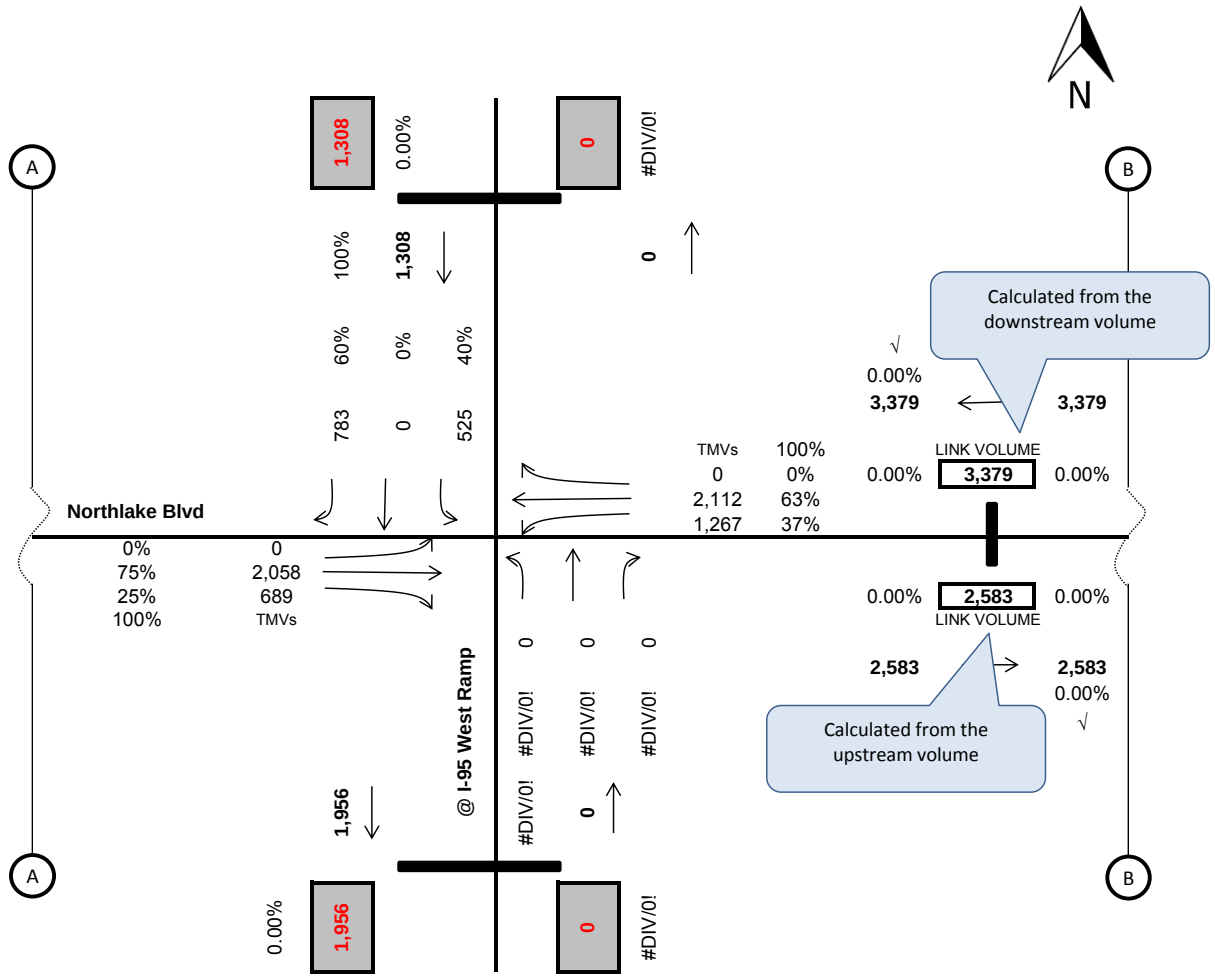
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A / A	Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Northlake Boulevard** **Turning Movement Volume Development** **2040 No Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **1 of 5** *Date:* 9/24/15

@ I-95 West Ramp



Turning Movement Volumes
@ I-95 West Ramp

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**3,379**			**0**			**2,773**			**1,308**		
TM Pk Hr Counts	1392	2186	0	0	0	0	0	1825	634	780	0	1163
% Turns	39%	61%	0%	0%	0%	0%	0%	74%	26%	40%	0%	60%
Calc. Pk Hr Volumes	1315	2064	0	0	0	0	0	2058	715	525	0	783
Adjustments	-48	48							-26		0	
Bal Pk Hr Volumes	**1267**	**2112**	**0**	**0**	**0**	**0**	**0**	**2058**	**689**	**525**	**0**	**783**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

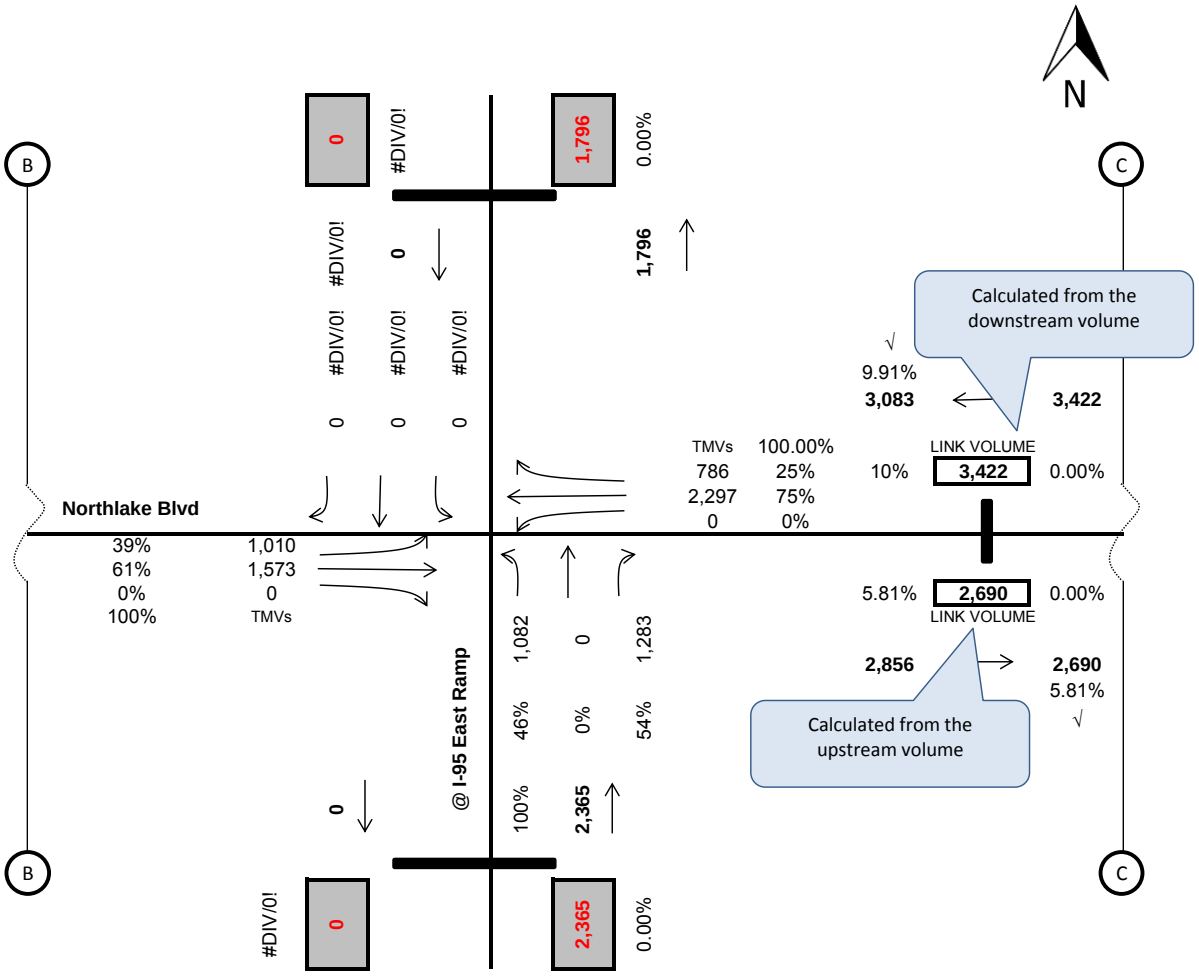
66 → — Turning Movement Volumes (Balanced)

A … A — Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Northlake Boulevard** **Turning Movement Volume Development** **2040 No Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **2 of 5** *Date:* 9/24/15

@ I-95 East Ramp



Turning Movement Volumes
@ I-95 East Ramp

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**3,422**			**2,365**			**2,583**			**0**	
TM Pk Hr Counts	0	2438	890	1141	0	1354	1186	1419	0	0	0	0
% Turns	0%	73%	27%	46%	0%	54%	46%	54%	0%	0%	0%	0%
Calc. Pk Hr Volumes	0	2507	915	1082	0	1283	1176	1407	0	0	0	0
Adjustments		-210	-129		0		-166	166				
Bal Pk Hr Volumes	**0**	**2297**	**786**	**1082**	**0**	**1283**	**1010**	**1573**	**0**	**0**	**0**	**0**

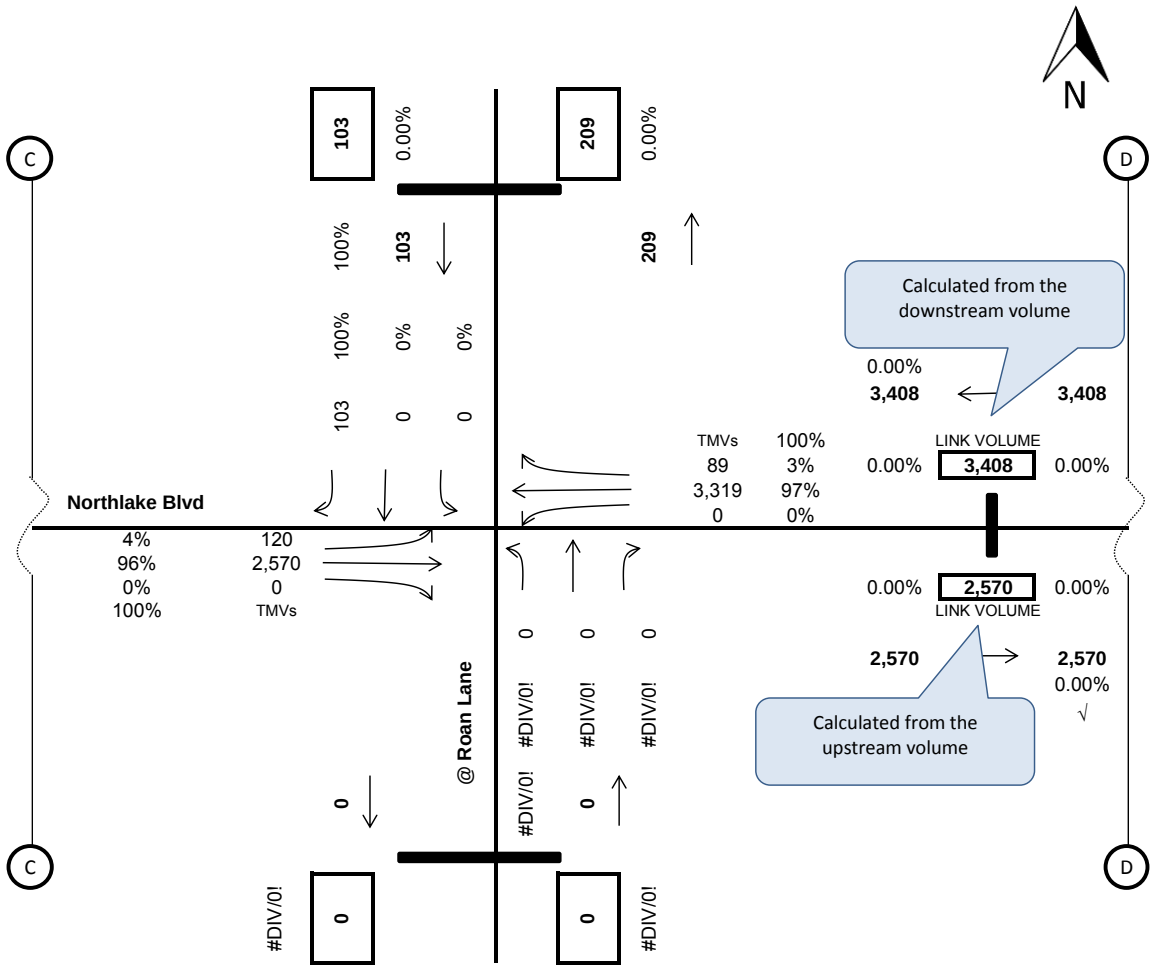
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Northlake Boulevard** **Turning Movement Volume Development** **2040 No Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **3 of 5** *Date:* 9/24/15

@ Roan Lane



Turning Movement Volumes
@ Roan Lane

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**3,408**			**0**			**2,690**			**103**	
TM Pk Hr Counts	0	3389	91	0	0	0	127	2727	0	0	0	103
% Turns	0%	97%	3%	0%	0%	0%	4%	96%	0%	0%	0%	100%
Calc. Pk Hr Volumes	0	3319	89	0	0	0	120	2570	0	0	0	103
Adjustments												
Bal Pk Hr Volumes	**0**	**3319**	**89**	**0**	**0**	**0**	**120**	**2570**	**0**	**0**	**0**	**103**

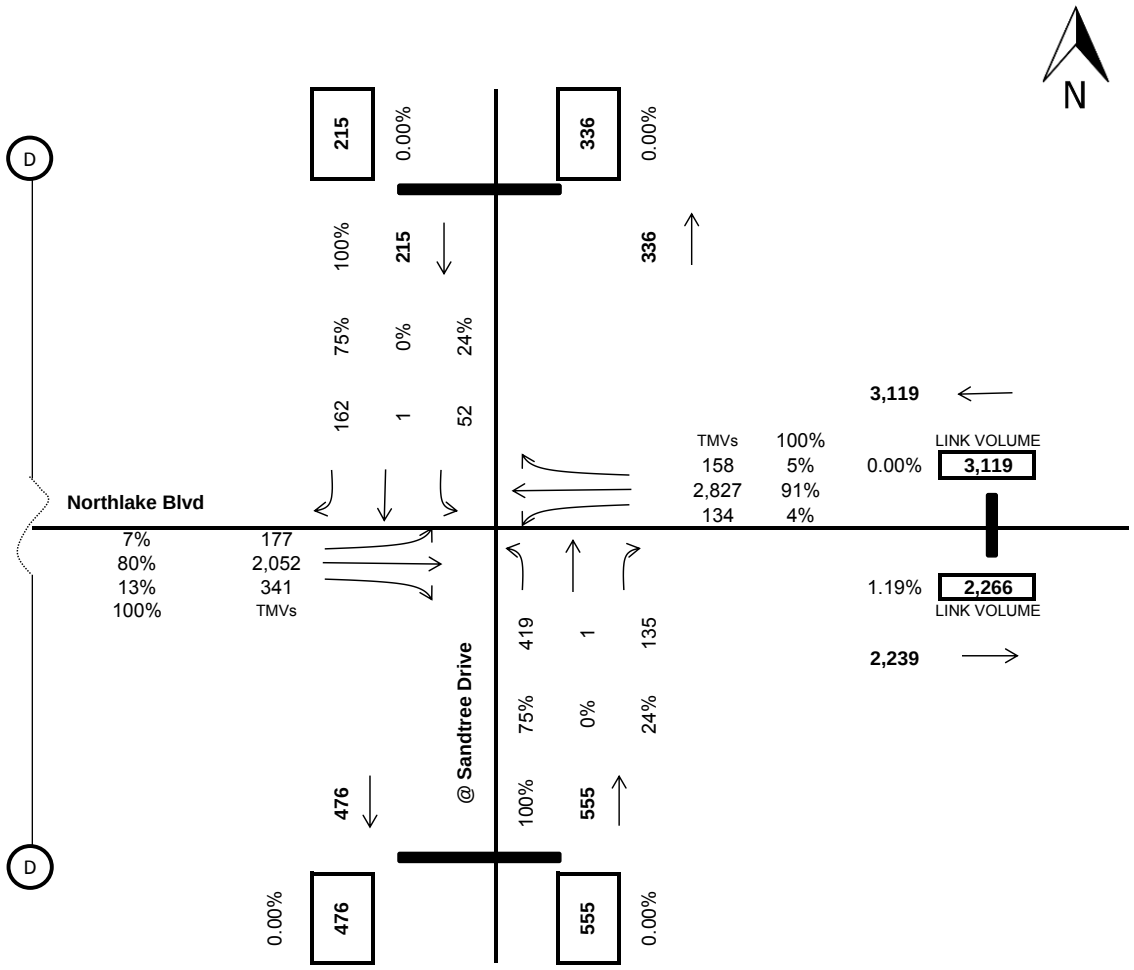
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A … A	Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Northlake Boulevard Turning Movement Volume Development 2040 No Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **4 of 5** *Date:* 9/24/15

@ Sandtree Drive



Turning Movement Volumes
@ Sandtree Drive

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**3,119**			**555**			**2,570**			**215**	
TM Pk Hr Counts	130	2747	154	419	1	135	191	2213	368	52	1	162
% Turns	4%	91%	5%	75%	0%	24%	7%	80%	13%	24%	0%	75%
Calc. Pk Hr Volumes	134	2827	158	419	1	135	177	2052	341	52	1	162
Adjustments												
Bal Pk Hr Volumes	**134**	**2827**	**158**	**419**	**1**	**135**	**177**	**2052**	**341**	**52**	**1**	**162**

LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Northlake Boulevard Turning Movement Volume Development 2040 No Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **5 of 5** *Date:* 9/24/15

APPENDIX AC

BUILD ALTERNATIVES LINK VOLUME DEVELOPMENT TABLES

APPENDIX AC - BUILD ALTERNATIVE VOLUME DEVELOPMENT

TABLE 3

I-95/PGA Boulevard PD&E

2040 Build Volume Development - AM Peak Hour

Segment				Adjusted No Build						Model Outputs				Δ % Change		Adjusted Build					
Limits				2020		2030		2040		2040 No-Build Pk Hr		2040 Build Pk Hr		Build vs No-Build		2020		2030		2040	
From	To		Station ID	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
Northlake Boulevard																					
Military Trail	I-95		2207	2,189	1,557	2,395	1,782	2,581	2,020	3,457	1,817	3,297	1,869	-5%	3%	2,088	1,601	2,284	1,833	2,462	2,078
I-95	Congress Ave		2309	2,060	1,720	2,215	1,803	2,390	1,886	3,191	1,865	3,210	1,836	1%	-2%	2,072	1,694	2,228	1,775	2,404	1,857
PGA Boulevard																					
West of Florida's Turnpike			2103	992	1,132	1,067	1,239	1,142	1,335	3,464	3,162	3,594	3,003	4%	-5%	1,029	1,075	1,107	1,177	1,185	1,268
Turnpike	Central Blvd		2201	2,222	1,657	2,389	1,813	2,557	1,954	3,464	3,162	3,594	3,003	4%	-5%	2,305	1,573	2,478	1,722	2,653	1,855
Central Blvd	Military Trail		2609	2,339	1,602	2,599	1,709	2,859	1,802	3,067	2,020	2,865	2,017	-7%	0%	2,185	1,600	2,428	1,707	2,670	1,800
Military Trail	I-95		2203	2,261	1,275	2,391	1,383	2,500	1,492	3,380	3,023	3,223	2,493	-5%	-18%	2,156	1,052	2,280	1,141	2,384	1,230
I-95	Lake Victoria Gardens		2303	3,596	1,577	3,838	1,769	4,046	1,946	4,359	954	4,125	839	-5%	-12%	3,403	1,387	3,632	1,556	3,829	1,711
East of Lake Victoria Gardens			2829	2,616	1,153	2,815	1,300	2,989	1,446	2,978	1,632	2,795	1,624	-6%	0%	2,455	1,147	2,642	1,294	2,805	1,439
Hood Road																					
W of Central Boulevard	Central Boulevard		2105	627	328	812	393	996	458	1,247	540	906	542	-27%	0%	456	329	590	394	724	460
Central Boulevard	Military Trail		2611	783	454	1,002	472	1,227	490	2,067	1,171	2,438	1,846	18%	58%	923	716	1,182	744	1,447	773
Military Trail	SR 811		2213	943	489	1,169	552	1,402	611	2,591	1,803	2,599	2,022	0%	12%	946	548	1,173	619	1,406	685
Donald Ross Road																					
W of I-95			1105	851	385	961	418	1,062	450	1,492	2,365	1,378	1,937	-8%	-18%	786	315	888	342	981	369
I-95	Parkside Drive		1219	1,968	1,531	2,218	1,714	2,487	1,897	3,345	2,568	2,154	1,652	-36%	-36%	1,267	985	1,428	1,103	1,601	1,220
Parkside Drive	Central Blvd		1205	1,930	1,057	2,255	1,299	2,579	1,532	2,268	2,148	1,807	1,517	-20%	-29%	1,537	747	1,796	917	2,054	1,082
Central Boulevard	Military Trail		-	1,678	984	1,774	1,101	1,886	1,218	1,962	1,597	1,886	1,458	-4%	-9%	1,613	898	1,705	1,005	1,813	1,112
East of Military Trail			1211	1,562	991	1,652	1,109	1,756	1,227	1,962	1,597	1,886	1,458	-4%	-9%	1,502	905	1,588	1,013	1,688	1,120
Central Boulevard																					
PGA Blvd	I-95		2608	988	1,048	1,080	1,214	1,180	1,381	1,470	2,107	1,710	1,821	16%	-14%	1,150	906	1,257	1,049	1,373	1,194
I-95	Hood Road		2608	1,071	1,029	1,281	1,168	1,501	1,307	1,785	2,325	2,961	3,521	66%	51%	1,777	1,558	2,125	1,769	2,490	1,979
Hood Road	Donald Ross Rd		2210	747	983	941	1,277	1,135	1,563	1,589	2,203	2,081	2,567	31%	17%	978	1,145	1,232	1,488	1,486	1,821
Donald Ross Rd	Frederick Small Rd		1206	831	805	1,101	1,042	1,372	1,278	1,857	2,878	2,035	2,853	10%	-1%	911	798	1,206	1,033	1,503	1,267
Military Trail																					
South of PGA Blvd			2606	1,553	1,541	1,670	1,725	1,802	1,923	2,828	3,499	2,845	3,233	1%	-8%	1,562	1,424	1,680	1,594	1,813	1,777
PGA Blvd	I-95		2624	1,243	1,626	1,348	1,735	1,464	1,843	3,373	3,717	2,827	3,301	-16%	-11%	1,042	1,444	1,130	1,541	1,227	1,637
I-95	Hood Road		2604	1,074	1,139	1,210	1,285	1,347	1,421	2,939	3,528	2,248	2,960	-23%	-16%	822	956	926	1,078	1,030	1,192
Hood Road	Donald Ross Rd		2208	1,002	1,303	1,059	1,413	1,126	1,524	2,166	2,523	2,129	2,517	-2%	0%	985	1,300	1,041	1,410	1,107	1,521
Donald Ross Rd	Frederick Small Rd		1602	1,502	1,707	1,545	1,822	1,604	1,920	2,473	3,079	2,438	2,996	-1%	-3%	1,481	1,661	1,523	1,773	1,582	1,868
I-95[1]																					
	South of Northlake Blvd		-	6,901	-	7,717	-	8,595	-	-	-	-	-	-1% [2]	-	6,833	-	7,642	-	8,511	-
	Northlake Blvd (NB Off-Ramp)	Northlake Blvd (NB On-Ramp)	-	5,314	-	5,942	-	6,618	-	-	-	-	-	0% [2]	-	5,291	-	5,917	-	6,590	-
	Northlake Blvd (NB On-Ramp)	PGA Blvd (EB Off-Ramp)	2187	6,492	-	7,259	-	8,086	-	9,577	-	9,663	-	1% [2]	-	6,550	-	7,324	-	8,159	-
	PGA Blvd (EB Off-Ramp)	PGA Blvd (WB Off-Ramp)	-	4,087	-	4,570	-	5,090	-	-	-	-	-	8% [2]	-	4,404	-	4,924	-	5,485	-
Northbound	PGA Blvd (WB Off-Ramp)	PGA Blvd (EB &WB On-Ramp)	-	3,049	-	3,410	-	3,798	-	-	-	-	-	19% [2]	-	3,640	-	4,070	-	4,534	-
	PGA Blvd (EB &WB On-Ramp)	Military Tr (NB & SB On-Ramp)	-	3,183	-	3,559	-	3,964	-	-	-	-	-	19% [2]	-	3,780	-	4,225	-	4,707	-
	Military Tr (NB & SB On-Ramp)	Central Blvd (EB & WB Off Ramp)	-	3,287	-	3,675	-	4,094	-	-	-	-	-	19% [2]	-	3,923	-	4,384	-	4,885	-
	Central Blvd (EB & WB Off Ramp)	Central Blvd (EB & WB On Ramp)	-	3,287	-	3,675	-	4,094	-	-	-	-	-	-11% [2]	-	2,909	-	3,269	-	3,659	-
	Central Blvd (EB & WB On Ramp)	Donald Ross Rd (NB Off Ramp)	2214	3287	-	3675	-	4094	-	-	-	-	-	-1% [2]	-	3,219	-	3,610	-	4,034	-
	Donald Ross Rd (NB Off Ramp)	Donald Ross Rd (NB On Ramp)	-	2,148	-	2,402	-	2,676	-	-	-	-	-	8% [2]	-	2,293	-	2,575	-	2,882	-
	North of Donald Ross Rd		-	2,618	-	2,927	-	3,261	-	-	-	-	-	3% [2]	-	2,677	-	3,004	-	3,361	-
	North of Donald Ross Rd		-	-	4,704	-	5,099	-	5,539	-	-	-		-	-6%	-	4,431	-	4,803 [2]	-	5,217
	Donald Ross Rd (SB Off Ramp)	Donald Ross Rd (SB On Ramp)	-	-	3,953	-	4,285	-	4,654	-	-	-		-	-6%	-	3,729	-	4,042 [2]	-	4,390
	Donald Ross Rd (SB On Ramp)	Central Blvd (EB & WB Off Ramp)	2214	-	5,530	-	5,995	-	6,512	-	8,842	-	8,068	-	-9%	-	5046	-	5470 [2]	-	5942
	Central Blvd (EB & WB Off Ramp)	Central Blvd (EB & WB On Ramp)	-	-	5,530	-	5,995	-	6,512	-	-	-	-	-	-12%	-	4,847	-	5,251 [2]	-	5,702
	Central Blvd (EB & WB On Ramp)	Military Tr (SB Off-Ramp)	-	-	5,530	-	5,995	-	6,512	-	-	-	-	-	8%	-	5,962	-	6,478 [2]	-	7,050
	Military Tr (SB Off-Ramp)	PGA Blvd (EB &WB Off-Ramp)	-	-	5,182	-	5,618	-	6,102	-	-	-	-	-	1%	-	5,194	-	5,646 [2]	-	6,145
Southbound	PGA Blvd (EB &WB Off-Ramp)	PGA Blvd (WB On-Ramp)	-	-	4,494	-	4,872	-	5,292	-	-	-	-	-	-3%	-	4,320	-	4,699 [2]	-	5,116
	PGA Blvd (WB On-Ramp)	PGA Blvd (EB On-Ramp)	-	-	5,740	-	6,223	-	6,759	-	-	-	-	-	-4%	-	5,468	-	5,944 [2]	-	6,467
	PGA Blvd (EB On-Ramp)	Northlake Blvd. (SB Off-Ramp)	2187	-	6,990	-	7,578	-	8,232	-	-	-	-	-	-4%	-	6,661	-	7,237 [2]	-	7,873
	Northlake Blvd. (SB Off-Ramp)	Northlake Blvd. (SB On-Ramp)	-	-	5,999	-	6,504	-	7,065	-	-	-	-	-	-7%	-	5,573	-	6,058 [2]	-	6,591
	South of Northlake Blvd		-	-	7,668	-	8,313	-	9,029	-	-	-	-	-	-7%	-	7,076	-	7,687 [2]	-	8,359

APPENDIX AC - BUILD ALTERNATIVE VOLUME DEVELOPMENT

TABLE 3
I-95/PGA Boulevard PD&E
2040 Build Volume Development - AM Peak Hour

Segment			Adjusted No Build						Model Outputs				Δ % Change		Adjusted Build					
	Limits		2020		2030		2040		2040 No-Build Pk Hr		2040 Build Pk Hr		Build vs No-Build		2020		2030		2040	
	From	To	Station ID	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
Ramps[3]																					
I-95 Nbound	Northlake Blvd. (EB & WB Off-Ramp)		4077	1,587	-	1,775	-	1,977	-	1,729	-	1,680	-	-3%	-	1,542	-	1,725	-	1,921	-
	Northlake Blvd. (EB & WB On-Ramp)		4078	1,178	-	1,317	-	1,468	-	1,776	-	1,898	-	7%	-	1,259	-	1,407	-	1,569	-
	PGA Blvd (EB Off-Ramp)		4081	2,405	-	2,689	-	2,996	-	2,771	-	2,473	-	-11%	-	2,146	-	2,400	-	2,674	-
	PGA Blvd (WB Off-Ramp)		4581	1,038	-	1,160	-	1,292	-	1,867	-	1,374	-	-26%	-	764	-	854	-	951	-
	PGA Blvd (EB &WB On-Ramp)		4082	134	-	149	-	166	-	140	-	146	-	4%	-	140	-	155	-	173	-
	Military Tr (NB & SB On-Ramp)		4095	104	-	116	-	130	-	126	-	173	-	37%	-	143	-	159	-	178	-
	Central Blvd (EB & WB Off Ramp)		-	-	-	-	-	-	-	-	-	1,822	-	-	-	1,014	-	1,115	-	1,226	-
	Central Blvd (EB & WB On Ramp)		-	-	-	-	-	-	-	-	-	557	-	-	-	310	-	341	-	375	-
	Donald Ross Rd. (EB & WB Off-Ramp)		4085	1,139	-	1,273	-	1,418	-	1,906	-	1,549	-	-19%	-	926	-	1,035	-	1,152	-
	Donald Ross Rd. (EB & WB On-Ramp)		4086	470	-	525	-	585	-	511	-	418	-	-18%	-	384	-	429	-	479	-
I-95 Sbound	Donald Ross Rd. (EB & WB Off-Ramp)		4087	-	751	-	814	-	885	-	922	-	862	-	-7%	-	702	-	761	-	827
	Donald Ross Rd. (EB & WB On-Ramp)		4088	-	1,577	-	1,710	-	1,858	-	2,258	-	1,886	-	-16%	-	1,317	-	1,428	-	1,552
	Central Blvd (EB & WB Off Ramp)		-	-	-	-	-	-	-	-	-	-	357	-	-	-	199	-	219	-	240
	Central Blvd (EB & WB On Ramp)		-	-	-	-	-	-	-	-	-	-	2,003	-	-	-	1,115	-	1,226	-	1,348
	Military Tr (SB Off-Ramp)		4096	-	348	-	377	-	410	-	82	-	181	-	121%	-	768	-	832	-	905
	PGA Blvd (EB &WB Off-Ramp)		4083	-	688	-	746	-	810	-	797	-	1,012	-	27%	-	874	-	947	-	1,029
	PGA Blvd (WB On-Ramp)		4584	-	1,246	-	1,351	-	1,467	-	2,056	-	1,894	-	-8%	-	1,148	-	1,245	-	1,351
	PGA Blvd (EB On-Ramp)		4084	-	1,250	-	1,355	-	1,473	-	2,193	-	2,093	-	-5%	-	1,193	-	1,293	-	1,406
	Northlake Blvd. (EB & WB Off-Ramp)		4079	-	991	-	1,074	-	1,167	-	2,038	-	2,238	-	10%	-	1,088	-	1,179	-	1,282
	Northlake Blvd. (EB & WB On-Ramp)		4080	-	1,669	-	1,809	-	1,964	-	2,148	-	1,934	-	-10%	-	1,503	-	1,629	-	1,768
Florida's Turnpike Ramps at PGA Boulevard																					
	On Ramp from PGA Blvd		-	874	-	874	-	874	-	1,045	-	863	-	-17%	-	721	-	721	-	721	-
	Off Ramp to PGA Blvd		-	-	1,304	-	1,379	-	1,466	-	1,680	-	1,789	-	7%	-	1,389	-	1,469	-	1,561

Notes

1. The Adjusted 2040 Pk Hr Build Volumes on I-95 were estimated by adding or subtracting the volumes from on or off ramp to the respective mainline upstream or downstream volumes as appropriate. As a starting point, factored I-95 mainline volumes at the control stations (i.e. #2214 and #2187) were used working outward from those segments to add or subtract on or off ramp volumes as previously described.

2. Represents percentage change between the Adjusted No-Build and Adjusted Build mainline volumes as calculated.

3. Ramp volumes for the Build condition were developed by applying the relative percentage change between No-Build ramp model volume and Build ramp model volume.

4. Ramp volumes for Central Blvd were calculated by taking 69% of the Model Output volumes. This reduction is generally consistent with the areawide relationship between the Build Adjusted Pk Hr Volumes and the Build Pk Hr Model Output Volumes across the major arterial roadways within the study area during the AM Pk Hr.

APPENDIX AC - BUILD ALTERNATIVE VOLUME DEVELOPMENT

TABLE 4

I-95/PGA Boulevard PD&E

2040 Build Volume Development - PM Peak Hour

Segment				Adjusted No Build						Model Outputs				Δ % Change		Adjusted Build					
Limits				2020		2030		2040		2040 No-Build Pk Hr		2040 Build Pk Hr		Build vs No-Build		2020		2030		2040	
From	To		Station ID	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
Northlake Boulevard																					
Military Trail	I-95		2207	1,997	2,272	2,253	2,540	2,510	2,829	2,549	3,256	2,131	2,998	-16%	-8%	1,670	2,092	1,884	2,339	2,098	2,605
I-95	Congress Ave		2309	2,068	2,773	2,167	2,959	2,266	3,119	2,581	3,180	2,666	3,229	3%	2%	2,136	2,815	2,239	3,004	2,341	3,167
PGA Boulevard																					
West of Florida's Turnpike			2103	873	1,193	953	1,271	1,042	1,361	3,068	3,761	3,090	3,835	1%	2%	879	1,217	960	1,296	1,049	1,388
Turnpike	Central Blvd		2201	1,786	2,257	1,952	2,406	2,134	2,576	3,068	3,761	3,090	3,835	1%	2%	1,799	2,302	1,966	2,454	2,149	2,627
Central Blvd	Military Trail		2609	1,919	2,250	2,011	2,461	2,122	2,692	2,059	3,320	1,943	3,053	-6%	-8%	1,811	2,069	1,898	2,263	2,003	2,475
Military Trail	I-95		2203	2,080	2,174	2,219	2,299	2,357	2,424	2,971	3,803	2,718	3,434	-9%	-10%	1,903	1,963	2,030	2,076	2,156	2,188
I-95	Lake Victoria Gardens		2303	2,970	3,146	3,058	3,528	3,145	3,881	3,640	2,201	3,295	1,596	-9%	-27%	2,688	2,281	2,768	2,558	2,847	2,814
East of Lake Victoria Gardens			2829	2,176	2,354	2,435	2,554	2,675	2,776	2,777	3,249	2,452	3,274	-12%	1%	1,921	2,372	2,150	2,574	2,362	2,797
Hood Road																					
W of Central Boulevard	Central Boulevard		2105	303	471	365	618	425	769	710	1,214	709	1,179	0%	-3%	303	458	365	600	425	747
Central Boulevard	Military Trail		2611	544	611	687	770	830	929	1,871	2,048	2,014	2,221	8%	8%	585	663	739	835	893	1,007
Military Trail	SR 811		2213	682	770	775	911	868	1,053	2,371	2,231	2,388	2,270	1%	2%	687	783	780	927	874	1,071
Donald Ross Road																					
W of I-95			1105	558	790	625	917	686	1,043	1,336	2,624	1,262	2,298	-6%	-12%	527	692	590	803	648	914
I-95	Parkside Drive		1219	1,766	1,897	1,901	2,185	2,018	2,473	2,908	3,153	2,637	2,656	-9%	-16%	1,601	1,598	1,724	1,841	1,830	2,084
Parkside Drive	Central Blvd		1205	1,464	1,853	1,698	2,245	1,931	2,638	2,653	2,445	2,284	2,022	-14%	-17%	1,260	1,532	1,462	1,856	1,662	2,181
Central Boulevard	Military Trail		-	1,269	1,599	1,442	1,706	1,615	1,797	1,782	2,047	1,872	2,100	5%	3%	1,333	1,640	1,515	1,750	1,697	1,843
East of Military Trail			1211	1,112	1,550	1,264	1,653	1,415	1,742	1,782	2,047	1,872	2,100	5%	3%	1,168	1,590	1,328	1,695	1,487	1,787
Central Boulevard																					
PGA Blvd	I-95		2608	778	910	976	1,077	1,174	1,237	2,489	2,055	2,158	1,953	-13%	-5%	675	865	846	1,023	1,018	1,175
I-95	Hood Road		2608	778	942	976	1,141	1,174	1,341	2,777	2,208	3,556	3,049	28%	38%	996	1,301	1,250	1,575	1,503	1,852
Hood Road	Donald Ross Rd		2210	906	954	1,233	1,327	1,559	1,700	2,521	2,305	2,492	2,278	-1%	-1%	896	943	1,219	1,312	1,541	1,680
Donald Ross Rd	Frederick Small Rd		1206	988	896	1,168	1,240	1,349	1,590	2,906	2,033	3,070	2,226	6%	10%	1,044	981	1,234	1,358	1,425	1,741
Military Trail																					
South of PGA Blvd			2606	1,994	1,746	2,266	1,909	2,538	2,073	3,959	3,162	3,647	2,930	-8%	-7%	1,837	1,618	2,088	1,769	2,338	1,921
PGA Blvd	I-95		2624	1,694	1,713	1,807	1,842	1,936	1,972	4,049	3,393	3,611	2,994	-11%	-12%	1,511	1,512	1,611	1,626	1,726	1,740
I-95	Hood Road		2604	1,185	1,184	1,335	1,304	1,475	1,425	3,453	2,870	2,879	2,400	-17%	-16%	988	990	1,113	1,091	1,230	1,192
Hood Road	Donald Ross Rd		2208	1,063	1,198	1,180	1,267	1,297	1,346	2,274	2,225	2,318	2,273	2%	2%	1,083	1,224	1,203	1,294	1,322	1,375
Donald Ross Rd	Frederick Small Rd		1602	1,396	1,755	1,515	1,808	1,633	1,842	2,800	2,491	2,739	2,593	-2%	4%	1,365	1,827	1,482	1,882	1,597	1,917
I-95[2]																					
	South of Northlake Blvd		-	6,601	-	7,334	-	8,007	-	-	-	-	-	-1% [2]	-	6,508	-	7,232	-	7,895	-
	Northlale Blvd (NB Off-Ramp)	Northlake Blvd (NB On-Ramp)	-	4,652	-	5,168	-	5,642	-	-	-	-	-	2% [2]	-	4,737	-	5,263	-	5,745	-
	Northlake Blvd (NB On-Ramp)	PGA Blvd (EB Off-Ramp)	2187	6,132	-	6,814	-	7,438	-	12,113	-	12,107	-	0% [2]	-	6,129	-	6,811	-	7,434	-
	PGA Blvd (EB Off-Ramp)	PGA Blvd (WB Off-Ramp)	-	4,874	-	5,416	-	5,912	-	-	-	-	-	3% [2]	-	5,035	-	5,595	-	6,107	-
Northbound	PGA Blvd (WB Off-Ramp)	PGA Blvd (EB &WB On-Ramp)	-	3,958	-	4,398	-	4,801	-	-	-	-	-	8% [2]	-	4,286	-	4,762	-	5,198	-
	PGA Blvd (EB &WB On-Ramp)	Military Tr (NB & SB On-Ramp)	-	4,660	-	5,178	-	5,653	-	-	-	-	-	6% [2]	-	4,953	-	5,503	-	6,008	-
	Military Tr (NB & SB On-Ramp)	Central Blvd (EB & WB Off Ramp)	-	5,199	-	5,777	-	6,306	-	-	-	-	-	12% [2]	-	5,846	-	6,495	-	7,090	-
	Central Blvd (EB & WB Off Ramp)	Central Blvd (EB & WB On Ramp)	-	5,199	-	5,777	-	6306	-	-	-	-	-	-9% [2]	-	4,746	-	5,268	-	5,742	-
	Central Blvd (EB & WB On Ramp)	Donald Ross Rd (NB Off Ramp)	2214	5199	-	5777	-	6306	-	-	-	-	-	-2% [2]	-	5,093	-	5,655	-	6,167	-
	Donald Ross Rd (NB Off Ramp)	Donald Ross Rd (NB On Ramp)	-	3,605		4,006		4373	-	-	-	-	-	3% [2]	-	3,714	-	4,123	-	4,494	-
	North of Donald Ross Rd		-	4,553		5,059		5,523	-	-	-	-	-	1% [2]	-	4,618	-	5,127	-	5,590	-
	North of Donald Ross Rd		-	-	3,227	-	3,612	-	3,997	-	-	-	-	-	-7%	-	2,995	-	3,352 [2]	-	3,710
	Donald Ross Rd (SB Off Ramp)	Donald Ross Rd (SB On Ramp)	-	-	2,819	-	3,155	-	3,491	-	-	-	-	-	-7%	-	2,632	-	2,946 [2]	-	3,260
	Donald Ross Rd (SB On Ramp)	Central Blvd (EB & WB Off Ramp)	2214	-	3,899	-	4,364	-	4,829	-	7,514	-	6,823	-	-9%	-	3540	-	3963 [2]	-	4385
	Central Blvd (EB & WB Off Ramp)	Central Blvd (EB & WB On Ramp)	-	-	3,899	-	4,364	-	4,829	-	-	-	-	-	-20%	-	3,123	-	3,498 [2]	-	3,874
Southbound	Central Blvd (EB & WB On Ramp)	Military Tr (SB Off-Ramp)	-	-	3,899	-	4,364	-	4,829	-	-	-	-	-	6%	-	4,128	-	4,619 [2]	-	5,106
	Military Tr (SB Off-Ramp)	PGA Blvd (EB &WB Off-Ramp)	-	-	3,723	-	4,167	-	4,611	-	-	-	-	-	4%	-	3,873	-	4,333 [2]	-	4,790
	PGA Blvd (EB &WB Off-Ramp)	PGA Blvd (WB On-Ramp)	-	-	3,456	-	3,868	-	4,280	-	-	-	-	-	5%	-	3,646	-	4,079 [2]	-	4,509
	PGA Blvd (WB On-Ramp)	PGA Blvd (EB On-Ramp)	-	-	5,689	-	6,368	-	7,046	-	-	-	-	-	1%	-	5,740	-	6,423 [2]	-	7,102
	PGA Blvd (EB On-Ramp)	Northlake Blvd. (SB Off-Ramp)	2187	-	7,263	-	8,129	-	8,995	-	-	-	-	-	-2%	-	7,140	-	7,989 [2]	-	8,835
	Northlake Blvd. (SB Off-Ramp)	Northlake Blvd. (SB On-Ramp)	-	-	6,206	-	6,947	-	7,687	-	-	-	-	-	-5%	-	5,932	-	6,639 [2]	-	7,341
	South of Northlake Blvd		-	-	7,786	-	8,714	-	9,643	-	-	-	-	-	-4%	-	7,498	-	8,390 [2]	-	9,280

APPENDIX AC - BUILD ALTERNATIVE VOLUME DEVELOPMENT

TABLE 4
I-95/PGA Boulevard PD&E
2040 Build Volume Development - PM Peak Hour

Segment				Adjusted No Build						Model Outputs				Δ % Change		Adjusted Build					
	Limits			2020		2030		2040		2040 No-Build Pk Hr		2040 Build Pk Hr		Build vs No-Build		2020		2030		2040	
	From	To	Station ID	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
Ramps[3]																					
I-95 Nbound	Northlake Blvd. (EB & WB Off-Ramp)		4077	1,949	-	2,166	-	2,365	-	2,569	-	2,335	-	-9%	-	1,771	-	1,969	-	2,150	-
	Northlake Blvd. (EB & WB On-Ramp)		4078	1,480	-	1,646	-	1,796	-	2,256	-	2,122	-	-6%	-	1,392	-	1,548	-	1,689	-
	PGA Blvd (EB Off-Ramp)		4081	1,258	-	1,398	-	1,526	-	2,637	-	2,293	-	-13%	-	1,094	-	1,216	-	1,327	-
	PGA Blvd (WB Off-Ramp)		4581	916	-	1,018	-	1,111	-	2,078	-	1,700	-	-18%	-	749	-	833	-	909	-
	PGA Blvd (EB &WB On-Ramp)		4082	702	-	780	-	852	-	865	-	822	-	-5%	-	667	-	741	-	810	-
	Military Tr (NB & SB On-Ramp)		4095	539	-	599	-	653	-	131	-	217	-	66%	-	893	-	992	-	1,082	-
	Central Blvd (EB & WB Off Ramp)[4]		-	-	-	-	-	-	-	-	-	2,010	-	-	-	1,100	-	1,227	-	1,348	-
	Central Blvd (EB & WB On Ramp)[4]		-	-	-	-	-	-	-	-	-	634	-	-	-	347	-	387	-	425	-
	Donald Ross Rd. (EB & WB Off-Ramp)		4085	1,594	-	1,771	-	1,933	-	2,212	-	1,914	-	-13%	-	1,379	-	1,532	-	1,673	-
	Donald Ross Rd. (EB & WB On-Ramp)		4086	948	-	1,053	-	1,150	-	835	-	796	-	-5%	-	904	-	1,004	-	1,096	-
I-95 Sbound	Donald Ross Rd. (EB & WB Off-Ramp)		4087	-	408	-	457	-	506	-	906	-	805	-	-11%	-	363	-	406	-	450
	Donald Ross Rd. (EB & WB On-Ramp)		4088	-	1,080	-	1,209	-	1,338	-	1,905	-	1,602	-	-16%	-	908	-	1,017	-	1,125
	Central Blvd (EB & WB Off Ramp)[4]		-	-	-	-	-	-	-	-	-	-	762	-	-	-	417	-	465	-	511
	Central Blvd (EB & WB On Ramp)[4]		-	-	-	-	-	-	-	-	-	-	1,837	-	-	-	1,006	-	1,121	-	1,232
	Military Tr (SB Off-Ramp)		4096	-	176	-	197	-	218	-	82	-	119	-	45%	-	255	-	286	-	316
	PGA Blvd (EB &WB Off-Ramp)		4083	-	267	-	299	-	331	-	384	-	326	-	-15%	-	227	-	254	-	281
	PGA Blvd (WB On-Ramp)		4584	-	2,233	-	2,500	-	2,766	-	1,970	-	1,847	-	-6%	-	2,094	-	2,344	-	2,593
	PGA Blvd (EB On-Ramp)		4084	-	1,574	-	1,761	-	1,949	-	2,111	-	1,877	-	-11%	-	1,400	-	1,566	-	1,733
	Northlake Blvd. (EB & WB Off-Ramp)		4079	-	1,057	-	1,182	-	1,308	-	2,007	-	2,293	-	14%	-	1,208	-	1,350	-	1,494
	Northlake Blvd. (EB & WB On-Ramp)		4080	-	1,580	-	1,767	-	1,956	-	2,128	-	2,109	-	-1%	-	1,566	-	1,751	-	1,939
Florida's Turnpike Ramps at PGA Boulevard																					
	On Ramp from PGA Blvd		-	1,395	-	1,475	-	1,568	-	1,500	-	1,618	-	8%	-	1,504	-	1,691	-	1,691	-
	Off Ramp to PGA Blvd		-	-	750	-	750	-	750	-	1,134	-	1,189	-	5%	-	787	-	787	-	787

Notes

1. The Adjusted 2040 Pk Hr Build Volumes on I-95 were estimated by adding or subtracting the volumes from on or off ramp to the respective mainline upstream or downstream volumes as appropriate. As a starting point, factored I-95 mainline volumes at the control stations (i.e. #2214 and #2187) were used working outward from those segments to add or subtract on or off ramp volumes as previously described.

2. Represents percentage change between the Adjusted No-Build and Adjusted Build mainline volumes as calculated.

3. Ramp volumes for the Build condition were developed by applying the relative percentage change between No-Build ramp model volume and Build ramp model volume.

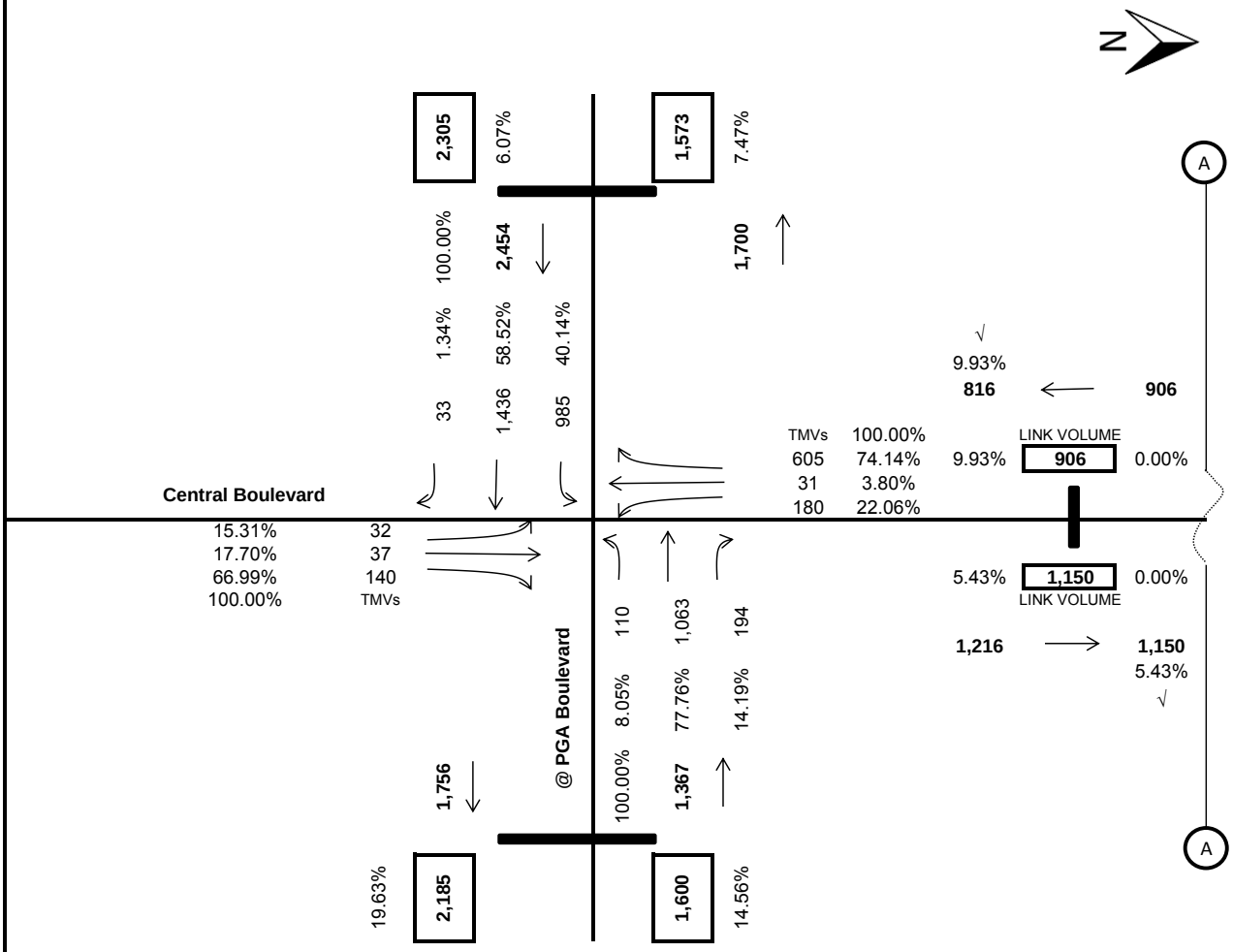
4. Ramp volumes for Central Blvd were calculated by taking 69% of the Model Output volumes. This reduction is generally consistent with the areawide relationship between the Build Adjusted Pk Hr Volumes and the Build Pk Hr Model Output Volumes across the major arterial roadways within the study area during the PM Pk Hr.

APPENDIX AD

BALANCED TURNING MOVEMENT DEVELOPMENT SHEETS

2020 BUILD AM PEAK HOUR

@ PGA Boulevard



Turning Movement Volumes
@ PGA Boulevard

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes												
TM Pk Hr Counts												
% Turns												
Calc. Pk Hr Volumes												
Adjustments												
Bal Pk Hr Volumes	**180**	**31**	**605**	**110**	**1063**	**194**	**32**	**37**	**140**	**985**	**1436**	**33**

LEGEND

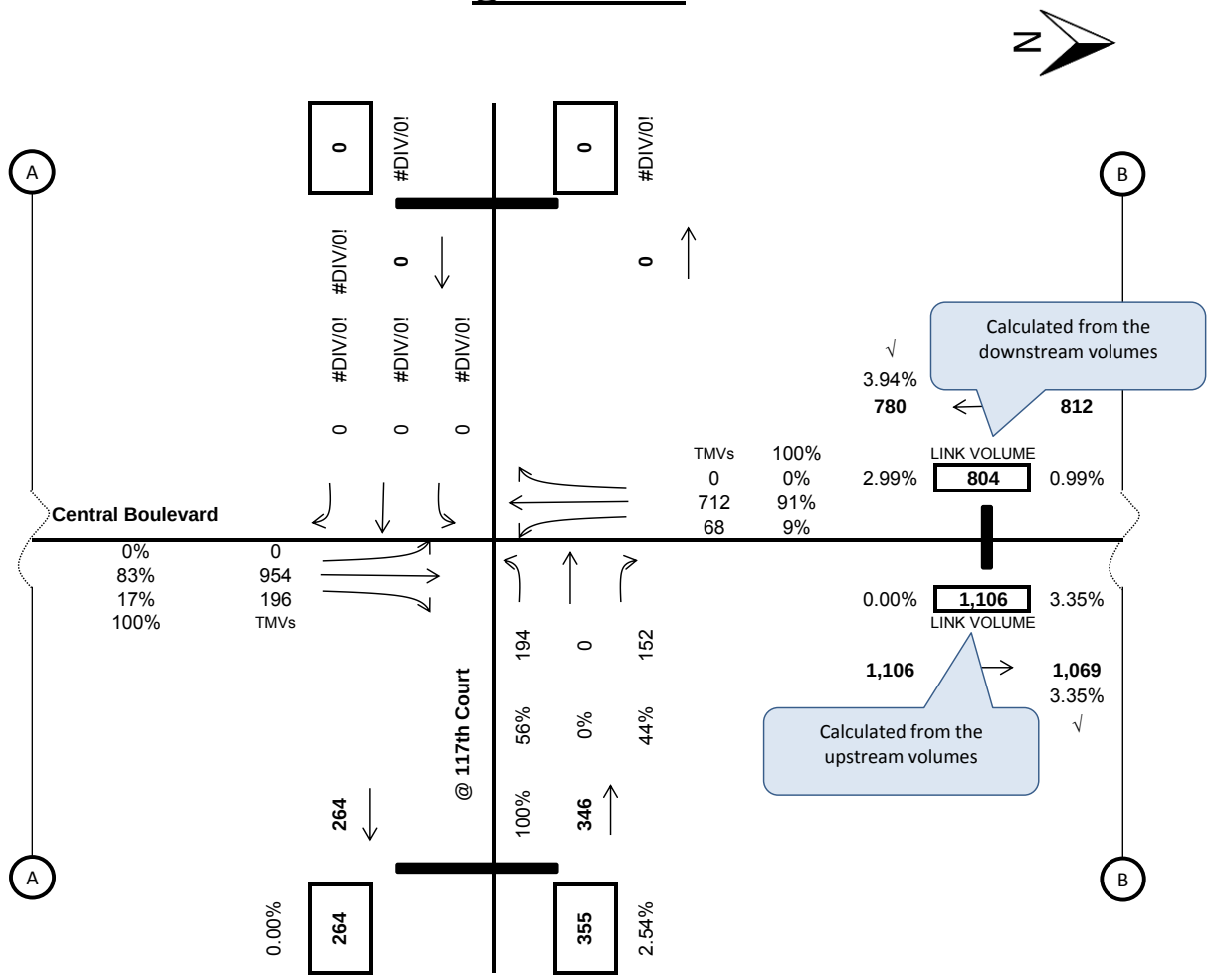
1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

For consistency, balanced peak hour volumes from major street arterial (aka PGA Boulevard) were used. See PGA Boulevard Arterial for details

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Central Boulevard** **Turning Movement Volume Development** **2020 Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **1 of 6** *Date:* 9/24/15

@ 117th Court



Turning Movement Volumes
@ 117th Court

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**804**			**355**			**1,150**			**0**	
TM Pk Hr Counts	108	1165	0	203	0	152	0	1069	220	0	0	0
% Turns	8%	92%	0%	57%	0%	43%	0%	83%	17%	0%	0%	0%
Calc. Pk Hr Volumes	68	736	0	203	0	152	0	954	196	0	0	0
Adjustments		-24		-9								
Bal Pk Hr Volumes	**68**	**712**	**0**	**194**	**0**	**152**	**0**	**954**	**196**	**0**	**0**	**0**

1230
1230

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

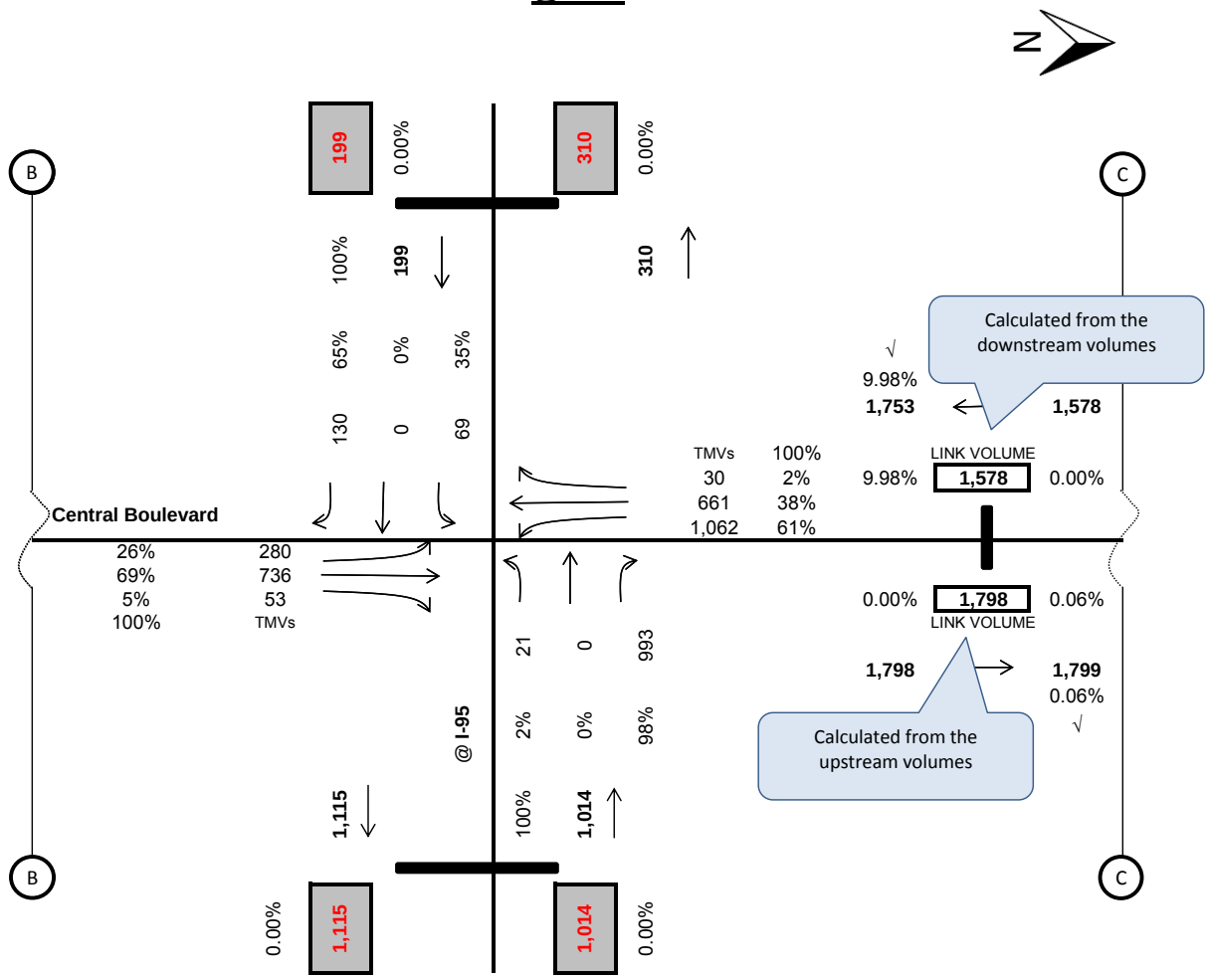
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Central Boulevard Turning Movement Volume Development 2020 Build AM Peak Hour**	*Exhibit No:* **TBD**
		Page No: **2 of 6**
		Date: 9/24/15

@ I-95



Turning Movement Volumes
@ I-95

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**1,578**			**1,014**			**1,106**			**199**		
TM Pk Hr Counts	1423	1099	58	27	0	1299	411	926	55	105	0	197
% Turns	55%	43%	2%	2%	0%	98%	30%	67%	4%	35%	0%	65%
Calc. Pk Hr Volumes	870	672	35	21	0	993	327	736	44	69	0	130
Adjustments	192	-11	-5				-47		9		0	
Bal Pk Hr Volumes	**1062**	**661**	**30**	**21**	**0**	**993**	**280**	**736**	**53**	**69**	**0**	**130**

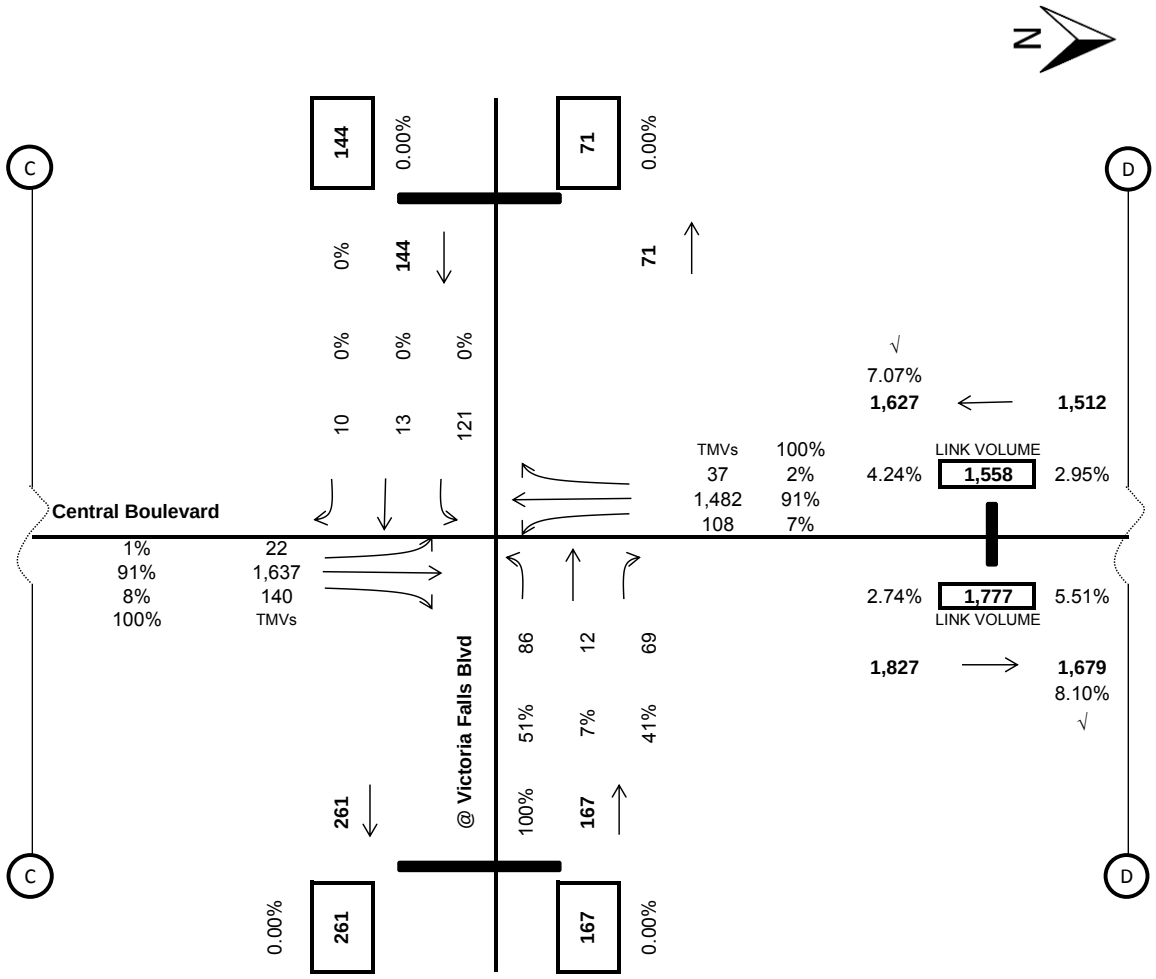
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A … A	Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Central Boulevard Turning Movement Volume Development 2020 Build AM Peak Hour**	*Exhibit No:* **TBD**
		Page No: **3 of 6**
		Date: 9/24/15

@ Victoria Falls Blvd



Turning Movement Volumes
@ Victoria Falls Blvd

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,558**			**167**			**1,798**			**144**	
TM Pk Hr Counts	188	2466	65	86	12	69	27	2050	175	121	13	10
% Turns	7%	91%	2%	51%	7%	41%	1%	91%	8%	84%	9%	7%
Calc. Pk Hr Volumes	108	1413	37	86	12	69	22	1637	140	121	13	10
Adjustments		69										
Bal Pk Hr Volumes	**108**	**1482**	**37**	**86**	**12**	**69**	**22**	**1637**	**140**	**121**	**13**	**10**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

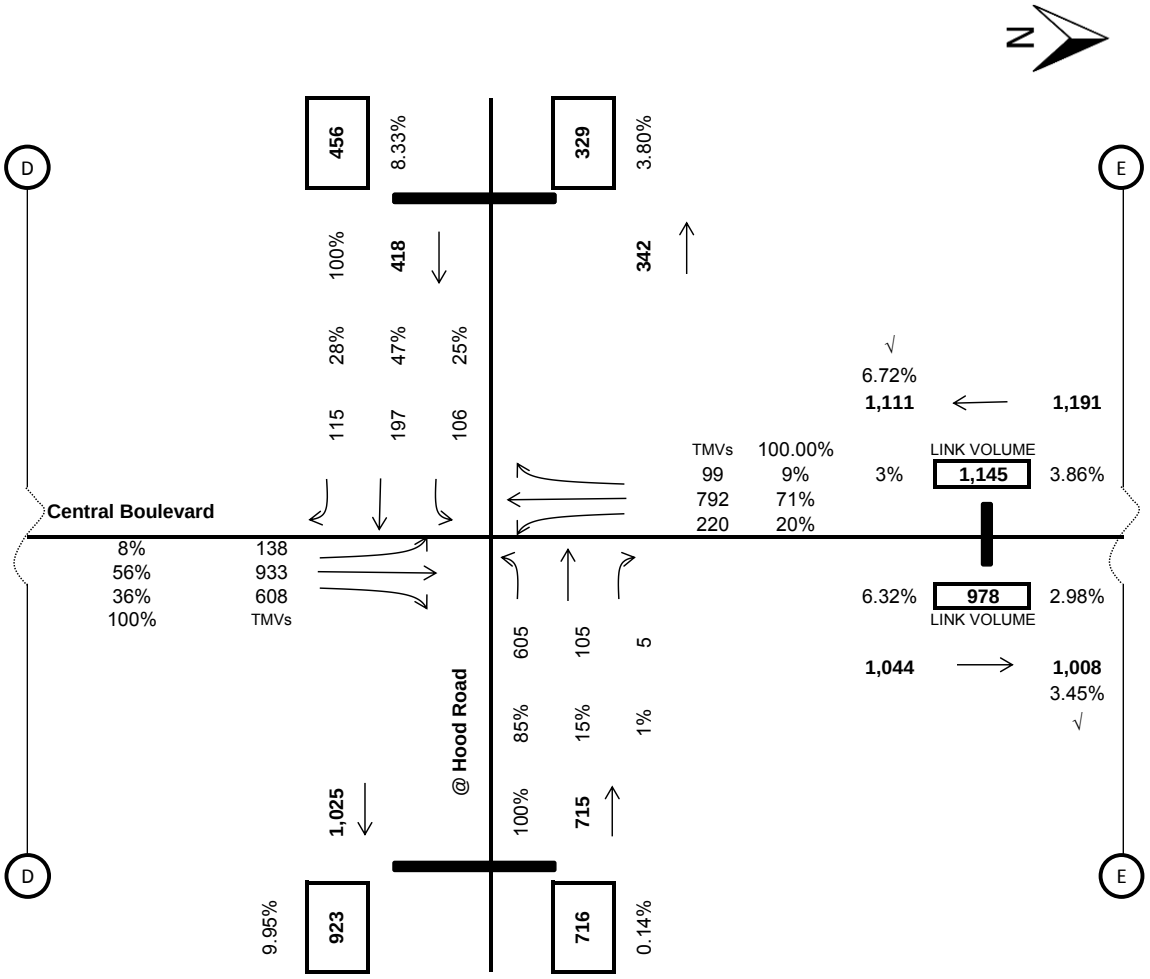
66 → Turning Movement Volumes (Balanced)

A … A — Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Central Boulevard Turning Movement Volume Development 2020 Build AM Peak Hour**	*Exhibit No:* **TBD**
		Page No: **4 of 6**
		Date: 9/24/15

@ Hood Road



Turning Movement Volumes
@ Hood Road

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,145**			**716**			**1,777**			**456**	
TM Pk Hr Counts	408	1273	159	1112	193	10	164	1112	842	247	547	269
% Turns	22%	69%	9%	85%	15%	1%	8%	53%	40%	23%	51%	25%
Calc. Pk Hr Volumes	254	792	99	605	105	5	138	933	706	106	235	115
Adjustments	-34								-98		-38	
Bal Pk Hr Volumes	**220**	**792**	**99**	**605**	**105**	**5**	**138**	**933**	**608**	**106**	**197**	**115**

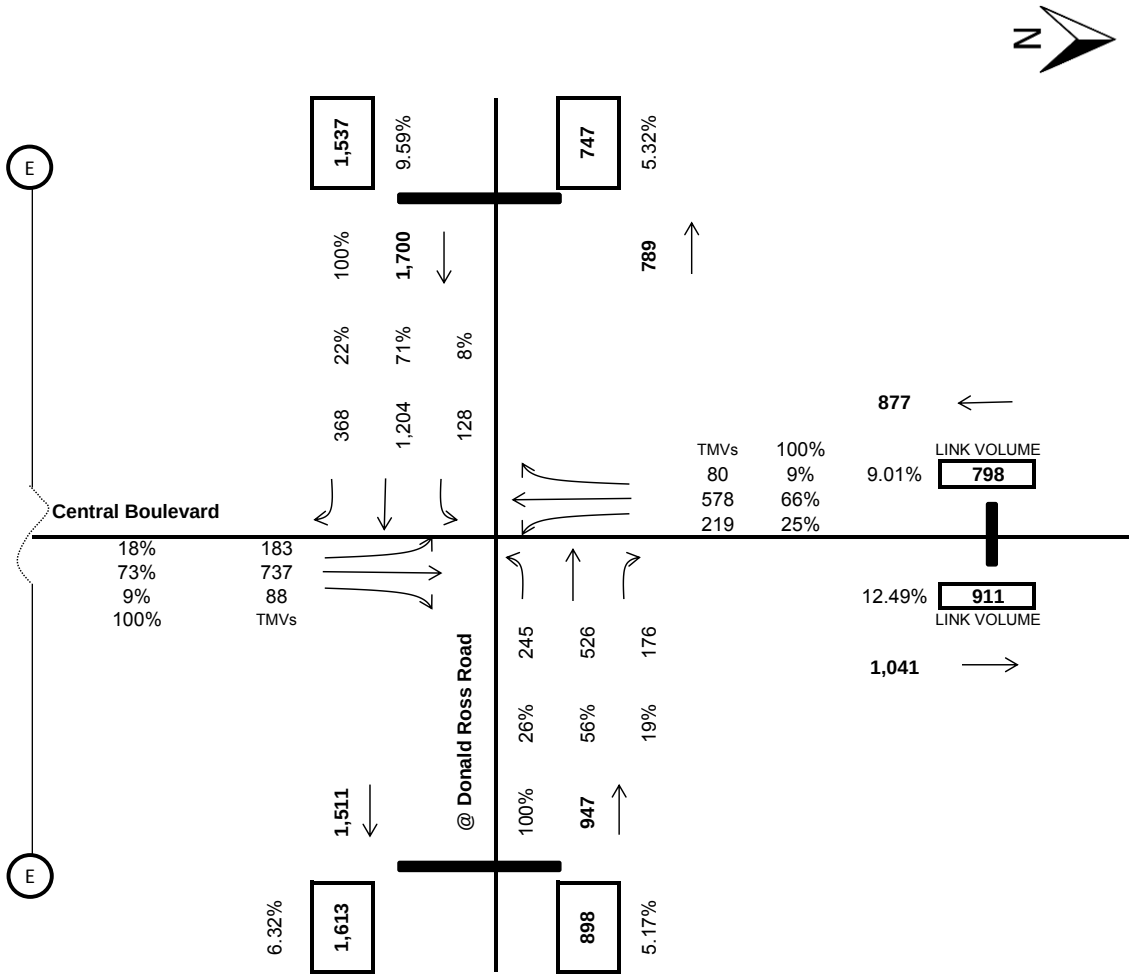
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66 →	Turning Movement Volumes (Balanced)
A … A	Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Central Boulevard Turning Movement Volume Development 2020 Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **5 of 6** *Date:* 9/24/15

@ Donald Ross Road



Turning Movement Volumes
@ Donald Ross Road

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**798**			**898**			**978**			**1,537**	
TM Pk Hr Counts	536	1480	200	317	635	229	327	1354	115	103	878	255
% Turns	24%	67%	9%	27%	54%	19%	18%	75%	6%	8%	71%	21%
Calc. Pk Hr Volumes	193	533	72	241	483	174	178	737	63	128	1092	317
Adjustments	26	45	8	4	43	2	5		25		112	51
Bal Pk Hr Volumes	**219**	**578**	**80**	**245**	**526**	**176**	**183**	**737**	**88**	**128**	**1204**	**368**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

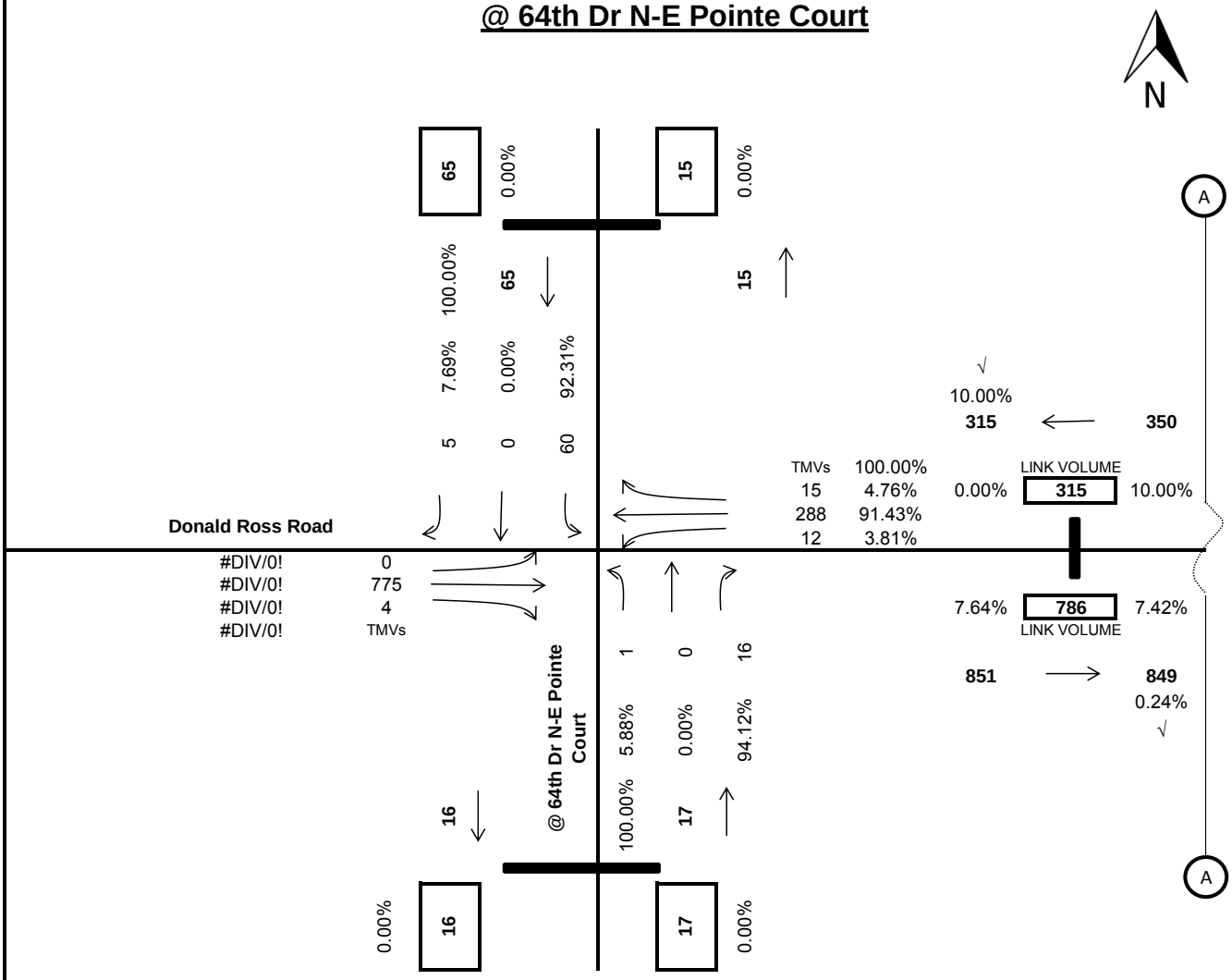
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Central Boulevard Turning Movement Volume Development 2020 Build AM Peak Hour**	*Exhibit No:* **TBD**
		Page No: **6 of 6**
		Date: 9/24/15

@ 64th Dr N-E Pointe Court



Turning Movement Volumes
@ 64th Dr N-E Pointe Court

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**315**			**17**			**779**			**65**	
TM Pk Hr Counts	14	358	19	1	0	16	3	772	4	60	0	5
% Turns	4%	92%	5%	6%	0%	94%	0%	99%	1%	92%	0%	8%
Calc. Pk Hr Volumes	12	288	15	1	0	16	3	772	4	60	0	5
Adjustments					0		-3	3				
Bal Pk Hr Volumes	**12**	**288**	**15**	**1**	**0**	**16**	**0**	**775**	**4**	**60**	**0**	**5**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

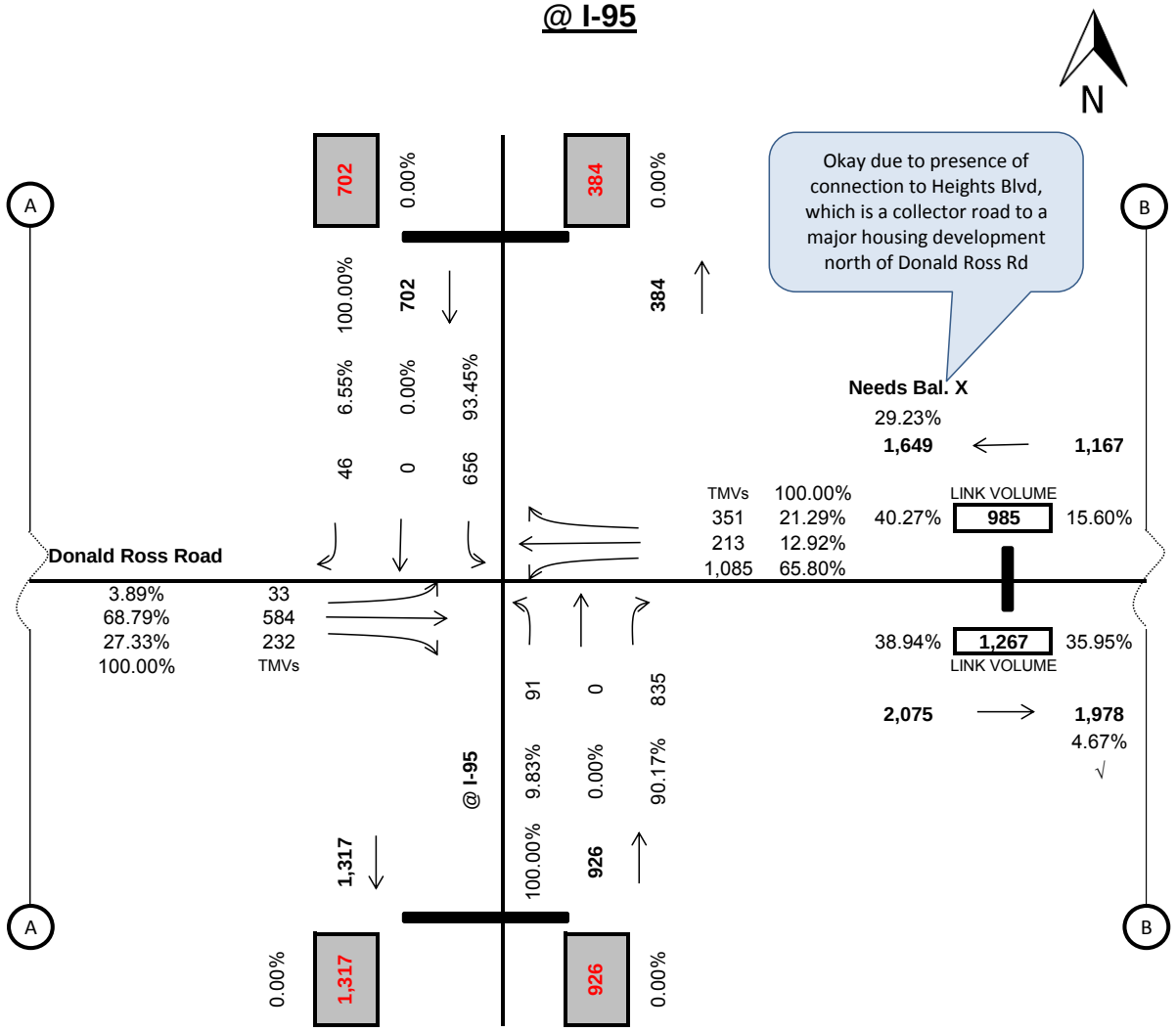
66 → — Turning Movement Volumes (Balanced)

A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

@ I-95



Turning Movement Volumes
@ I-95

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**985**			**926**			**786**			**702**	
TM Pk Hr Counts	1044	314	266	115	0	1051	35	965	298	580	0	41
% Turns	64%	19%	16%	10%	0%	90%	3%	74%	23%	93%	0%	7%
Calc. Pk Hr Volumes	633	190	161	91	0	835	21	584	180	656	0	46
Adjustments	452	23	190				12		52			
Bal Pk Hr Volumes	**1085**	**213**	**351**	**91**	**0**	**835**	**33**	**584**	**232**	**656**	**0**	**46**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

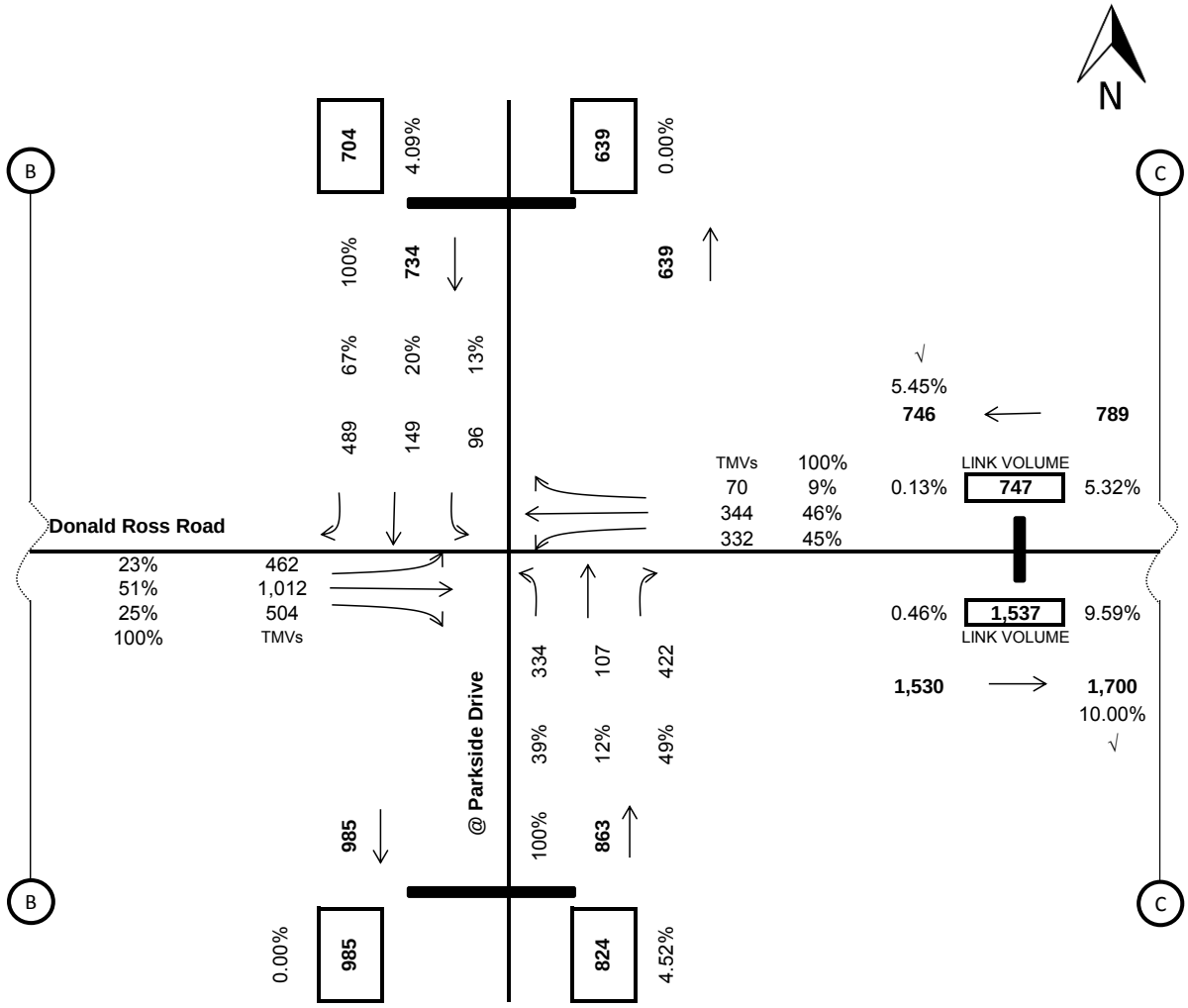
66 — Turning Movement Volumes (Balanced)

A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

@ Parkside Drive



Turning Movement Volumes
@ Parkside Drive

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**747**			**824**			**1,267**			**704**	
TM Pk Hr Counts	514	532	109	334	107	383	573	922	627	66	149	489
% Turns	45%	46%	9%	41%	13%	46%	27%	43%	30%	9%	21%	69%
Calc. Pk Hr Volumes	332	344	70	334	107	383	342	551	374	66	149	489
Adjustments						39	120	461	130	30		
Bal Pk Hr Volumes	**332**	**344**	**70**	**334**	**107**	**422**	**462**	**1012**	**504**	**96**	**149**	**489**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

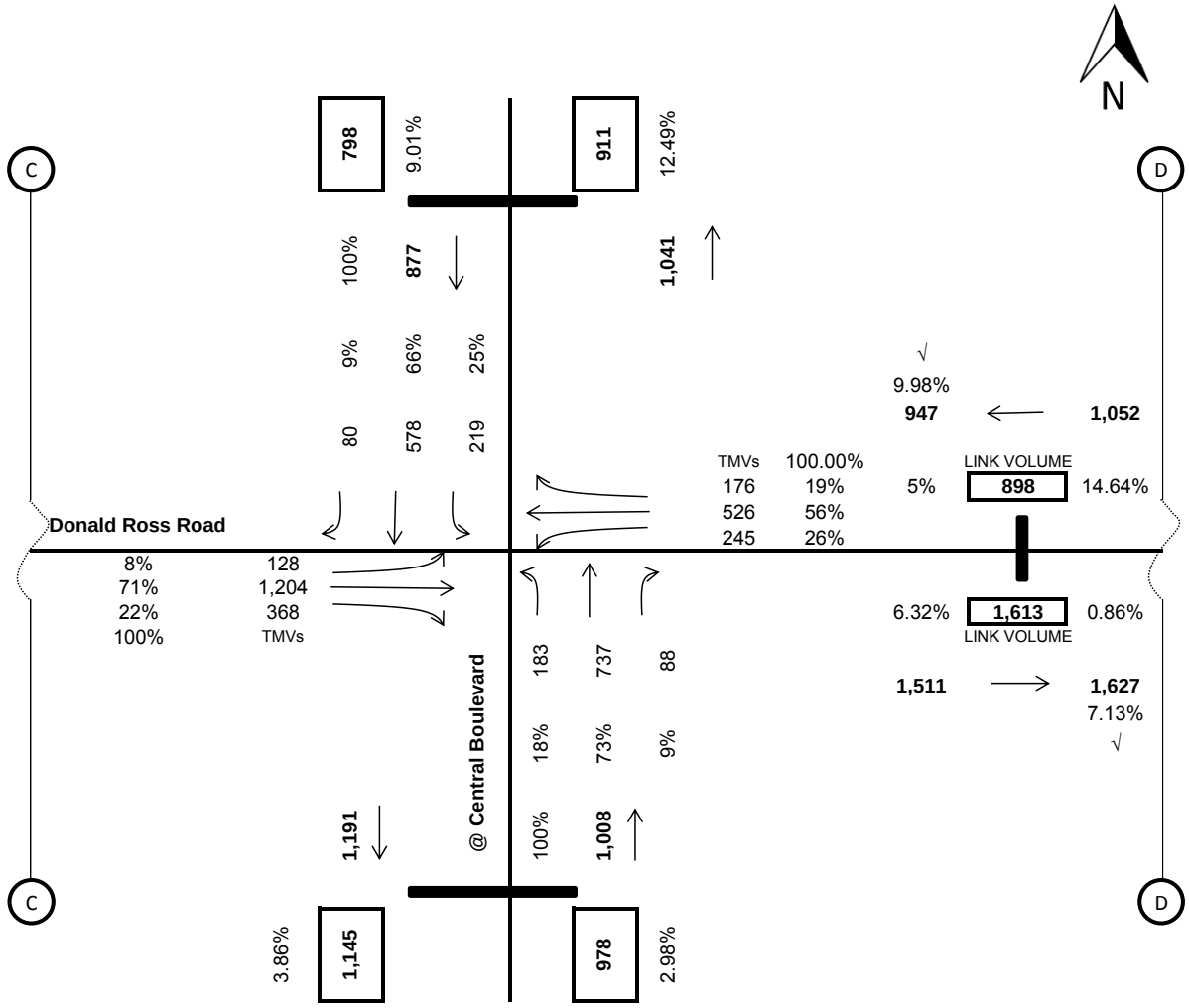
66 — Turning Movement Volumes (Balanced)

A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

@ Central Boulevard



Turning Movement Volumes
@ Central Boulevard

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes												
TM Pk Hr Counts												
% Turns												
Calc. Pk Hr Volumes												
Adjustments												
Bal Pk Hr Volumes	**245**	**526**	**176**	**183**	**737**	**88**	**128**	**1204**	**368**	**219**	**578**	**80**

LEGEND

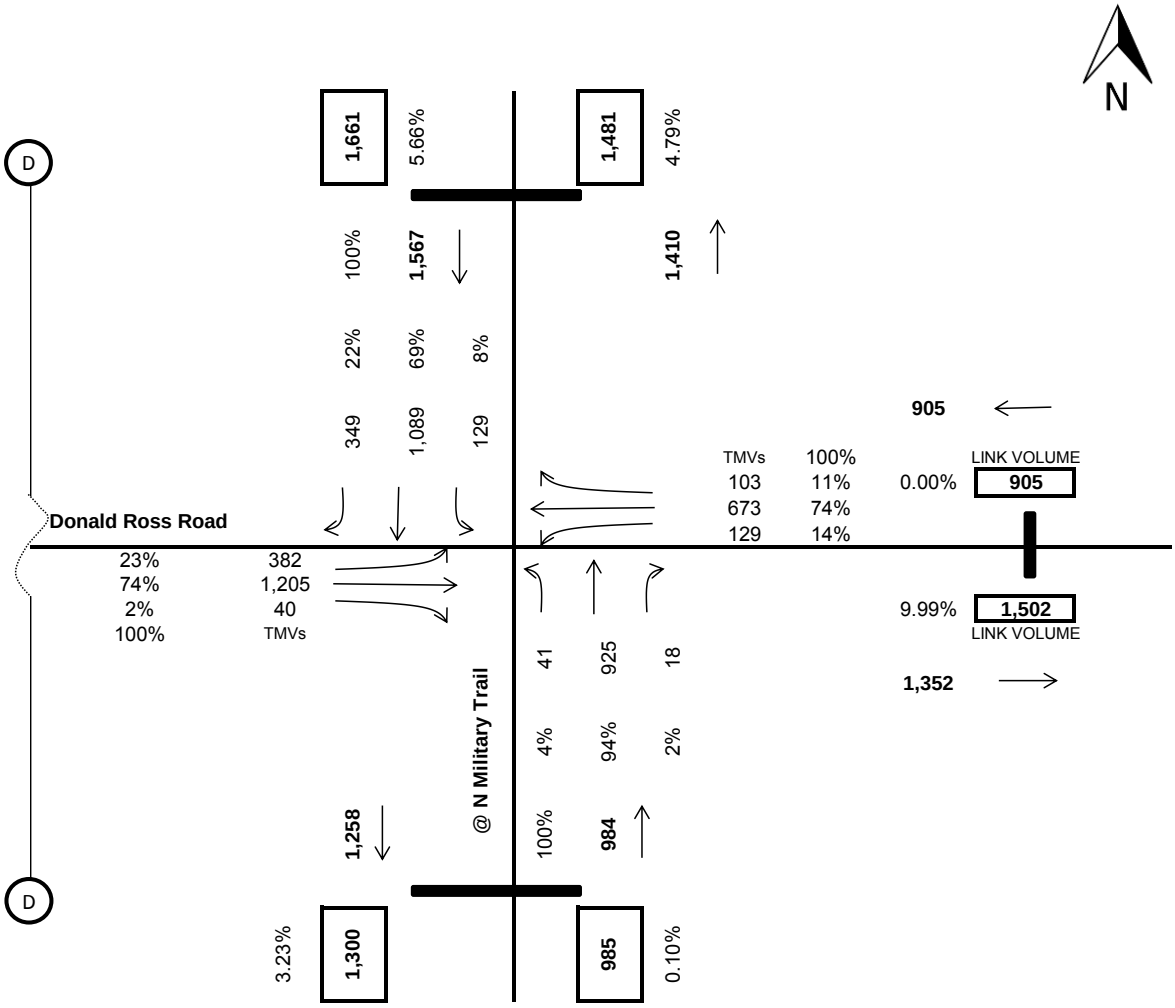
1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

For consistency, balanced peak hour volumes from major street arterial (aka Central Boulevard) were used. See Central Boulevard Arterial for details

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413626-1-22-01	*Exhibit Name:* **Donald Ross Road** **Turning Movement Volume Development** **2020 Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **4 of 5** *Date:* 9/24/15

@ N Military Trail



Turning Movement Volumes
@ N Military Trail

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes												
TM Pk Hr Counts												
% Turns												
Calc. Pk Hr Volumes												
Adjustments												
Bal Pk Hr Volumes	**129**	**673**	**103**	**41**	**925**	**18**	**382**	**1205**	**40**	**129**	**1089**	**349**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 → Turning Movement Volumes (Balanced)

A — Match Line

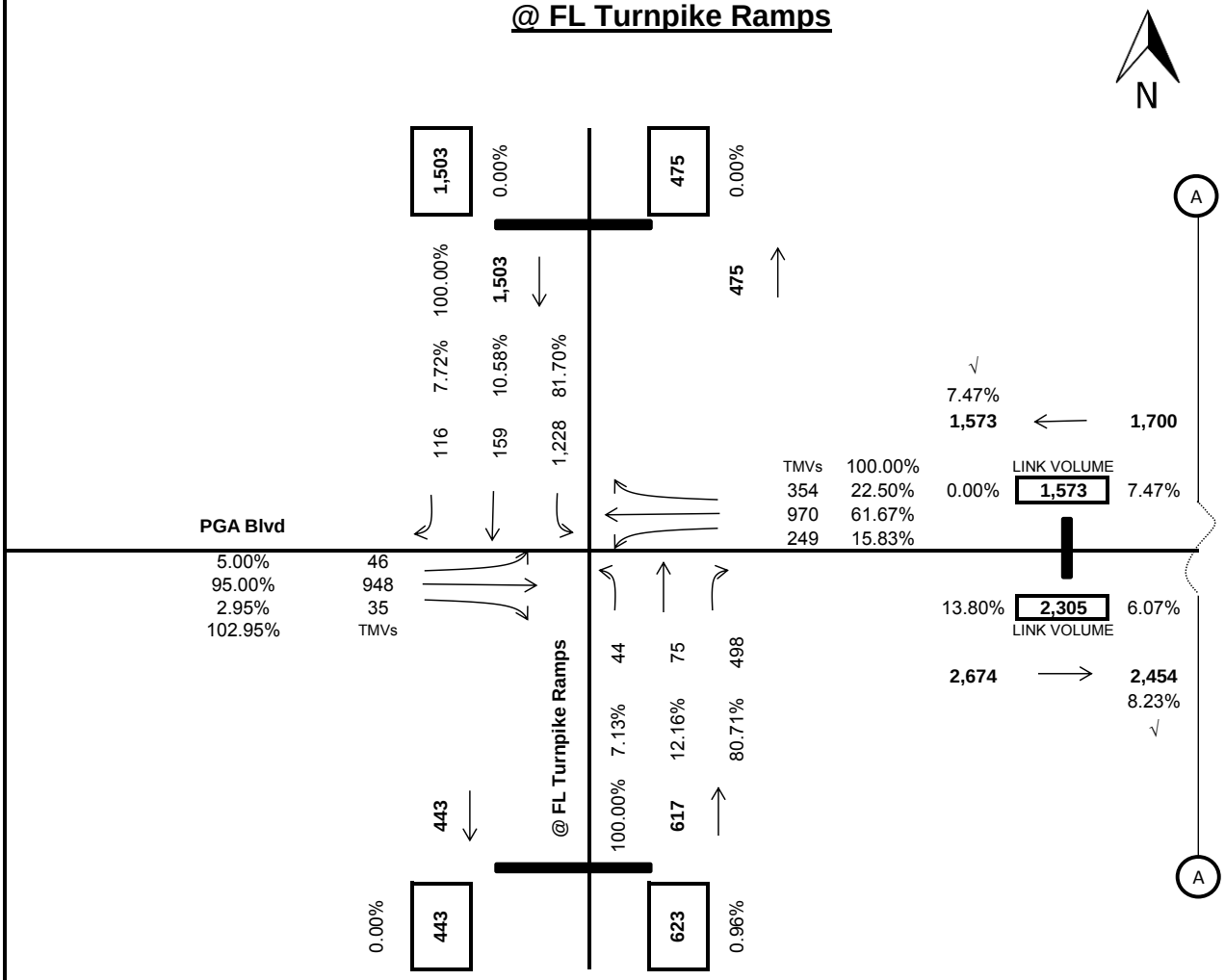
A

For consistency, balanced peak hour volumes from major street arterial (aka N Military Trail) were used. See N Military Trail Arterial for details

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name:	Exhibit Name:	Exhibit No:	TBD
SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FPID No. 413265-1-22-01	**Donald Ross Road** **Turning Movement Volume Development** **2020 Build AM Peak Hour**	Page No:	5 of 5
		Date:	9/24/15

@ FL Turnpike Ramps



Turning Movement Volumes
@ FL Turnpike Ramps

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,573**			**623**			**1,029**			**1,503**	
TM Pk Hr Counts	410	1598	583	45	77	501	69	1430	53	1228	159	116
% Turns	16%	62%	23%	7%	12%	80%	4%	92%	3%	82%	11%	8%
Calc. Pk Hr Volumes	249	970	354	44	75	498	46	948	35	1228	159	116
Adjustments												
Bal Pk Hr Volumes	**249**	**970**	**354**	**44**	**75**	**498**	**46**	**948**	**35**	**1228**	**159**	**116**

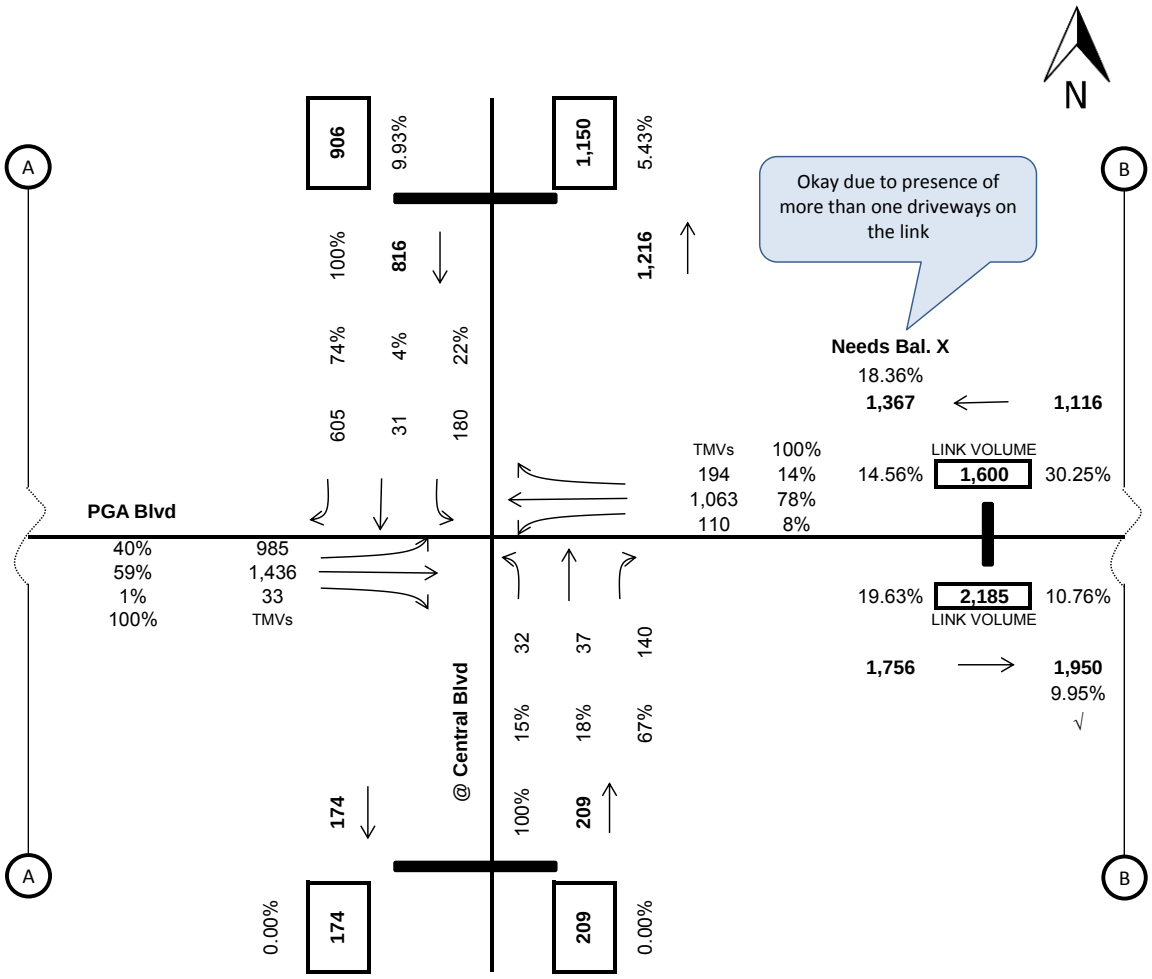
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66 →	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard Turning Movement Volume Development 2020 Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **1 of 8** *Date:* 9/24/15

@ Central Blvd



Turning Movement Volumes
@ Central Blvd

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**1,600**			**209**			**2,305**			**906**		
TM Pk Hr Counts	121	1105	205	32	37	140	1092	1576	36	299	51	1160
% Turns	8%	77%	14%	15%	18%	67%	40%	58%	1%	20%	3%	77%
Calc. Pk Hr Volumes	135	1235	229	32	37	140	931	1343	31	179	31	696
Adjustments	-25	-172	-35				54	93	2	1		-91
Bal Pk Hr Volumes	**110**	**1063**	**194**	**32**	**37**	**140**	**985**	**1436**	**33**	**180**	**31**	**605**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

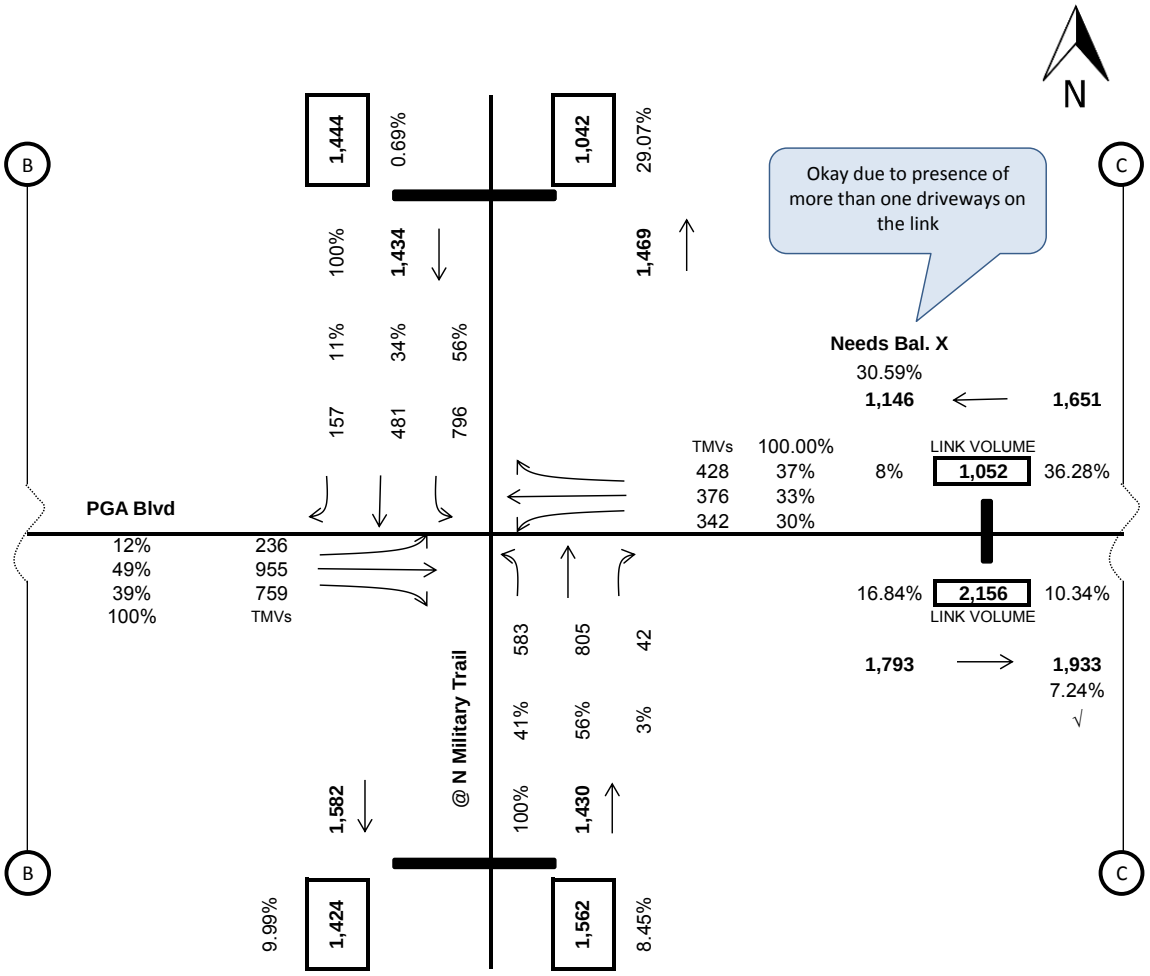
66 → Turning Movement Volumes (Balanced)

A … A — Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard, Project Development & Environmental Study, FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard, Turning Movement Volume Development, 2020 Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **2 of 8** *Date:* 9/24/15

@ N Military Trail



Turning Movement Volumes
@ N Military Trail

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,052**			**1,562**			**2,185**			**1,444**	
TM Pk Hr Counts	618	508	773	764	1281	40	275	1035	858	1276	911	266
% Turns	33%	27%	41%	37%	61%	2%	13%	48%	40%	52%	37%	11%
Calc. Pk Hr Volumes	342	281	428	572	960	30	277	1043	865	751	536	157
Adjustments		95		11	-155	12	-41	-88	-106	45	-55	
Bal Pk Hr Volumes	**342**	**376**	**428**	**583**	**805**	**42**	**236**	**955**	**759**	**796**	**481**	**157**

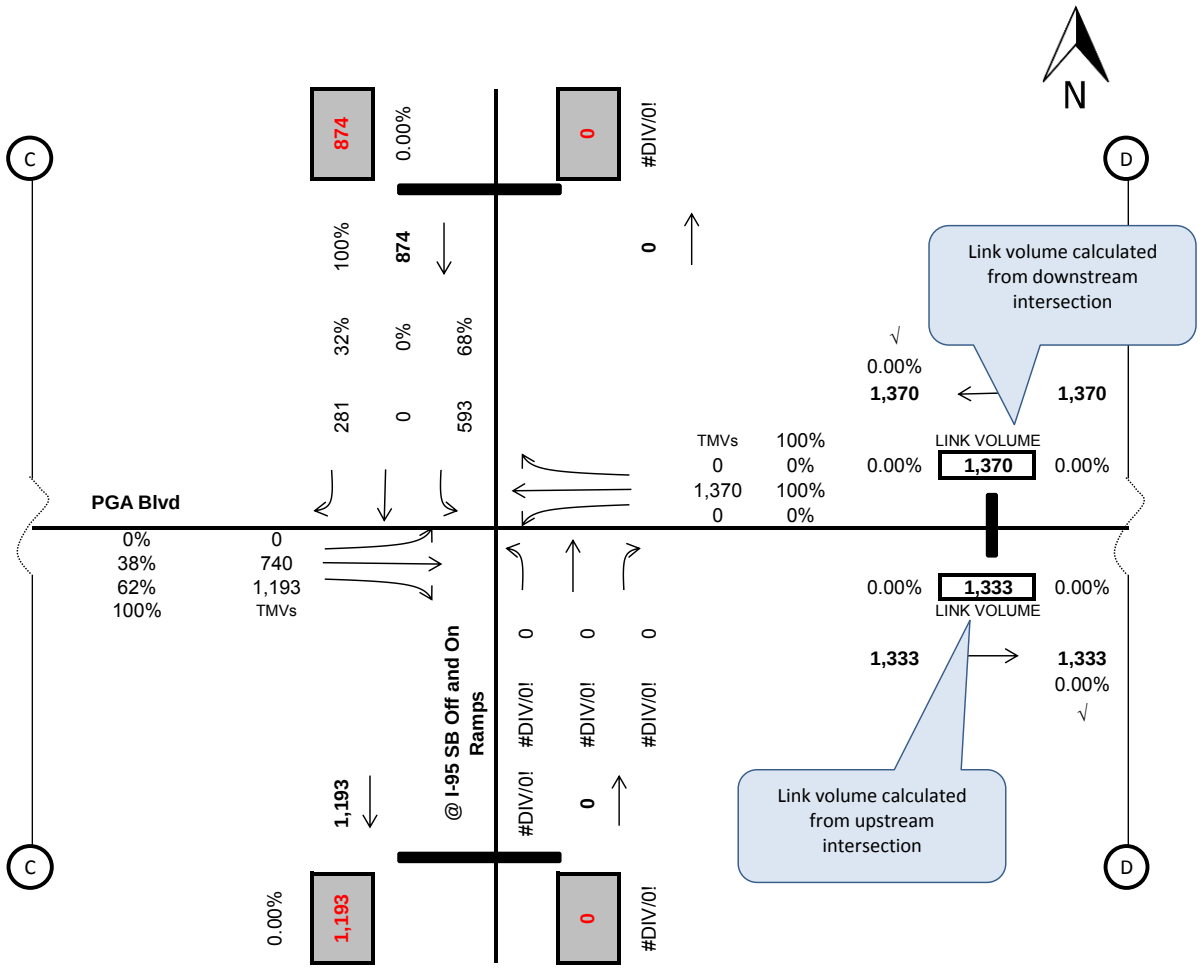
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66 →	Turning Movement Volumes (Balanced)
A … A	Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard, Project Development & Environmental Study, FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard Turning Movement Volume Development 2020 Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **3 of 8** *Date:* 9/24/15

@ I-95 SB Off and On Ramps



Turning Movement Volumes
@ I-95 SB Off and On Ramps

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,370**			**0**			**2,156**			**874**	
TM Pk Hr Counts	0	1694	0	0	0	0	0	775	1483	488	0	231
% Turns	0%	100%	0%	0%	0%	0%	0%	34%	66%	68%	0%	32%
Calc. Pk Hr Volumes	0	1370	0	0	0	0	0	740	1416	593	0	281
Adjustments									-223			
Bal Pk Hr Volumes	**0**	**1370**	**0**	**0**	**0**	**0**	**0**	**740**	**1193**	**593**	**0**	**281**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

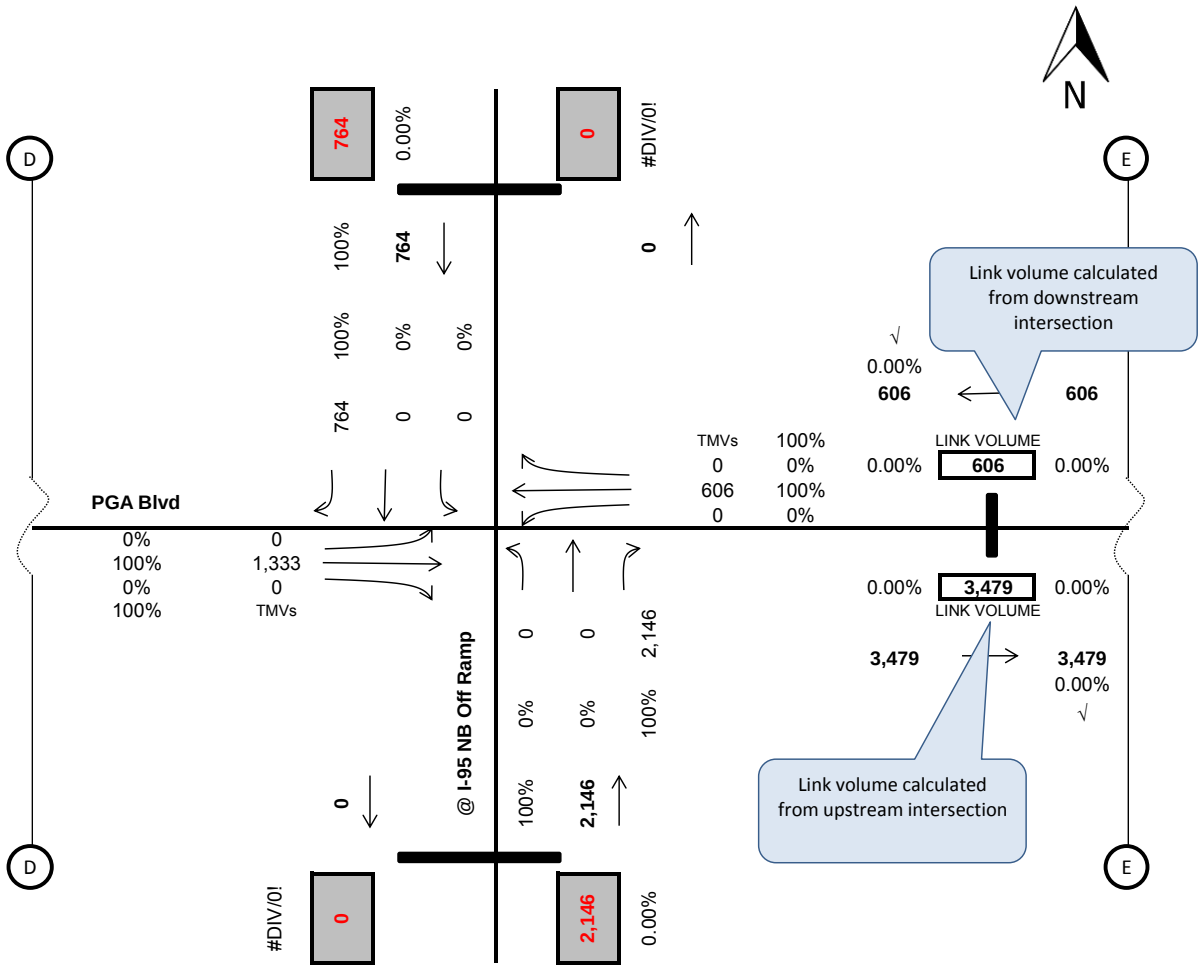
66 → — Turning Movement Volumes (Balanced)

A … A — Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name:	Exhibit Name:		
SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	**PGA Boulevard** **Turning Movement Volume Development** **2020 Build AM Peak Hour**	*Exhibit No:*	**TBD**
		Page No:	**4 of 8**
		Date:	9/24/15

@ I-95 NB Off Ramp



Turning Movement Volumes
@ I-95 NB Off Ramp

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**606**			**2,146**			**1,333**			**764**	
TM Pk Hr Counts	0	1694	0	0	0	1781	0	1162	0	0	0	1072
% Turns	0%	100%	0%	0%	0%	100%	0%	100%	0%	0%	0%	100%
Calc. Pk Hr Volumes	0	606	0	0	0	2146	0	1333	0	0	0	764
Adjustments												
Bal Pk Hr Volumes	**0**	**606**	**0**	**0**	**0**	**2146**	**0**	**1333**	**0**	**0**	**0**	**764**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 → Turning Movement Volumes (Balanced)

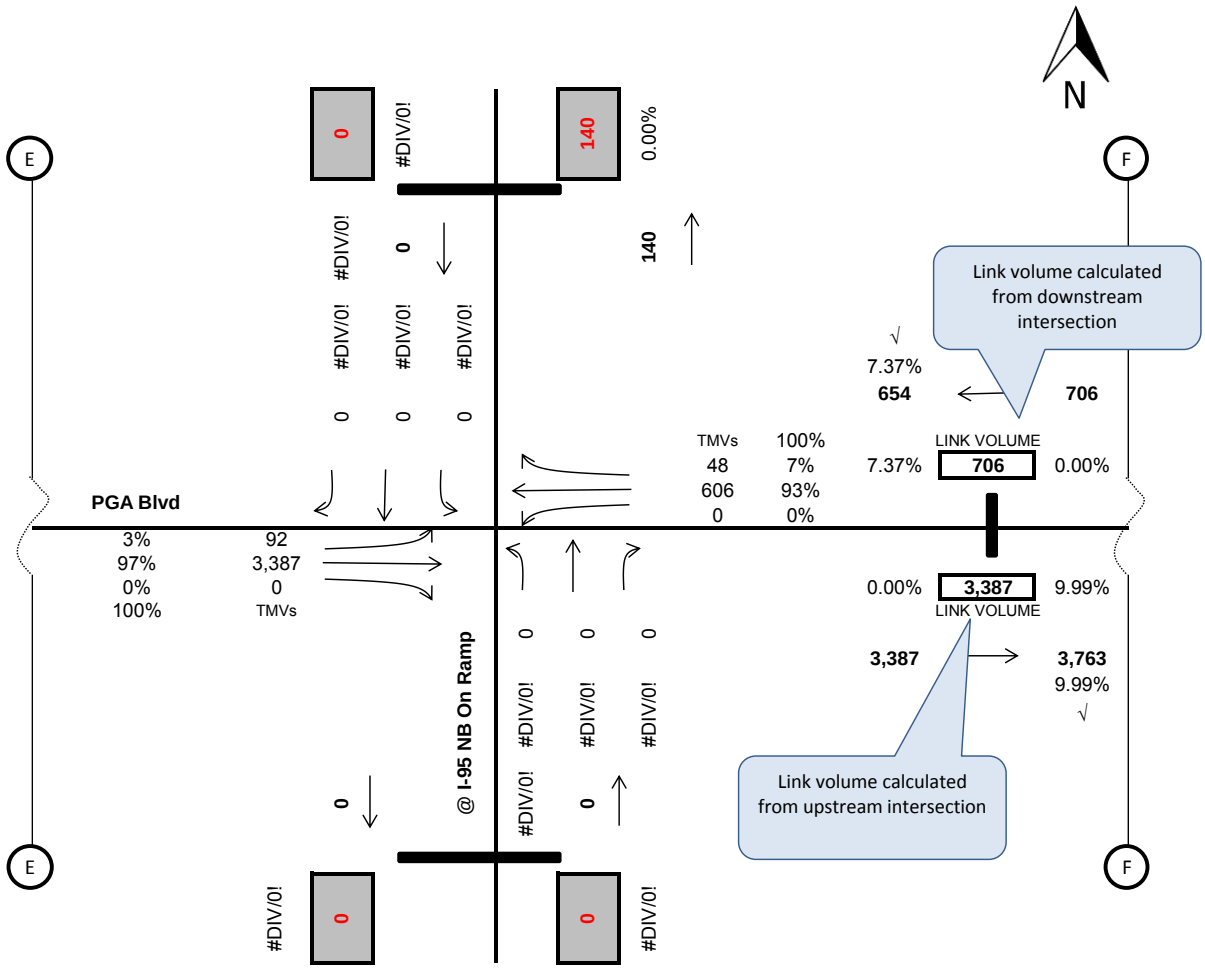
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard** **Turning Movement Volume Development** **2020 Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **5 of 8** *Date:* 9/24/15

@ I-95 NB On Ramp



Turning Movement Volumes
@ I-95 NB On Ramp

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**706**			**0**			**3,479**			**0**	
TM Pk Hr Counts	0	622	103	0	0	0	179	3039	0	0	0	0
% Turns	0%	86%	14%	0%	0%	0%	6%	94%	0%	0%	0%	0%
Calc. Pk Hr Volumes	0	606	100	0	0	0	194	3285	0	0	0	0
Adjustments			-52				-102	102				
Bal Pk Hr Volumes	**0**	**606**	**48**	**0**	**0**	**0**	**92**	**3387**	**0**	**0**	**0**	**0**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

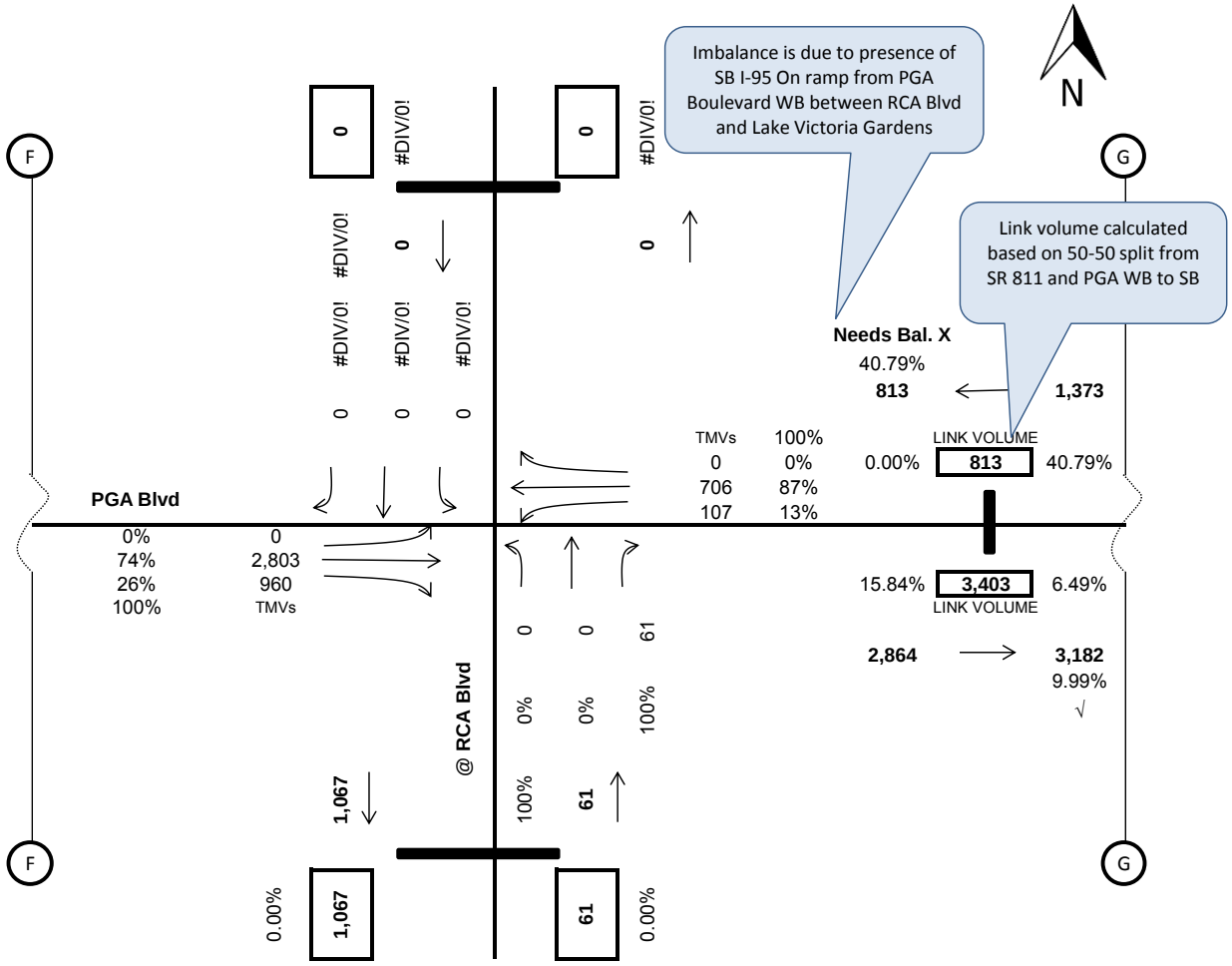
66 → — Turning Movement Volumes (Balanced)

A … A — Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard** **Turning Movement Volume Development** **2020 Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **6 of 8** *Date:* 9/24/15

@ RCA Blvd



Turning Movement Volumes
@ RCA Blvd

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**813**			**61**			**3,387**			**0**	
TM Pk Hr Counts	110	725	0	0	0	61	0	2013	1025	0	0	0
% Turns	13%	87%	0%	0%	0%	100%	0%	66%	34%	0%	0%	0%
Calc. Pk Hr Volumes	107	706	0	0	0	61	0	2244	1143	0	0	0
Adjustments								559	-183			
Bal Pk Hr Volumes	**107**	**706**	**0**	**0**	**0**	**61**	**0**	**2803**	**960**	**0**	**0**	**0**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

A — Match Line

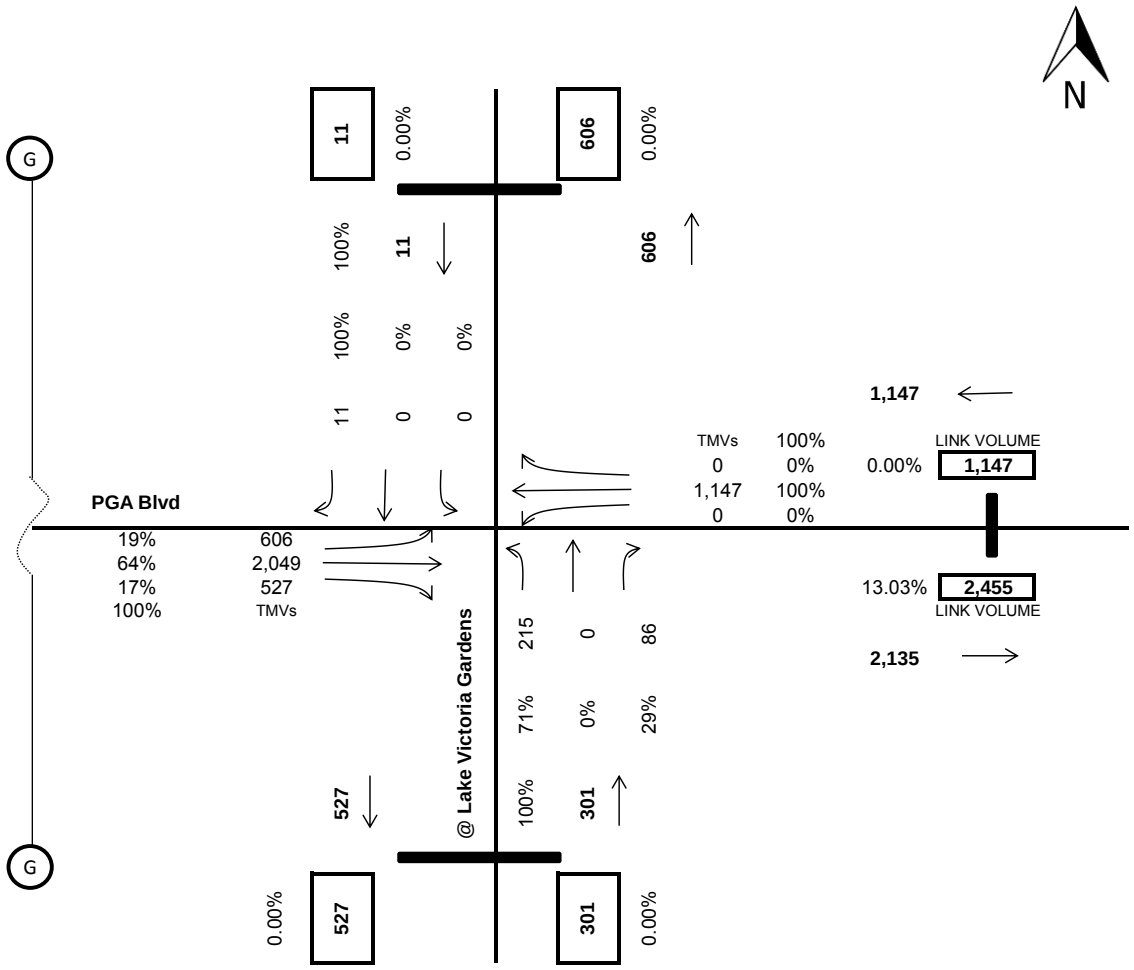
A

Adjustments were made to achieve balance between upstream and downstream intersection volumes as well as reasonable split between movements

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name:	Exhibit Name:		
SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	**PGA Boulevard** **Turning Movement Volume Development** **2020 Build AM Peak Hour**	*Exhibit No:*	**TBD**
		Page No:	**7 of 8**
		Date:	9/24/15

@ Lake Victoria Gardens



Turning Movement Volumes
@ Lake Victoria Gardens

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,147**			**301**			**3,403**			**11**	
TM Pk Hr Counts	0	1206	0	215	0	86	424	1438	368	0	0	11
% Turns	0%	100%	0%	71%	0%	29%	19%	64%	17%	0%	0%	100%
Calc. Pk Hr Volumes	0	1147	0	215	0	86	647	2194	562	0	0	11
Adjustments							-41	-145	-35			
Bal Pk Hr Volumes	**0**	**1147**	**0**	**215**	**0**	**86**	**606**	**2049**	**527**	**0**	**0**	**11**

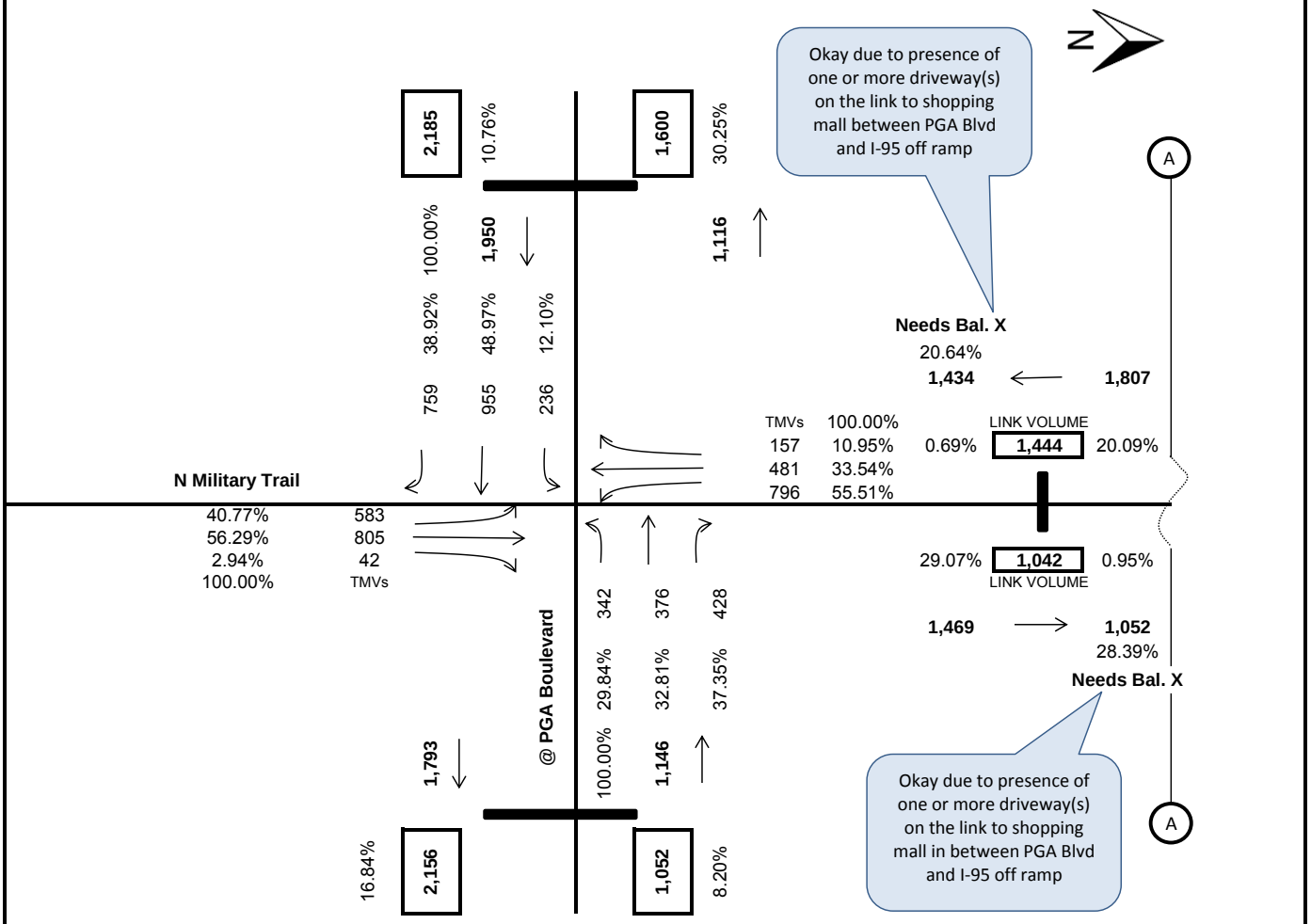
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66 →	Turning Movement Volumes (Balanced)
A … A	Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard** **Turning Movement Volume Development** **2020 Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **8 of 8** *Date:* 9/24/15

@ PGA Boulevard



Turning Movement Volumes
@ PGA Boulevard

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes												
TM Pk Hr Counts												
% Turns												
Calc. Pk Hr Volumes												
Adjustments												
Bal Pk Hr Volumes	**796**	**481**	**157**	**342**	**376**	**428**	**583**	**805**	**42**	**236**	**955**	**759**

For consistency, balanced peak hour volumes from major street arterial (aka PGA Boulevard) were used. See PGA Boulevard Arterial for details

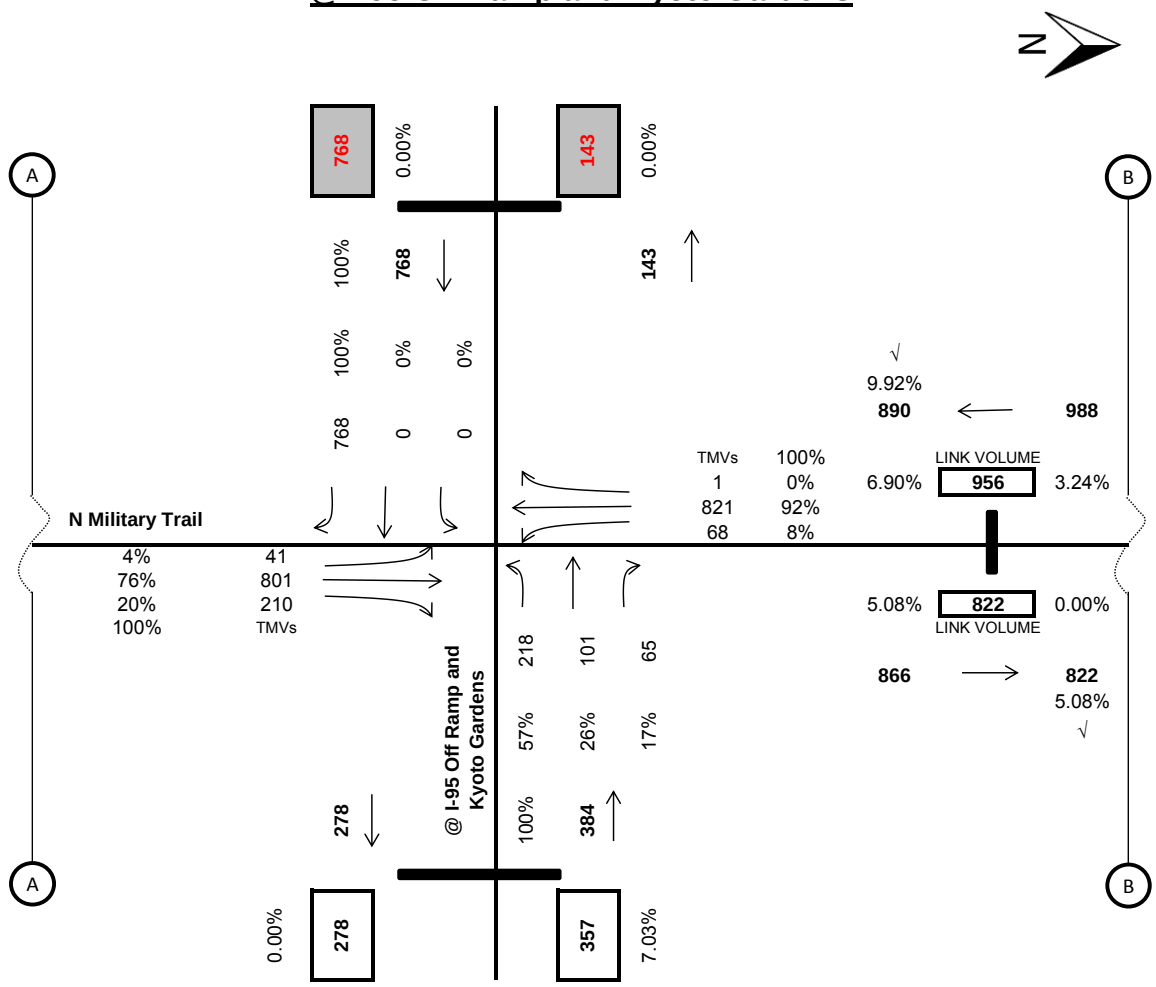
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66 →	Turning Movement Volumes (Balanced)
A … A	Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **N Military Trail Turning Movement Volume Development 2020 Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **1 of 4** *Date:* 9/24/15

@ I-95 Off Ramp and Kyoto Gardens



Turning Movement Volumes
@ I-95 Off Ramp and Kyoto

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**956**			**357**			**1,042**			**768**	
TM Pk Hr Counts	165	2167	3	218	74	65	64	1682	442	0	0	134
% Turns	7%	93%	0%	61%	21%	18%	3%	77%	20%	0%	0%	100%
Calc. Pk Hr Volumes	68	887	1	218	74	65	30	801	210	0	0	768
Adjustments		-66	0		27		11					
Bal Pk Hr Volumes	**68**	**821**	**1**	**218**	**101**	**65**	**41**	**801**	**210**	**0**	**0**	**768**

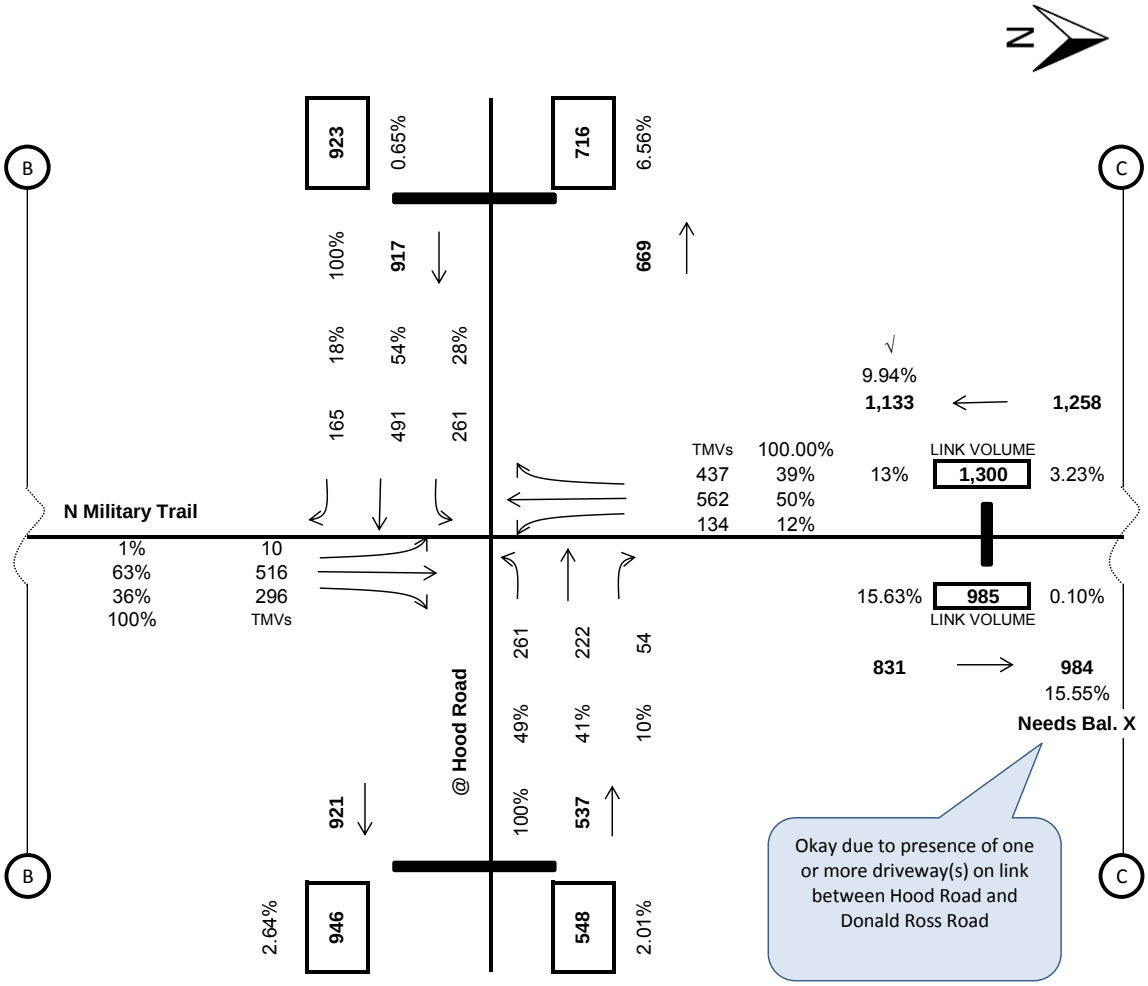
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66 →	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **N Military Trail** **Turning Movement Volume Development** **2020 Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **2 of 4** *Date:* 9/24/15

@ Hood Road



Turning Movement Volumes
@ Hood Road

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**1,300**			**548**			**822**			**923**		
TM Pk Hr Counts	229	981	722	700	572	140	21	1071	615	508	956	332
% Turns	12%	51%	37%	50%	41%	10%	1%	63%	36%	28%	53%	18%
Calc. Pk Hr Volumes	154	660	486	272	222	54	10	516	296	261	491	171
Adjustments	-20	-98	-49	-11								-6
Bal Pk Hr Volumes	**134**	**562**	**437**	**261**	**222**	**54**	**10**	**516**	**296**	**261**	**491**	**165**

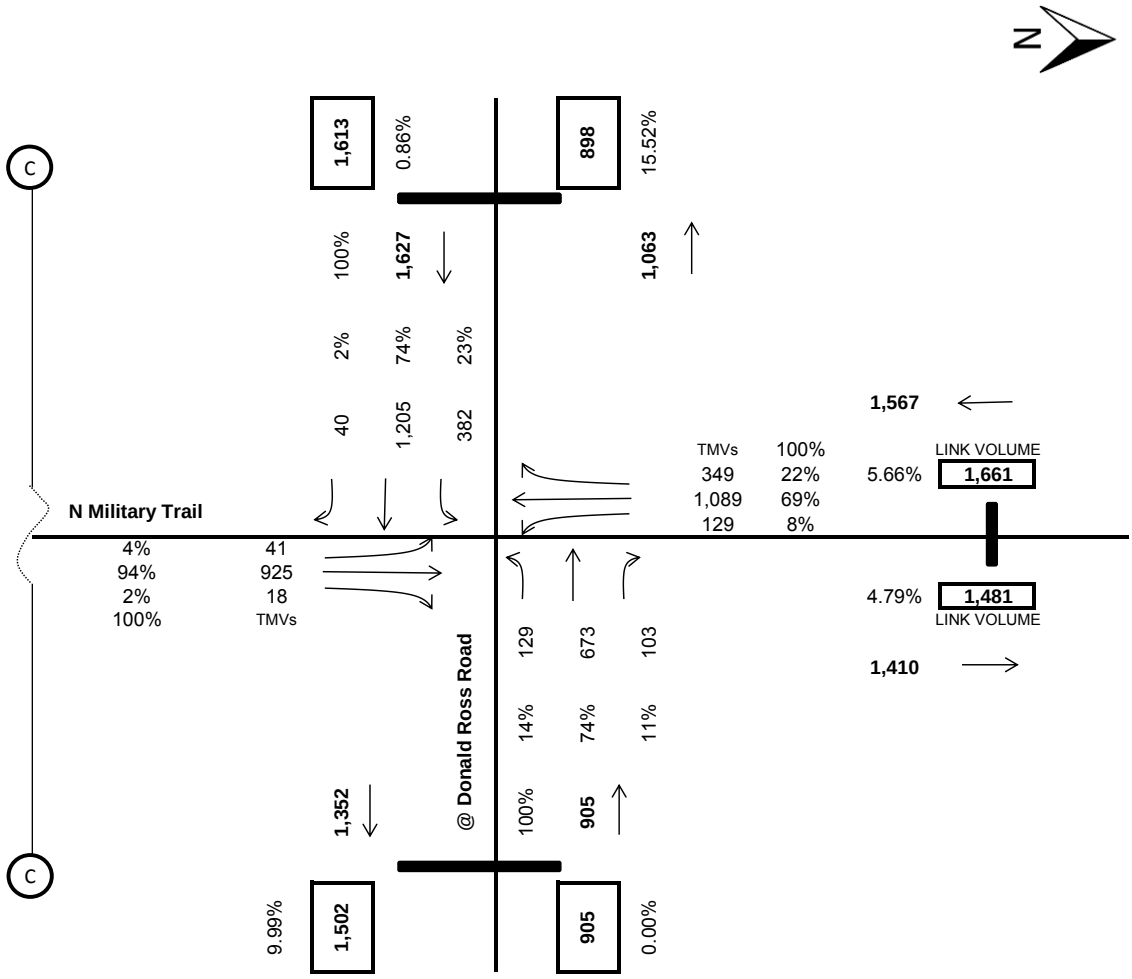
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66 →	Turning Movement Volumes (Balanced)
A … A	Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **N Military Trail** **Turning Movement Volume Development** **2020 Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **3 of 4** *Date:* 9/24/15

@ Donald Ross Road



Turning Movement Volumes
@ Donald Ross Road

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,661**			**905**			**985**			**1,613**	
TM Pk Hr Counts	169	1514	486	124	646	99	61	1364	27	359	1117	38
% Turns	8%	70%	22%	14%	74%	11%	4%	94%	2%	24%	74%	3%
Calc. Pk Hr Volumes	129	1159	372	129	673	103	41	925	18	382	1190	40
Adjustments		-70	-23								15	
Bal Pk Hr Volumes	**129**	**1089**	**349**	**129**	**673**	**103**	**41**	**925**	**18**	**382**	**1205**	**40**

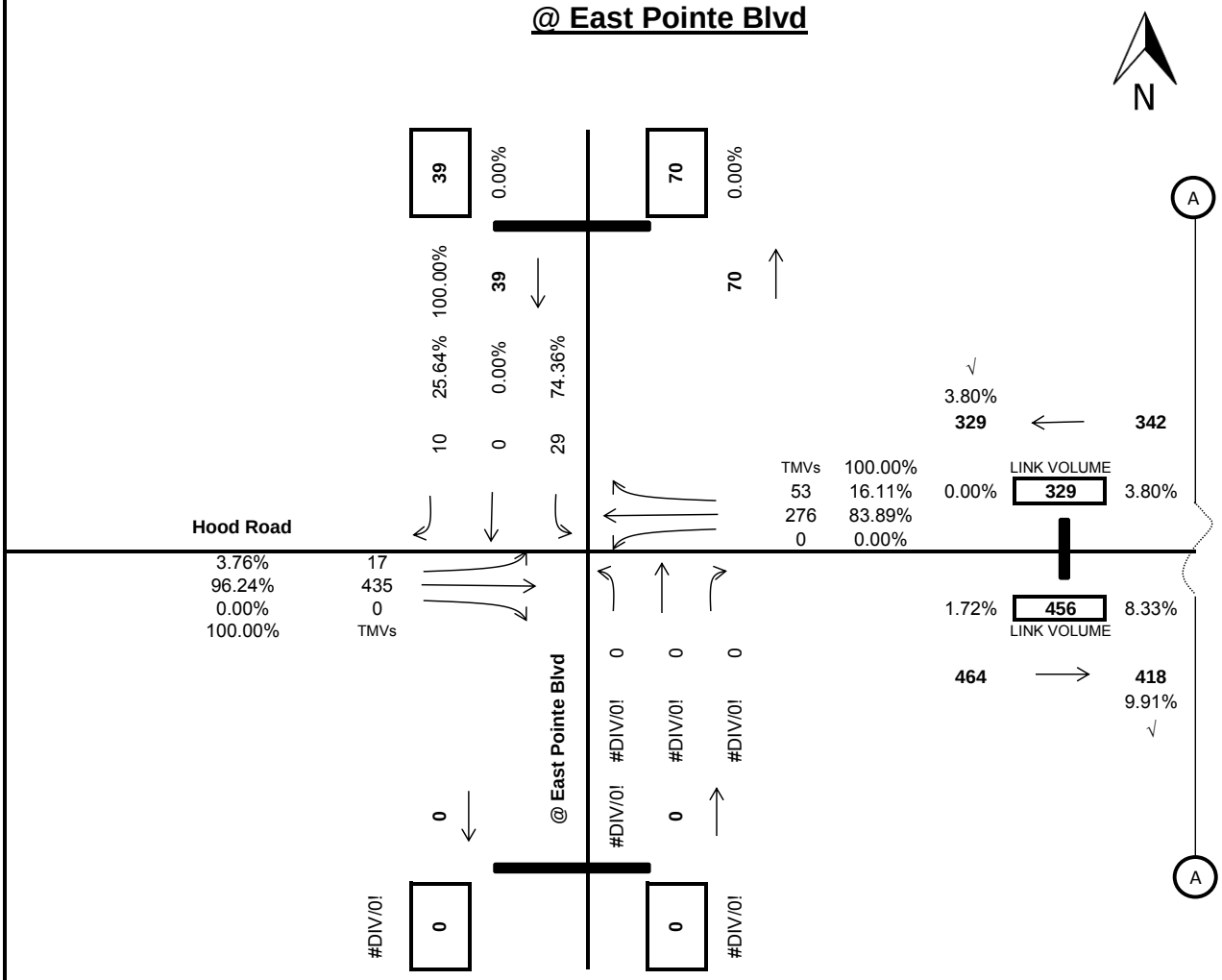
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **N Military Trail** **Turning Movement Volume Development** **2020 Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **4 of 4** *Date:* 9/24/15

@ East Pointe Blvd



Turning Movement Volumes
@ East Pointe Blvd

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**329**			**0**			**456**			**39**	
TM Pk Hr Counts	0	157	30	0	0	0	10	254	0	29	0	10
% Turns	0%	84%	16%	0%	0%	0%	4%	96%	0%	74%	0%	26%
Calc. Pk Hr Volumes	0	276	53	0	0	0	17	439	0	29	0	10
Adjustments								-4				
Bal Pk Hr Volumes	**0**	**276**	**53**	**0**	**0**	**0**	**17**	**435**	**0**	**29**	**0**	**10**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 → — Turning Movement Volumes (Balanced)

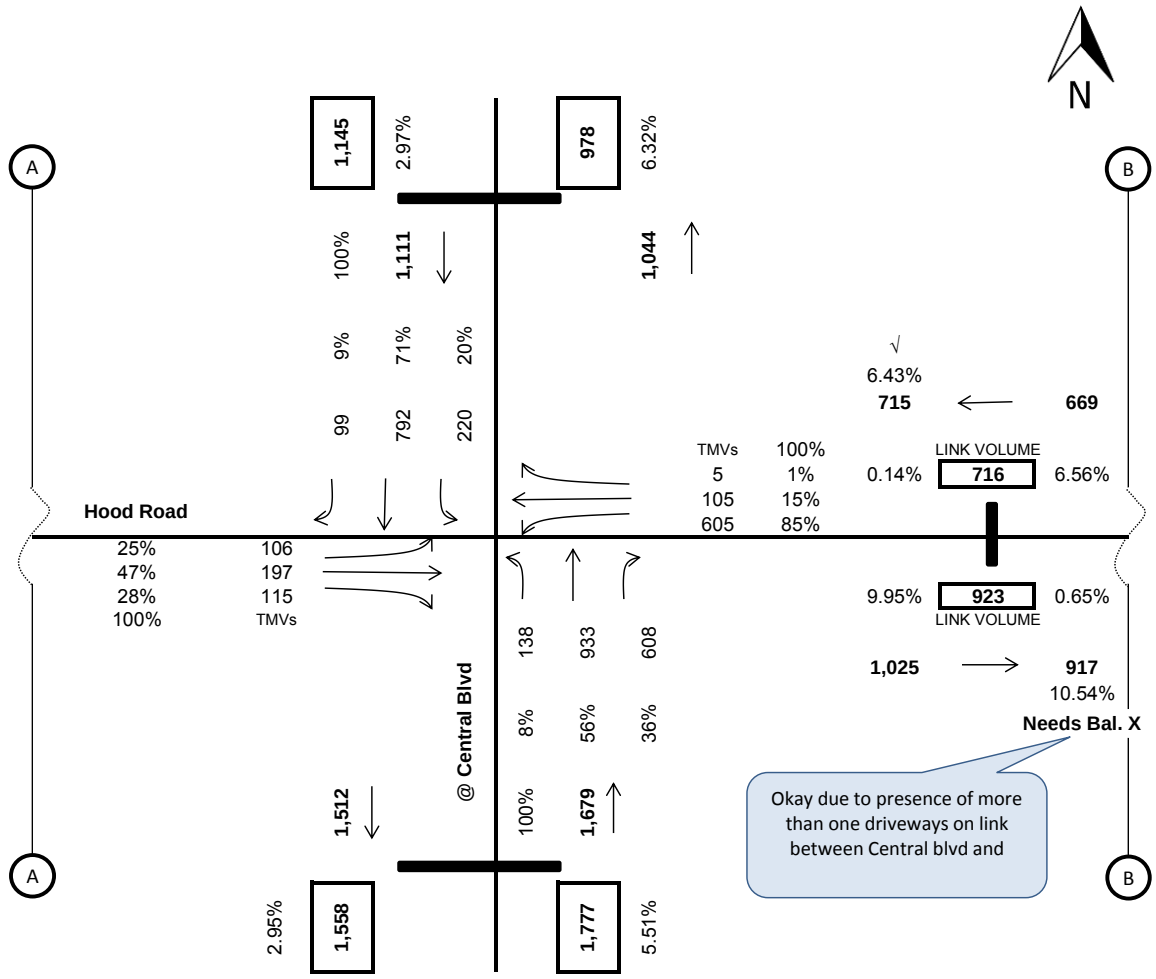
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Hood Road** **Turning Movement Volume Development** **2020 Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **1 of 3** *Date:* 9/24/15

@ Central Blvd



Turning Movement Volumes
@ Central Blvd

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes												
TM Pk Hr Counts												
% Turns												
Calc. Pk Hr Volumes												
Adjustments												
Bal Pk Hr Volumes	**605**	**105**	**5**	**138**	**933**	**608**	**106**	**197**	**115**	**220**	**792**	**99**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 → Turning Movement Volumes (Balanced)

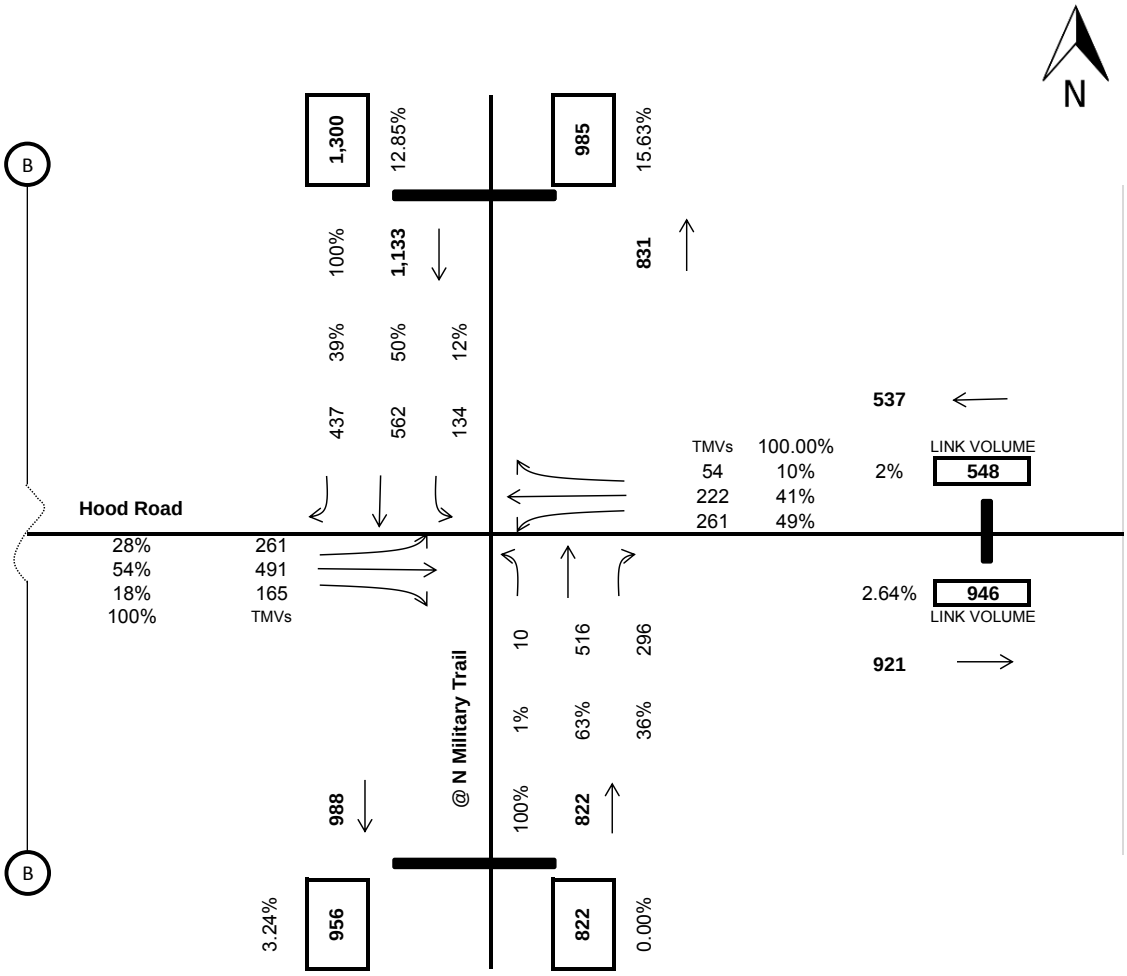
A — Match Line — A

For consistency, balanced peak hour volumes from major street arterial (aka Central Boulevard) were used. See Central Boulevard Arterial for details

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name:	Exhibit Name:		
SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	**Hood Road** **Turning Movement Volume Development** **2020 Build AM Peak Hour**	*Exhibit No:*	**TBD**
		Page No:	**2 of 3**
		Date:	9/24/15

@ N Military Trail



Turning Movement Volumes
@ N Military Trail

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes												
TM Pk Hr Counts												
% Turns												
Calc. Pk Hr Volumes												
Adjustments												
Bal Pk Hr Volumes	**261**	**222**	**54**	**10**	**516**	**296**	**261**	**491**	**165**	**134**	**562**	**437**

For consistency, balanced peak hour volumes from major street arterial (aka N Military Trail) were used. See N Military Trail Arterial for details

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

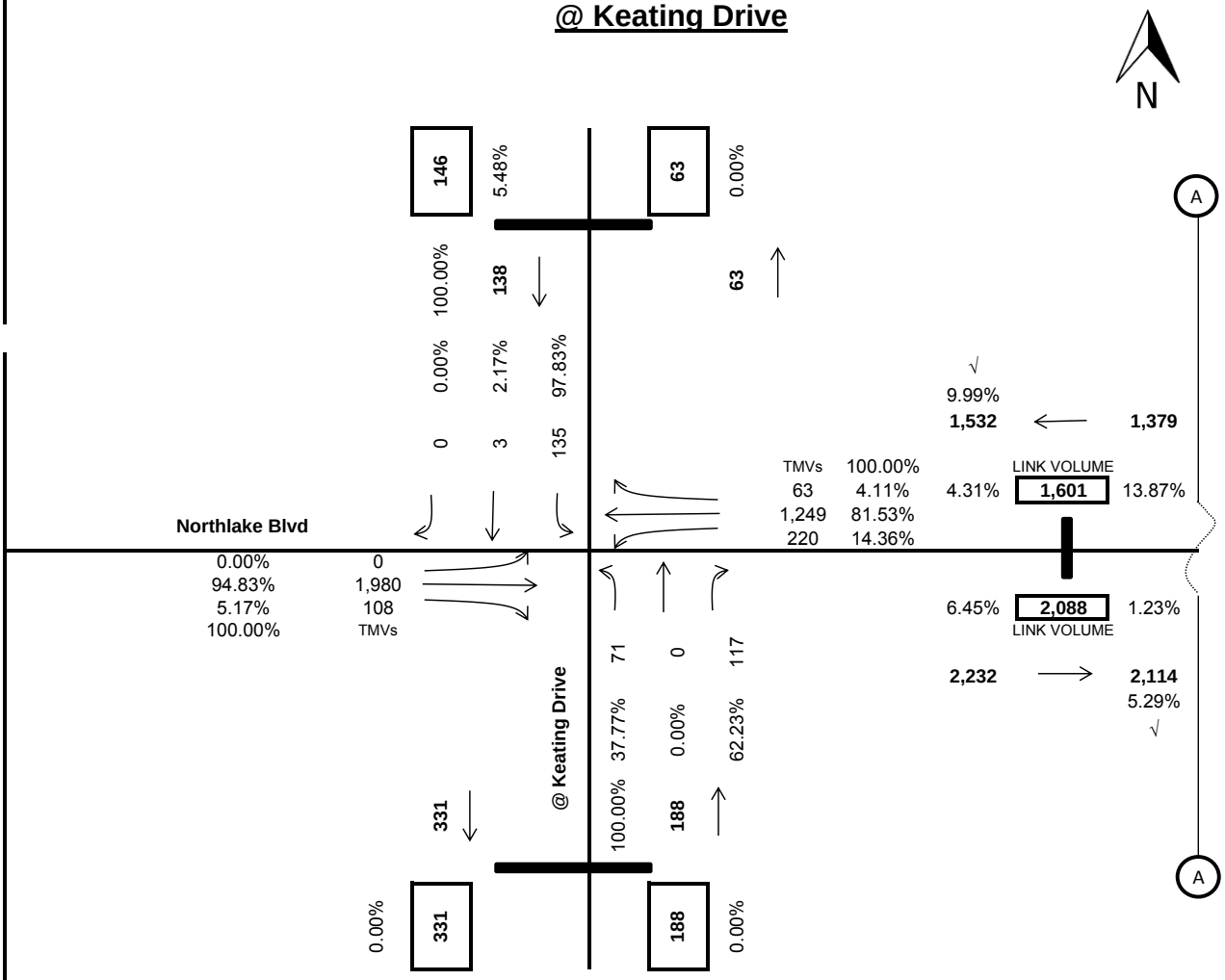
66 → Turning Movement Volumes (Balanced)

A — Match Line — A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name:	Exhibit Name:		
SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	**Hood Road** **Turning Movement Volume Development** **2020 Build AM Peak Hour**	*Exhibit No:*	**TBD**
		Page No:	**3 of 3**
		Date:	9/24/15

@ Keating Drive



Turning Movement Volumes
@ Keating Drive

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**1,601**			**188**			**2,088**			**146**		
TM Pk Hr Counts	231	1257	69	64	0	124	0	2290	125	143	3	0
% Turns	15%	81%	4%	34%	0%	66%	0%	95%	5%	98%	2%	0%
Calc. Pk Hr Volumes	238	1293	71	64	0	124	0	1980	108	143	3	0
Adjustments	-18	-44	-8	7		-7				-8		
Bal Pk Hr Volumes	**220**	**1249**	**63**	**71**	**0**	**117**	**0**	**1980**	**108**	**135**	**3**	**0**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

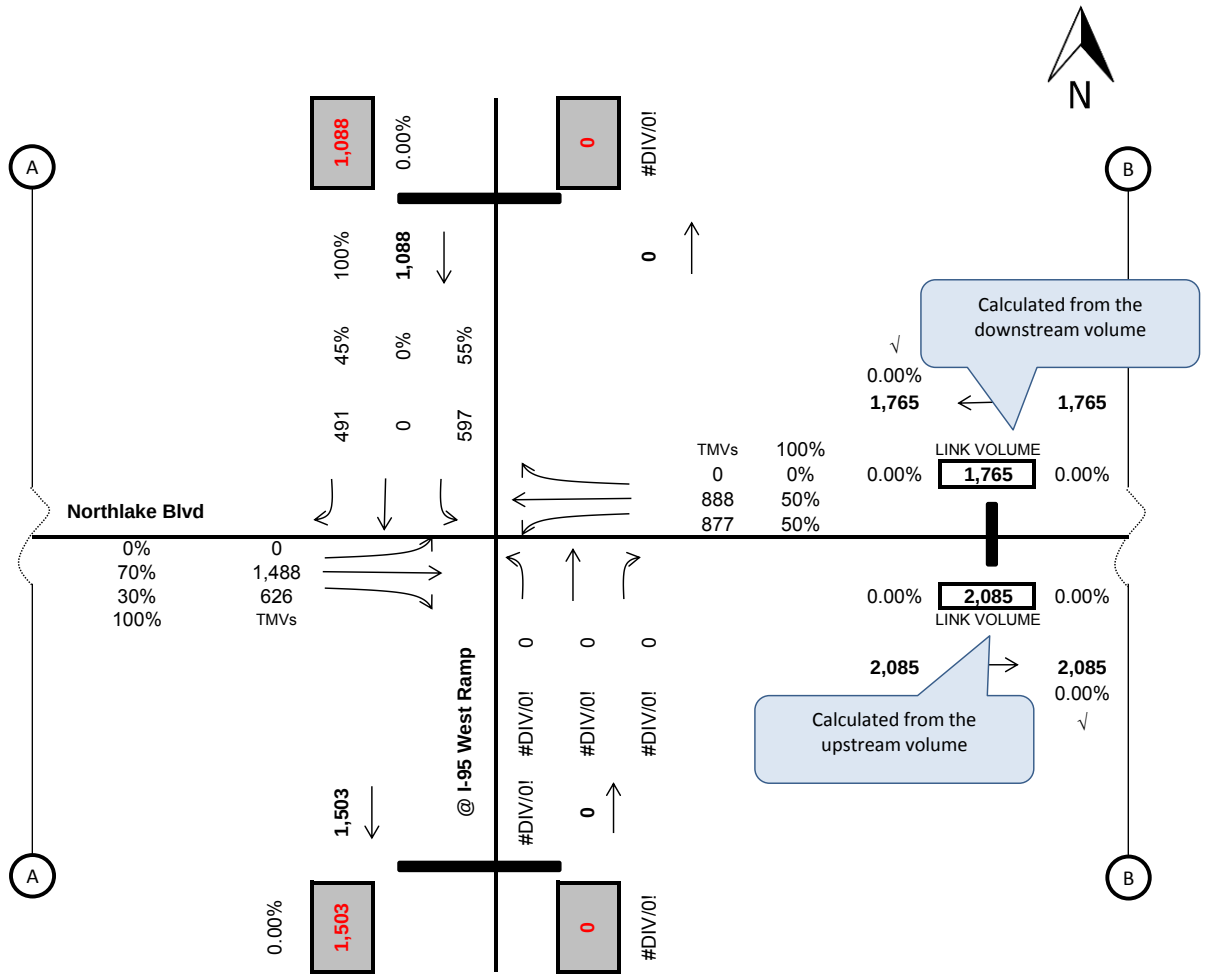
66 → — Turning Movement Volumes (Balanced)

A … A — Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Northlake Boulevard** **Turning Movement Volume Development** **2020 Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **1 of 5** *Date:* 9/24/15

@ I-95 West Ramp



Turning Movement Volumes
@ I-95 West Ramp

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**1,765**			**0**			**2,088**			**1,088**		
TM Pk Hr Counts	720	791	0	0	0	0	0	1821	735	932	0	767
% Turns	48%	52%	0%	0%	0%	0%	0%	71%	29%	55%	0%	45%
Calc. Pk Hr Volumes	841	924	0	0	0	0	0	1488	600	597	0	491
Adjustments	36	-36		0					26			
Bal Pk Hr Volumes	**877**	**888**	**0**	**0**	**0**	**0**	**0**	**1488**	**626**	**597**	**0**	**491**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

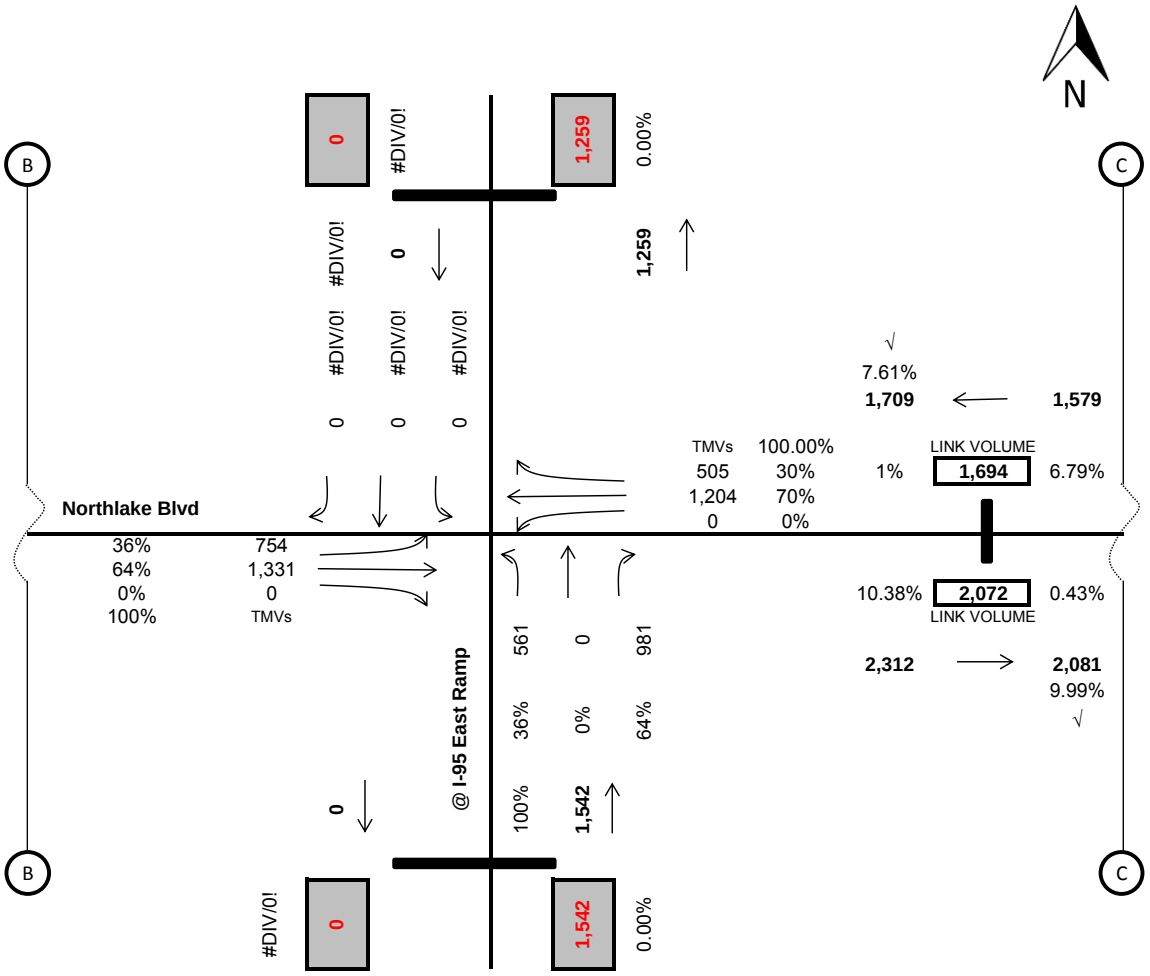
66 → — Turning Movement Volumes (Balanced)

A … A — Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Northlake Boulevard** **Turning Movement Volume Development** **2020 Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **2 of 5** *Date:* 9/24/15

@ I-95 East Ramp



Turning Movement Volumes
@ I-95 East Ramp

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,694**			**1,542**			**2,085**			**0**	
TM Pk Hr Counts	0	1049	427	462	0	809	966	1786	0	0	0	0
% Turns	0%	71%	29%	36%	0%	64%	35%	65%	0%	0%	0%	0%
Calc. Pk Hr Volumes	0	1204	490	561	0	981	732	1353	0	0	0	0
Adjustments			15				22	-22				
Bal Pk Hr Volumes	**0**	**1204**	**505**	**561**	**0**	**981**	**754**	**1331**	**0**	**0**	**0**	**0**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

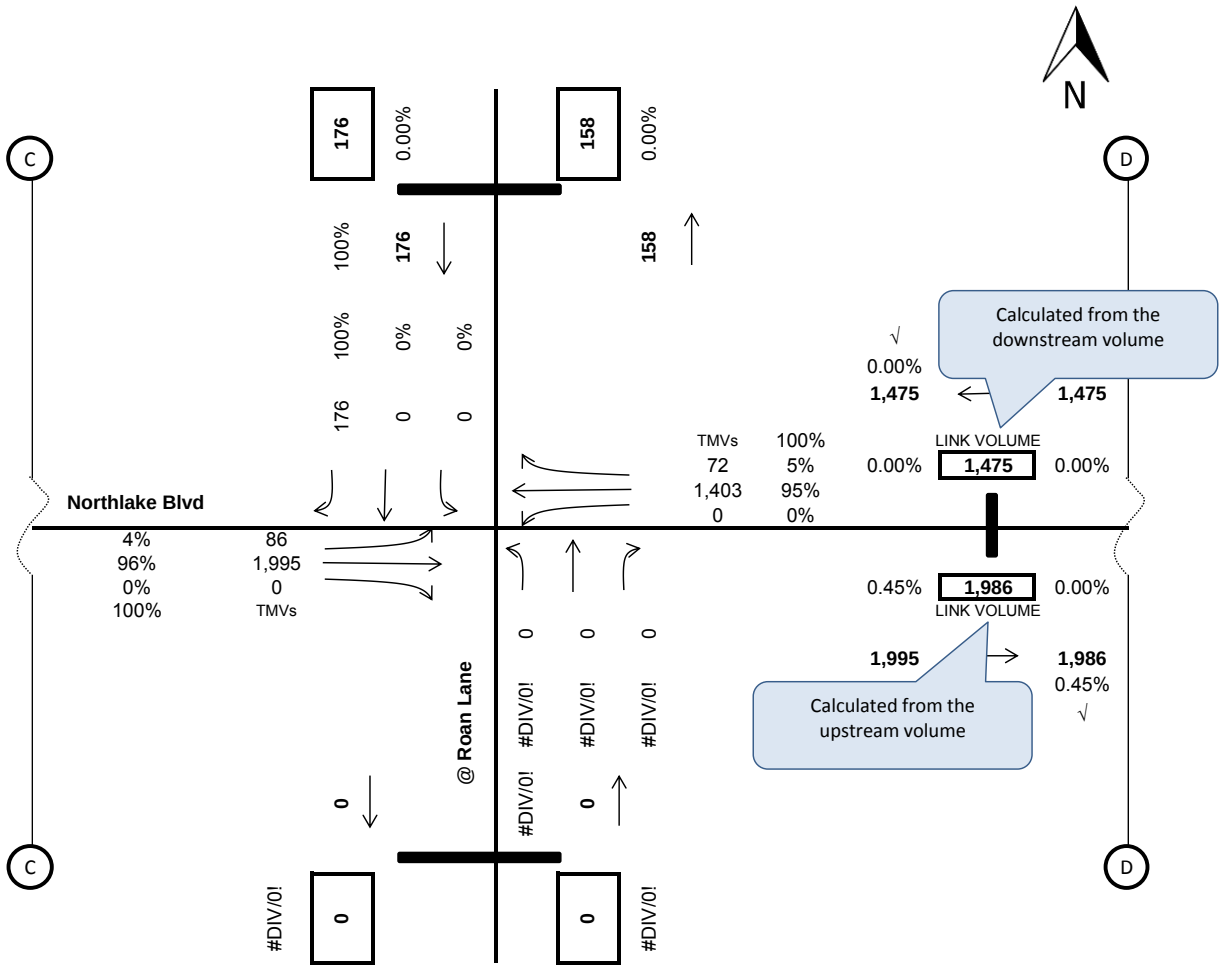
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Northlake Boulevard** **Turning Movement Volume Development** **2020 Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **3 of 5** *Date:* 9/24/15

@ Roan Lane



Turning Movement Volumes
@ Roan Lane

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,475**			**0**			**2,072**			**176**	
TM Pk Hr Counts	0	1557	80	0	0	0	118	2718	0	0	0	176
% Turns	0%	95%	5%	0%	0%	0%	4%	96%	0%	0%	0%	100%
Calc. Pk Hr Volumes	0	1403	72	0	0	0	86	1986	0	0	0	176
Adjustments						0		9		0		
Bal Pk Hr Volumes	**0**	**1403**	**72**	**0**	**0**	**0**	**86**	**1995**	**0**	**0**	**0**	**176**

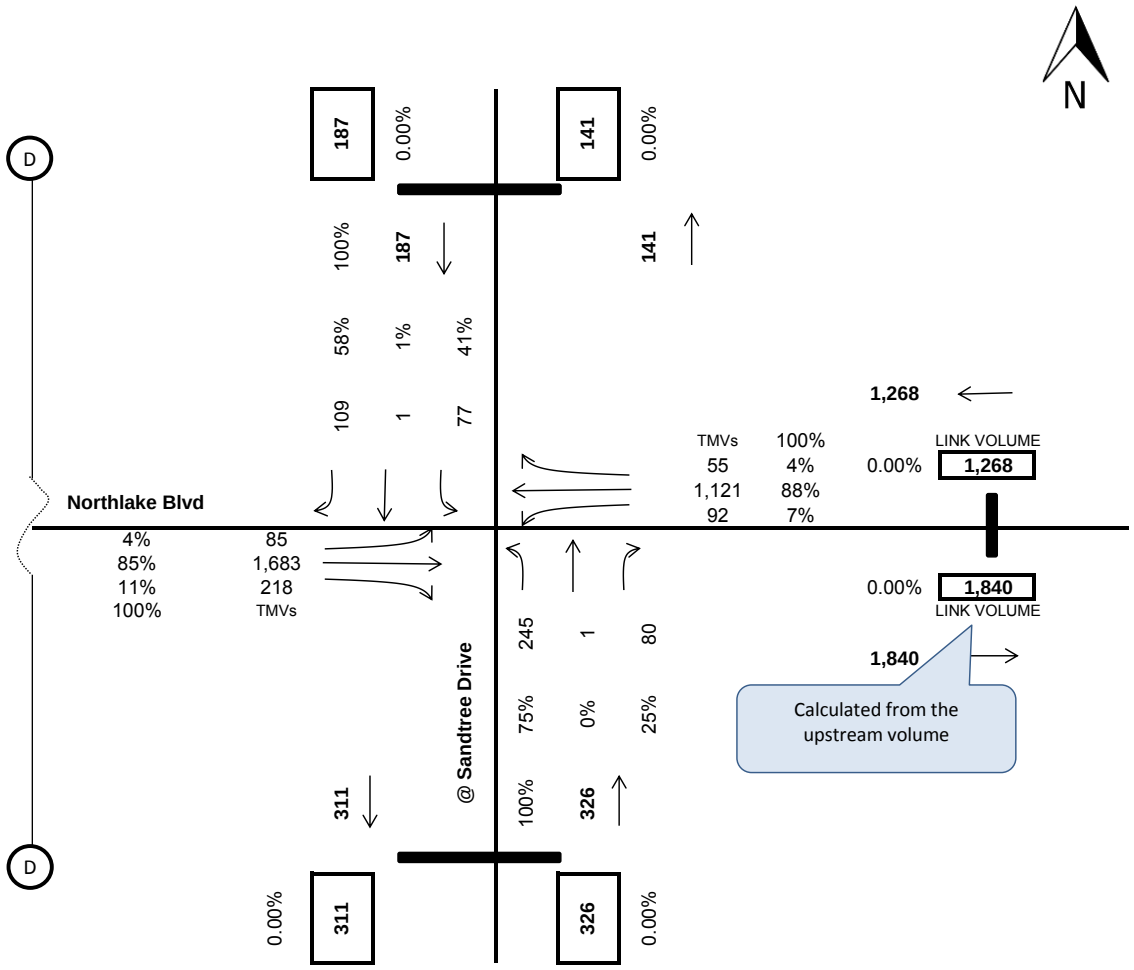
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66 →	Turning Movement Volumes (Balanced)
A … A	Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Northlake Boulevard Turning Movement Volume Development 2020 Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **4 of 5** *Date:* 9/24/15

@ Sandtree Drive



Turning Movement Volumes
@ Sandtree Drive

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,268**			**326**			**1,986**			**187**	
TM Pk Hr Counts	92	1121	55	245	1	80	111	2200	285	77	1	109
% Turns	7%	88%	4%	75%	0%	25%	4%	85%	11%	41%	1%	58%
Calc. Pk Hr Volumes	92	1121	55	245	1	80	85	1683	218	77	1	109
Adjustments												
Bal Pk Hr Volumes	**92**	**1121**	**55**	**245**	**1**	**80**	**85**	**1683**	**218**	**77**	**1**	**109**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

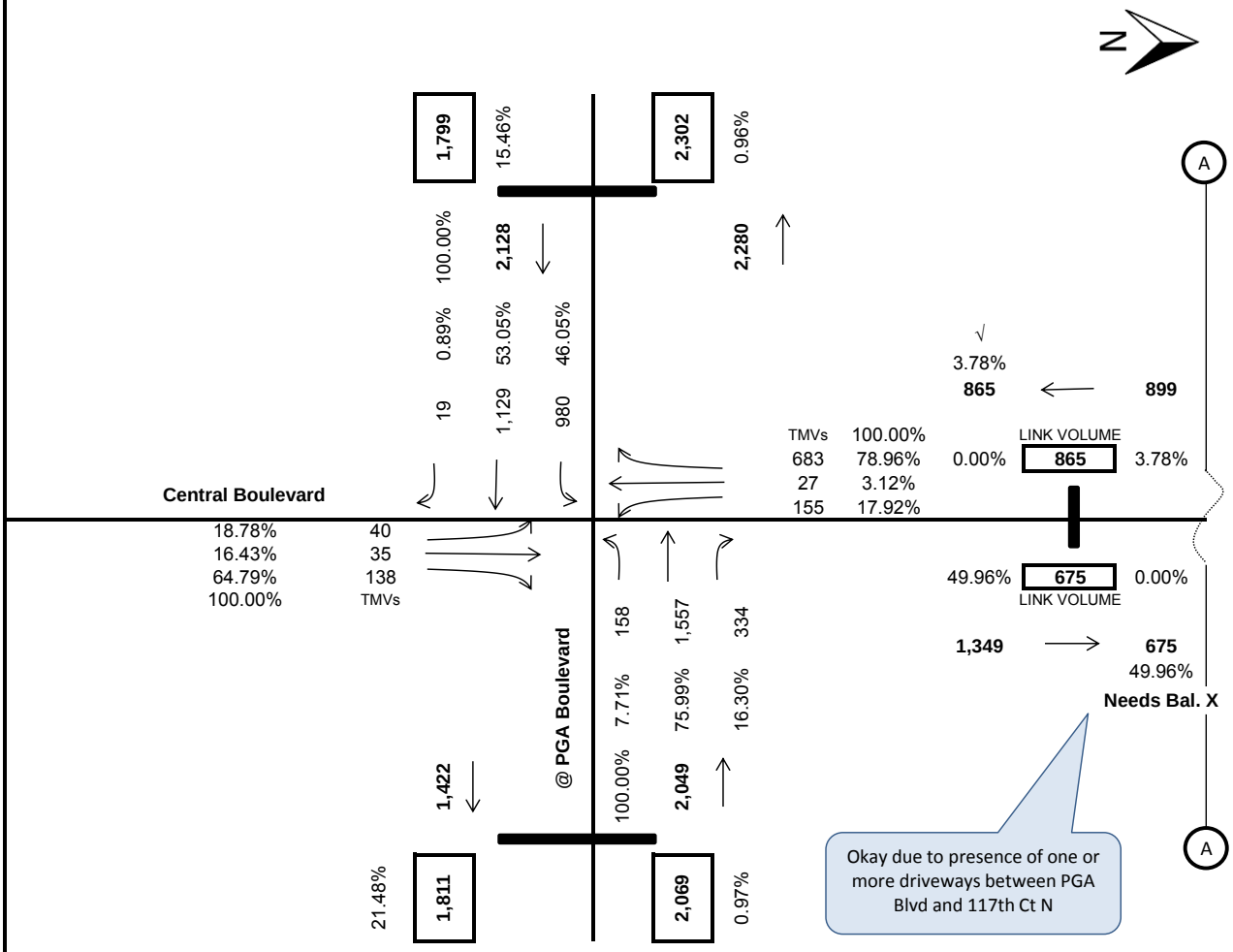
Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Northlake Boulevard Turning Movement Volume Development 2020 Build AM Peak Hour**	*Exhibit No:* **TBD**
		Page No: **5 of 5**
		Date: 9/24/15

APPENDIX AE

BALANCED TURNING MOVEMENT DEVELOPMENT SHEETS

2020 BUILD PM PEAK HOUR

@ PGA Boulevard



Turning Movement Volumes
@ PGA Boulevard

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes												
TM Pk Hr Counts												
% Turns												
Calc. Pk Hr Volumes												
Adjustments												
Bal Pk Hr Volumes	**155**	**27**	**683**	**158**	**1557**	**334**	**40**	**35**	**138**	**980**	**1129**	**19**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

A — Match Line

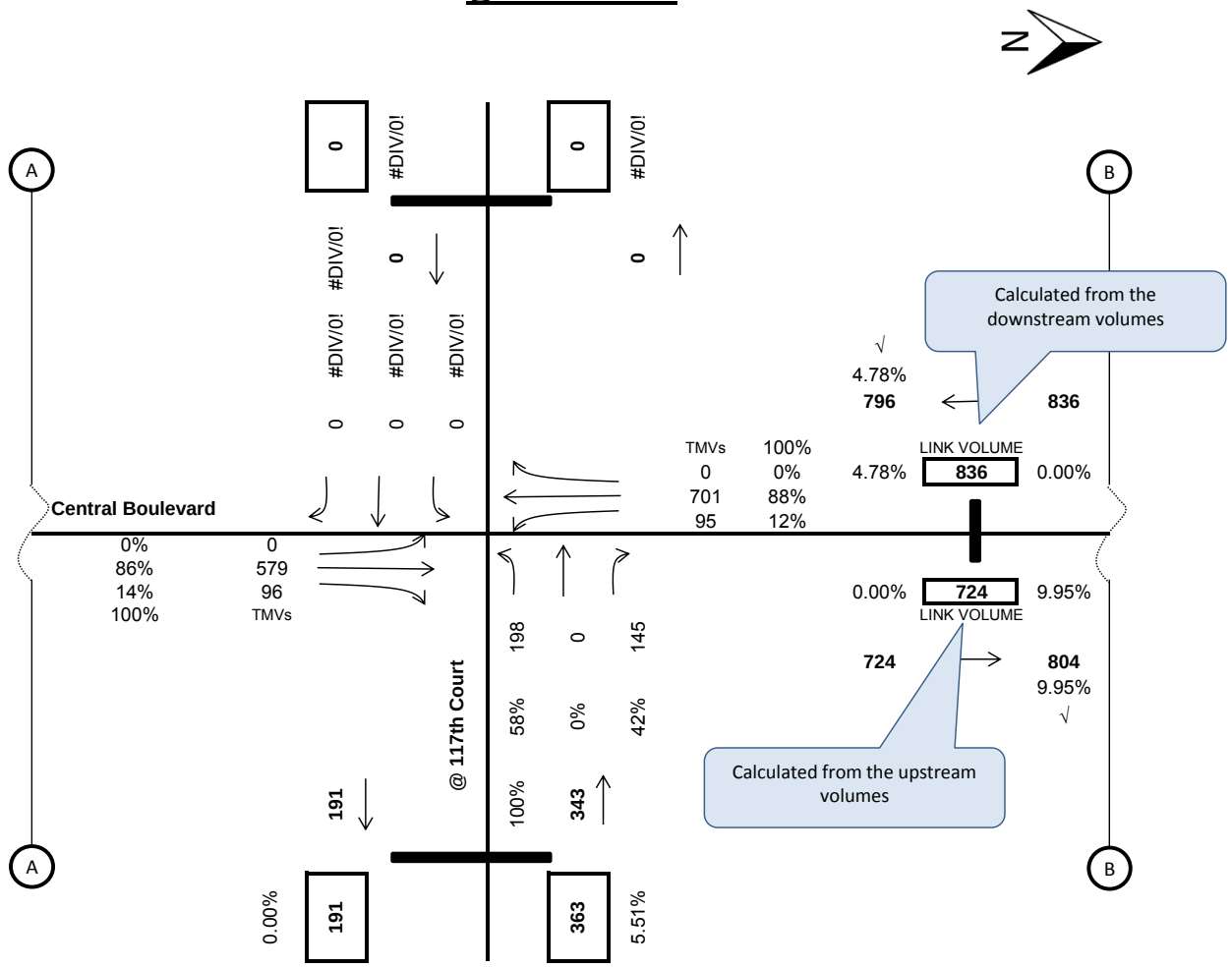
A

For consistency, balanced peak hour volumes from major street arterial (aka PGA Boulevard) were used. See PGA Boulevard Arterial for details

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Central Boulevard Turning Movement Volume Development 2020 Build PM Peak Hour**	*Exhibit No:* **TBD**
		Page No: **1 of 6**
		Date: 9/24/15

@ 117th Court



Turning Movement Volumes
@ 117th Court

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**836**			**363**			**675**			**0**	
TM Pk Hr Counts	158	1233	0	218	0	145	0	1377	229	0	0	0
% Turns	11%	89%	0%	60%	0%	40%	0%	86%	14%	0%	0%	0%
Calc. Pk Hr Volumes	95	741	0	218	0	145	0	579	96	0	0	0
Adjustments		-40		-20								
Bal Pk Hr Volumes	**95**	**701**	**0**	**198**	**0**	**145**	**0**	**579**	**96**	**0**	**0**	**0**

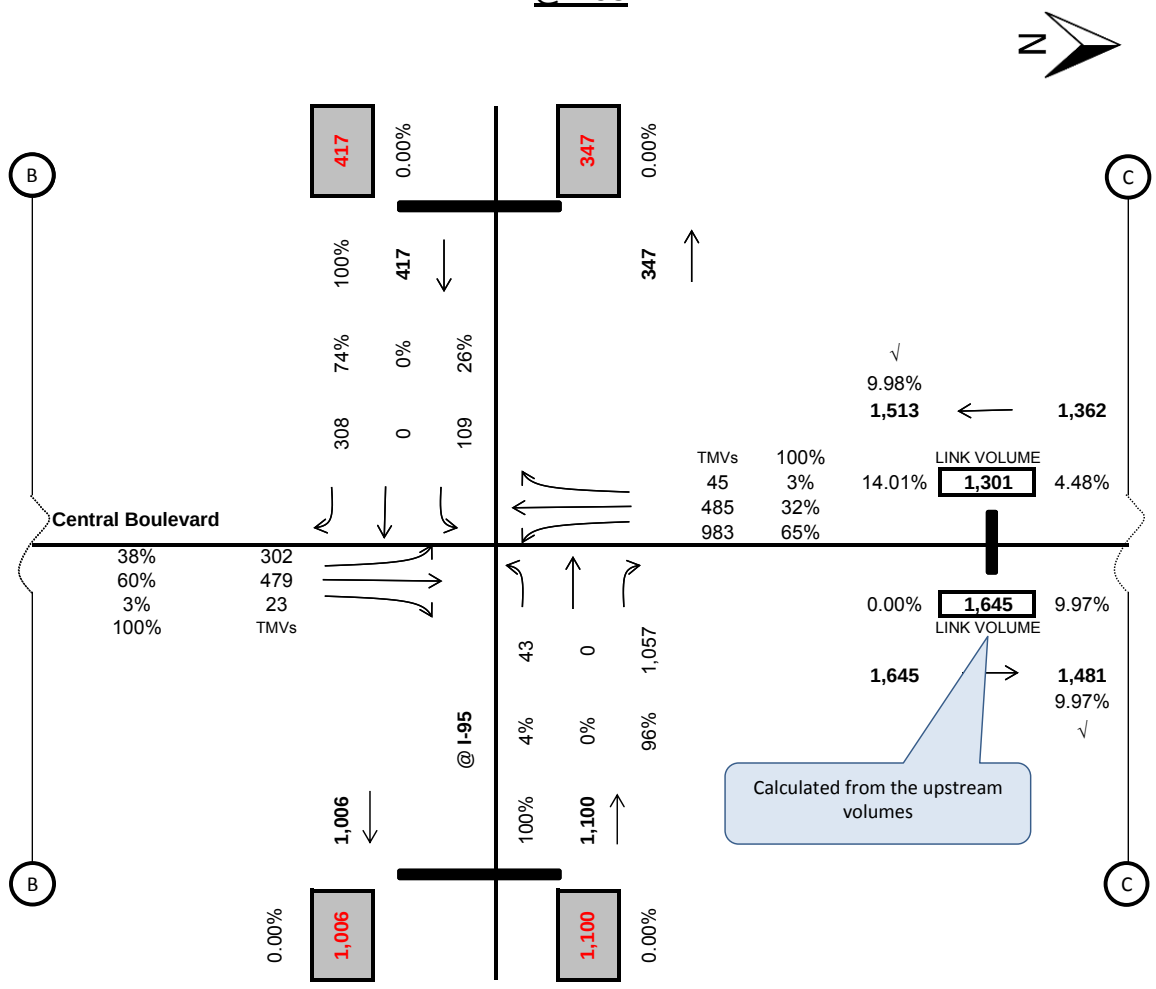
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Central Boulevard** **Turning Movement Volume Development** **2020 Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **2 of 6** *Date:* 9/24/15

@ I-95



Turning Movement Volumes
@ I-95

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**1,301**			**1,100**			**724**			**417**		
TM Pk Hr Counts	1354	1044	50	61	0	1492	430	1241	39	148	0	418
% Turns	55%	43%	2%	4%	0%	96%	25%	73%	2%	26%	0%	74%
Calc. Pk Hr Volumes	720	555	27	43	0	1057	182	525	17	109	0	308
Adjustments	263	-70	18				120	-46	6			
Bal Pk Hr Volumes	**983**	**485**	**45**	**43**	**0**	**1057**	**302**	**479**	**23**	**109**	**0**	**308**

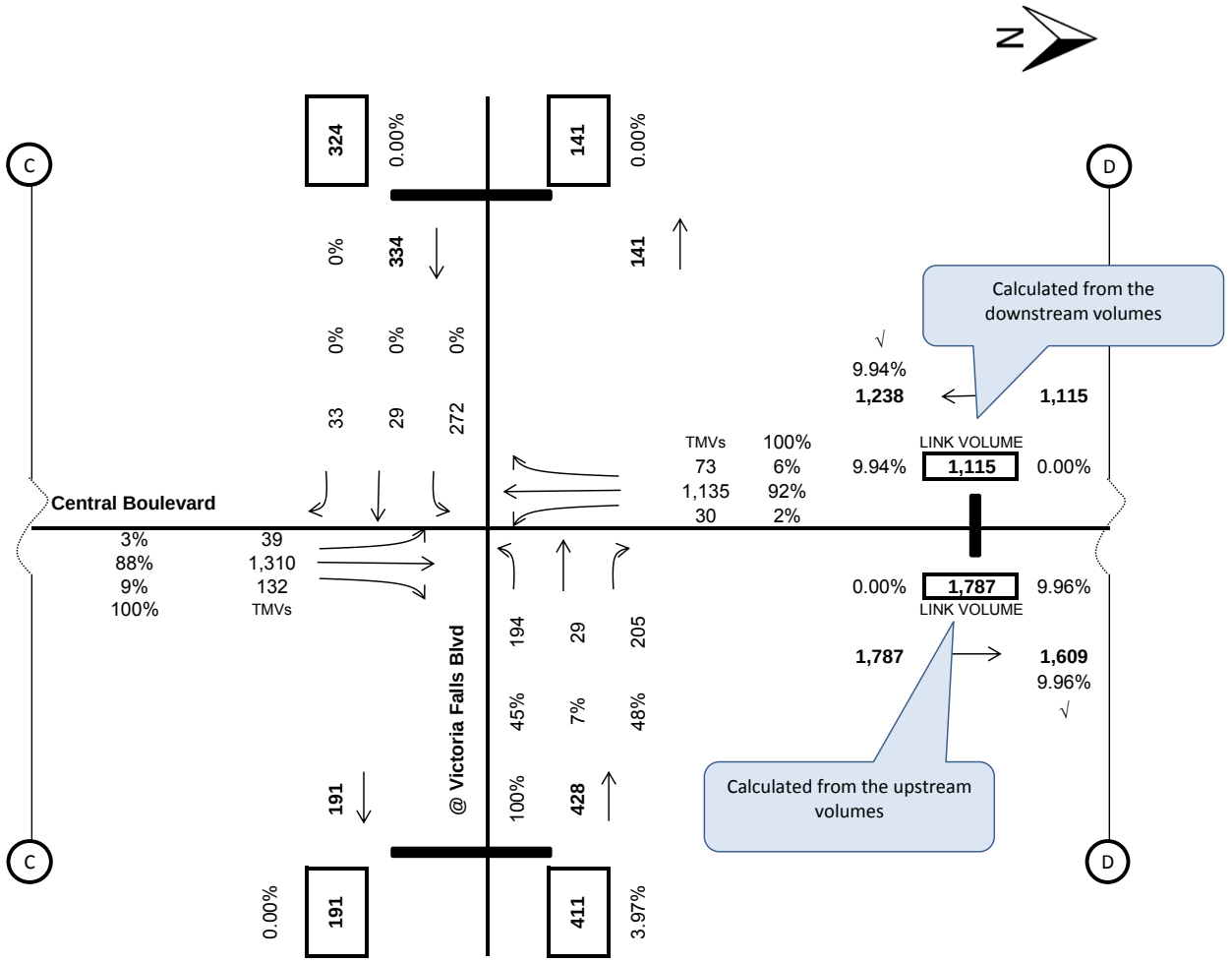
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A … A	Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Central Boulevard** **Turning Movement Volume Development** **2020 Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **3 of 6** *Date:* 9/24/15

@ Victoria Falls Blvd



Turning Movement Volumes
@ Victoria Falls Blvd

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,115**			**411**			**1,645**			**324**	
TM Pk Hr Counts	66	2211	159	177	29	205	67	2508	225	272	30	22
% Turns	3%	91%	7%	43%	7%	50%	2%	90%	8%	84%	9%	7%
Calc. Pk Hr Volumes	30	1012	73	177	29	205	39	1473	132	272	29	23
Adjustments		123		17				-163				10
Bal Pk Hr Volumes	**30**	**1135**	**73**	**194**	**29**	**205**	**39**	**1310**	**132**	**272**	**29**	**33**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

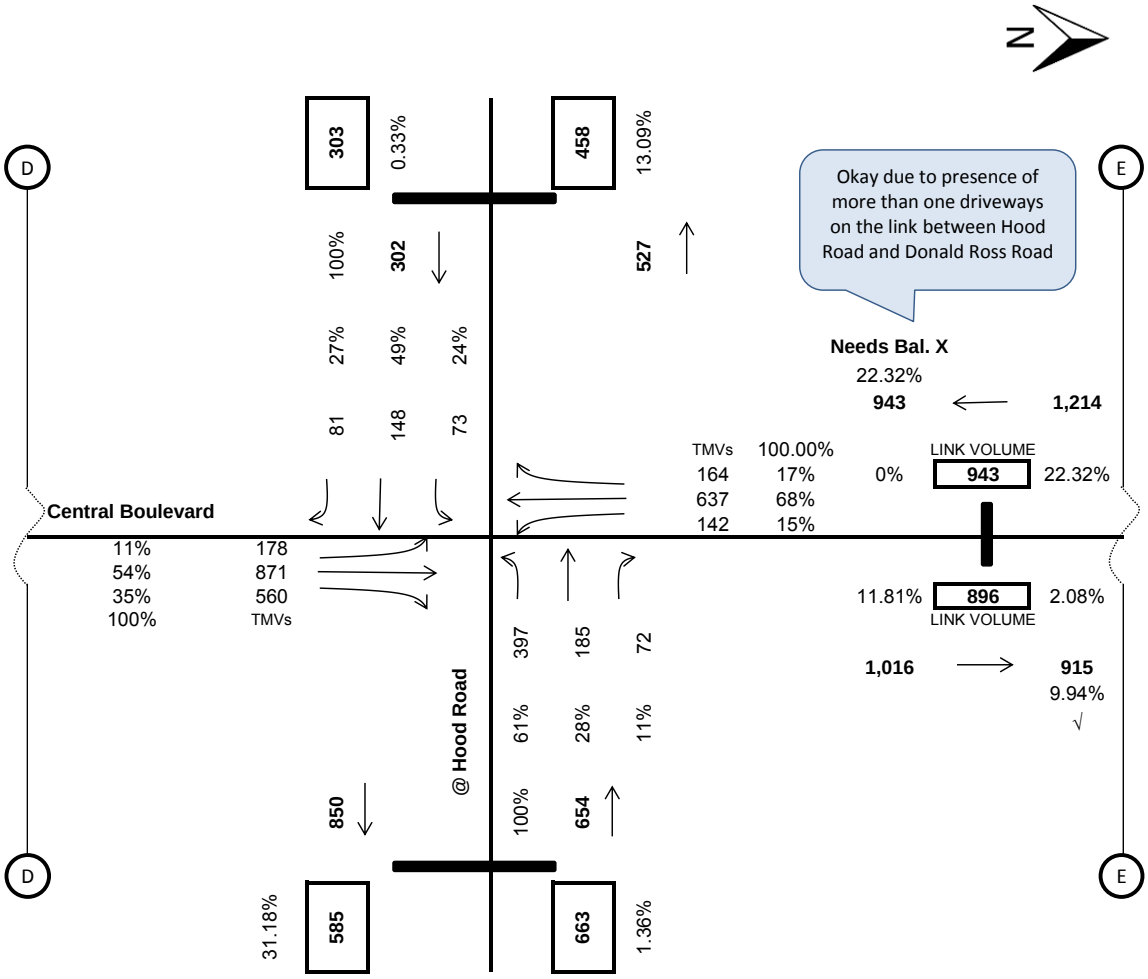
66 → Turning Movement Volumes (Balanced)

A — Match Line — A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Central Boulevard Turning Movement Volume Development 2020 Build PM Peak Hour**	*Exhibit No:* **TBD**
		Page No: **4 of 6**
		Date: 9/24/15

@ Hood Road



Turning Movement Volumes
@ Hood Road

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**943**			**663**			**1,787**			**303**		
TM Pk Hr Counts	234	1051	271	1043	485	212	307	1465	942	164	331	182
% Turns	15%	68%	17%	60%	28%	12%	11%	54%	35%	24%	49%	27%
Calc. Pk Hr Volumes	142	637	164	397	185	81	202	965	620	73	148	81
Adjustments						-9	-24	-94	-60			
Bal Pk Hr Volumes	**142**	**637**	**164**	**397**	**185**	**72**	**178**	**871**	**560**	**73**	**148**	**81**

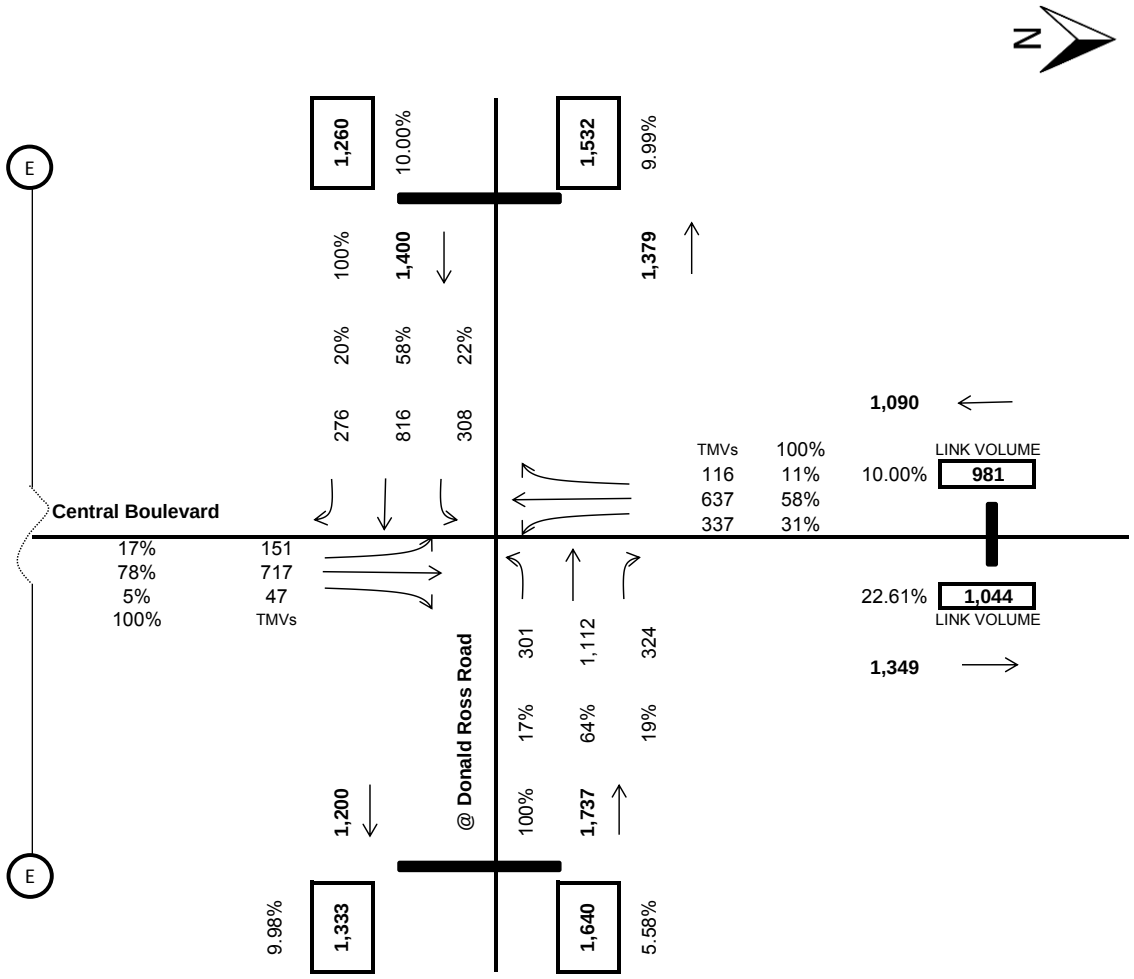
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66 →	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Central Boulevard Turning Movement Volume Development 2020 Build PM Peak Hour**	*Exhibit No:* **TBD**
		Page No: **5 of 6**
		Date: 9/24/15

@ Donald Ross Road



Turning Movement Volumes
@ Donald Ross Road

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**981**			**1,640**			**896**			**1,260**		
TM Pk Hr Counts	481	1089	190	286	963	307	311	1583	84	436	869	383
% Turns	27%	62%	11%	18%	62%	20%	16%	80%	4%	26%	51%	23%
Calc. Pk Hr Volumes	268	607	106	301	1015	324	141	717	38	325	649	286
Adjustments	69	30	10		97		10		9	-17	167	-10
Bal Pk Hr Volumes	**337**	**637**	**116**	**301**	**1112**	**324**	**151**	**717**	**47**	**308**	**816**	**276**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

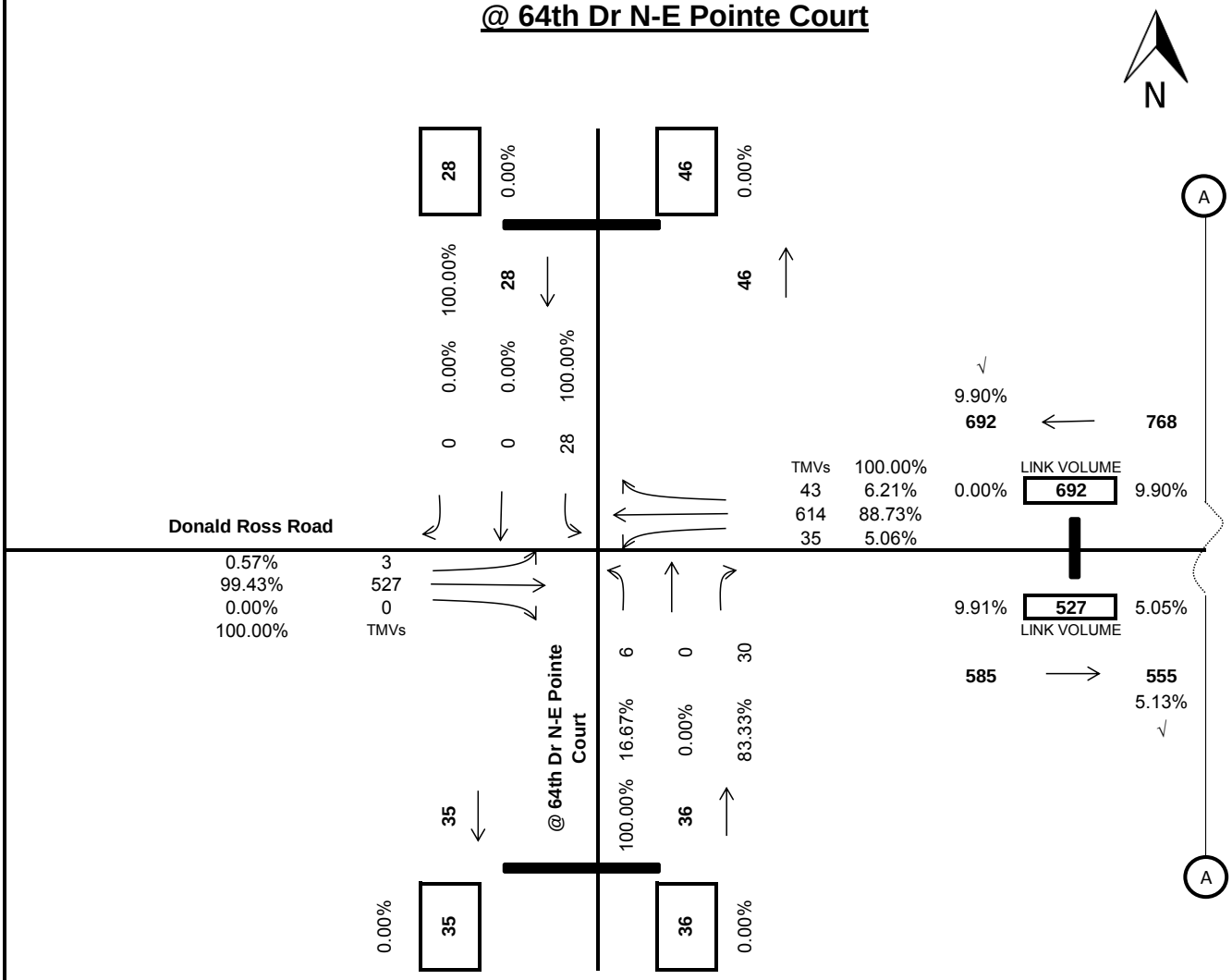
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name:	Exhibit Name:		
SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	**Central Boulevard** **Turning Movement Volume Development** **2020 Build PM Peak Hour**	*Exhibit No:*	**TBD**
		Page No:	**6 of 6**
		Date:	9/24/15

@ 64th Dr N-E Pointe Court



Turning Movement Volumes
@ 64th Dr N-E Pointe Court

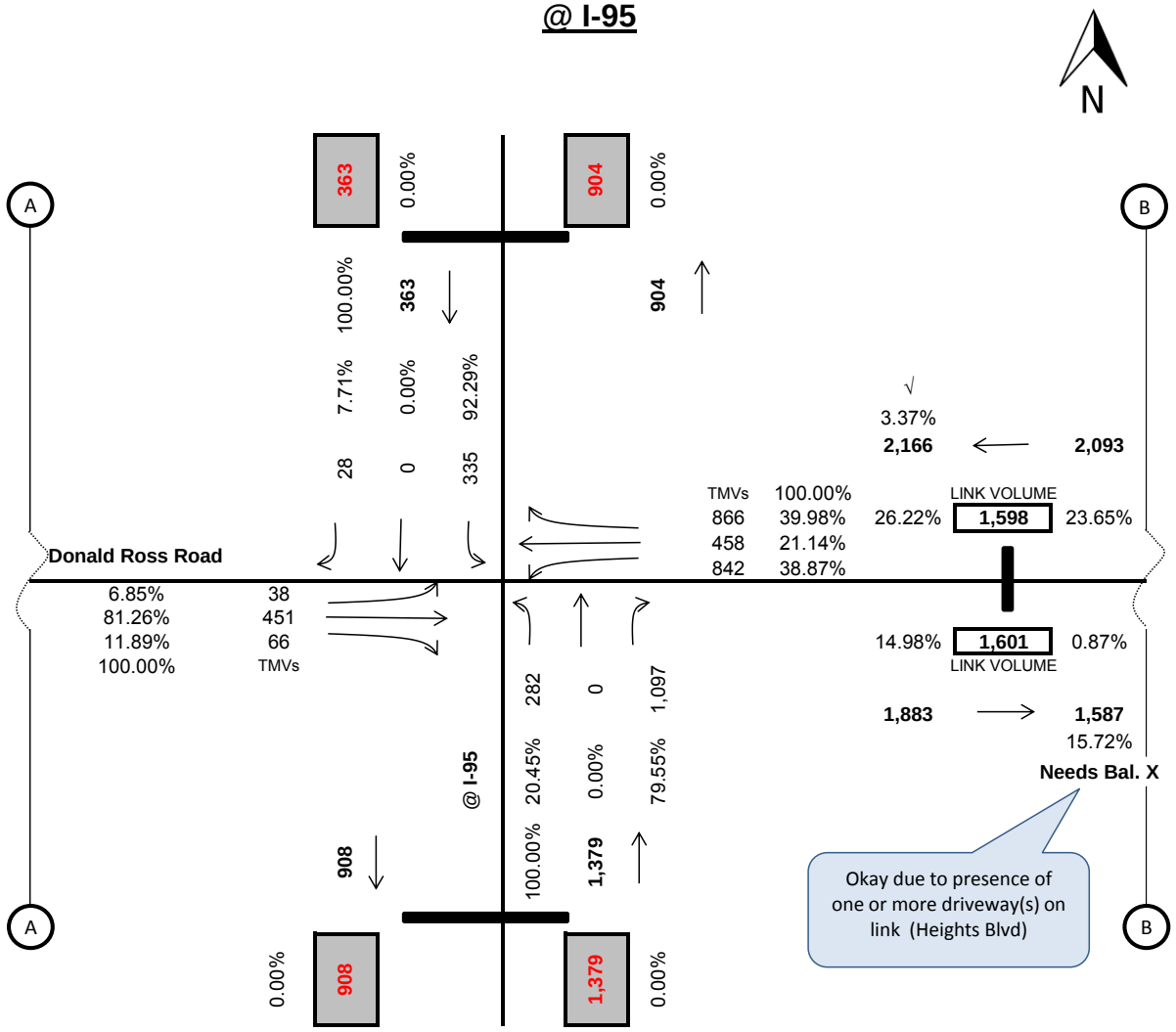
Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**692**			**36**			**535**			**28**	
TM Pk Hr Counts	39	687	48	6	0	30	3	532	0	28	0	0
% Turns	5%	89%	6%	17%	0%	83%	1%	99%	0%	100%	0%	0%
Calc. Pk Hr Volumes	35	614	43	6	0	30	3	532	0	28	0	0
Adjustments								-5				
Bal Pk Hr Volumes	**35**	**614**	**43**	**6**	**0**	**30**	**3**	**527**	**0**	**28**	**0**	**0**

LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66 →	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

@ I-95



Turning Movement Volumes
@ I-95

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,598**			**1,379**			**527**			**363**	
TM Pk Hr Counts	1097	668	568	309	0	1145	35	915	120	566	0	47
% Turns	47%	29%	24%	21%	0%	79%	3%	86%	11%	92%	0%	8%
Calc. Pk Hr Volumes	751	458	389	293	0	1086	17	451	59	335	0	28
Adjustments	91		477	-11	0	11	21		7		0	
Bal Pk Hr Volumes	**842**	**458**	**866**	**282**	**0**	**1097**	**38**	**451**	**66**	**335**	**0**	**28**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

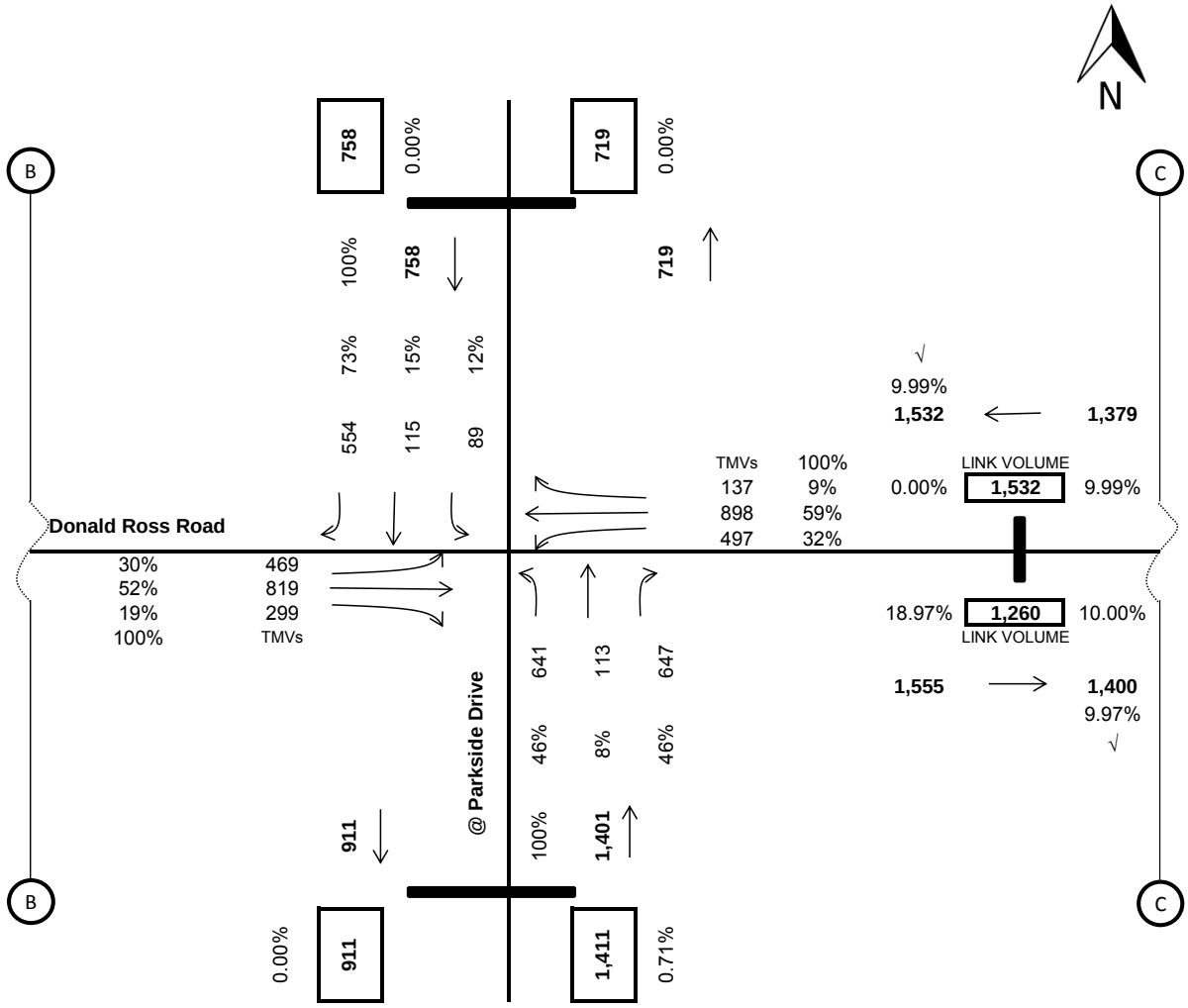
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 432421-1-22-01	*Exhibit Name:* **Donald Ross Road** **Turning Movement Volume Development** **2020 Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **2 of 5** *Date:* 9/24/15

@ Parkside Drive



Turning Movement Volumes
@ Parkside Drive

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,532**			**1,411**			**1,601**			**758**	
TM Pk Hr Counts	524	947	144	641	113	657	570	1012	364	89	115	554
% Turns	32%	59%	9%	45%	8%	47%	29%	52%	19%	12%	15%	73%
Calc. Pk Hr Volumes	497	898	137	641	113	657	469	833	299	89	115	554
Adjustments						-10		-14				
Bal Pk Hr Volumes	**497**	**898**	**137**	**641**	**113**	**647**	**469**	**819**	**299**	**89**	**115**	**554**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

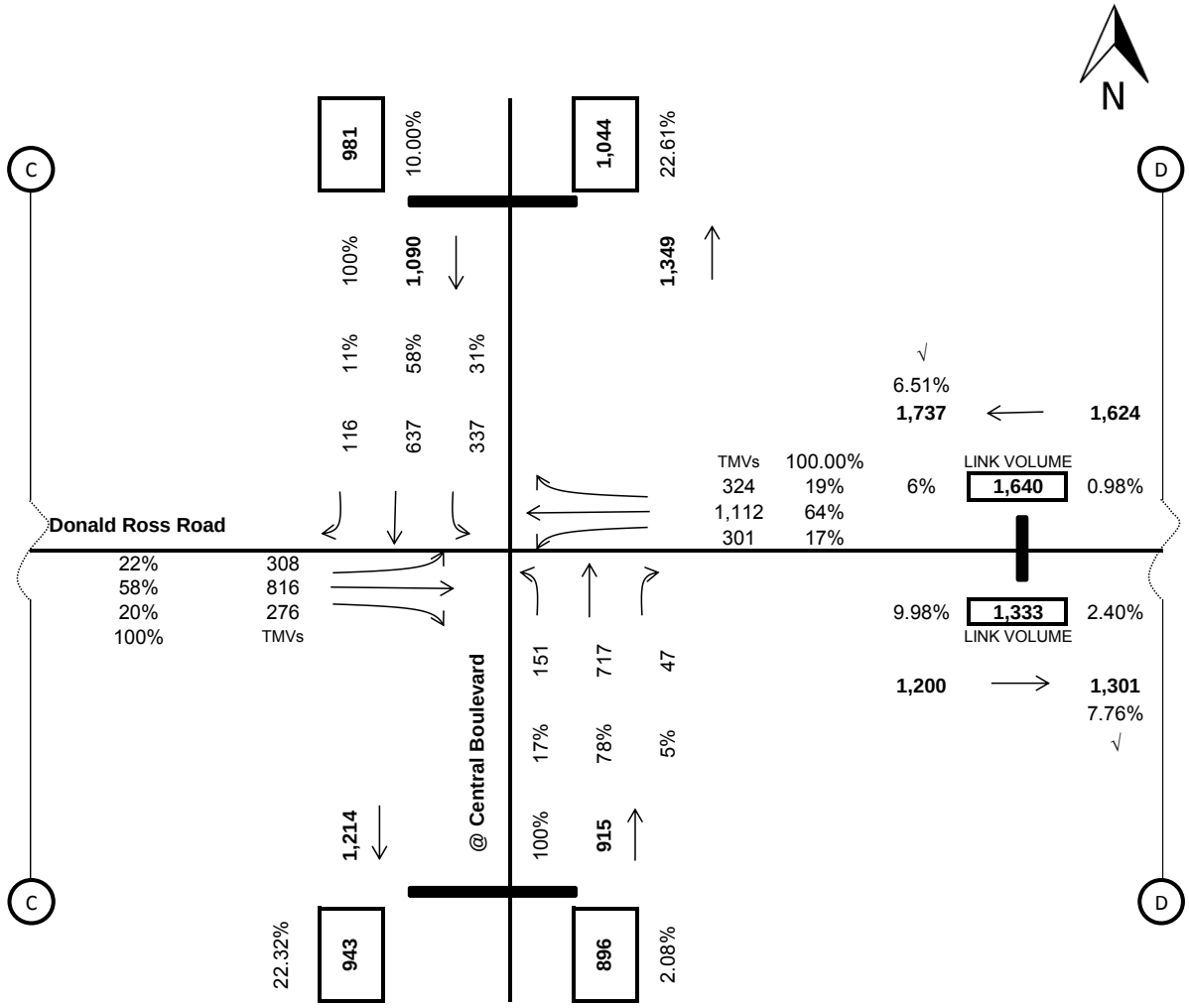
66 — Turning Movement Volumes (Balanced)

A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

@ Central Boulevard



Turning Movement Volumes
@ Central Boulevard

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes												
TM Pk Hr Counts												
% Turns												
Calc. Pk Hr Volumes												
Adjustments												
Bal Pk Hr Volumes	**301**	**1112**	**324**	**151**	**717**	**47**	**308**	**816**	**276**	**337**	**637**	**116**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 → Turning Movement Volumes (Balanced)

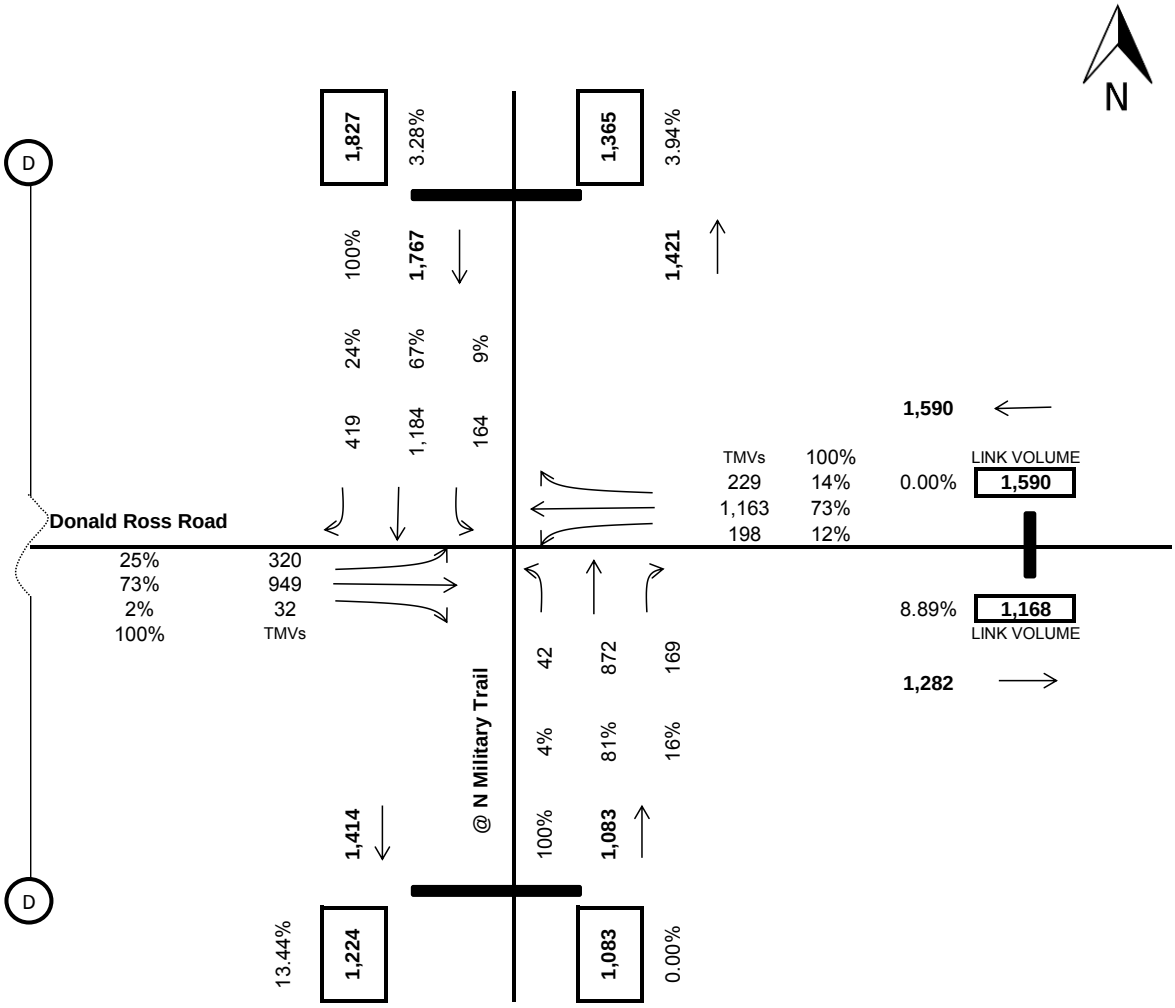
A … A — Match Line

For consistency, balanced peak hour volumes from major street arterial (aka Central Boulevard) were used. See Central Boulevard Arterial for details

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 435511-1-22-01	*Exhibit Name:* **Donald Ross Road** **Turning Movement Volume Development** **2020 Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **4 of 5** *Date:* 9/24/15

@ N Military Trail



Turning Movement Volumes
@ N Military Trail

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes												
TM Pk Hr Counts												
% Turns												
Calc. Pk Hr Volumes												
Adjustments												
Bal Pk Hr Volumes	**198**	**1163**	**229**	**42**	**872**	**169**	**320**	**949**	**32**	**164**	**1184**	**419**

LEGEND

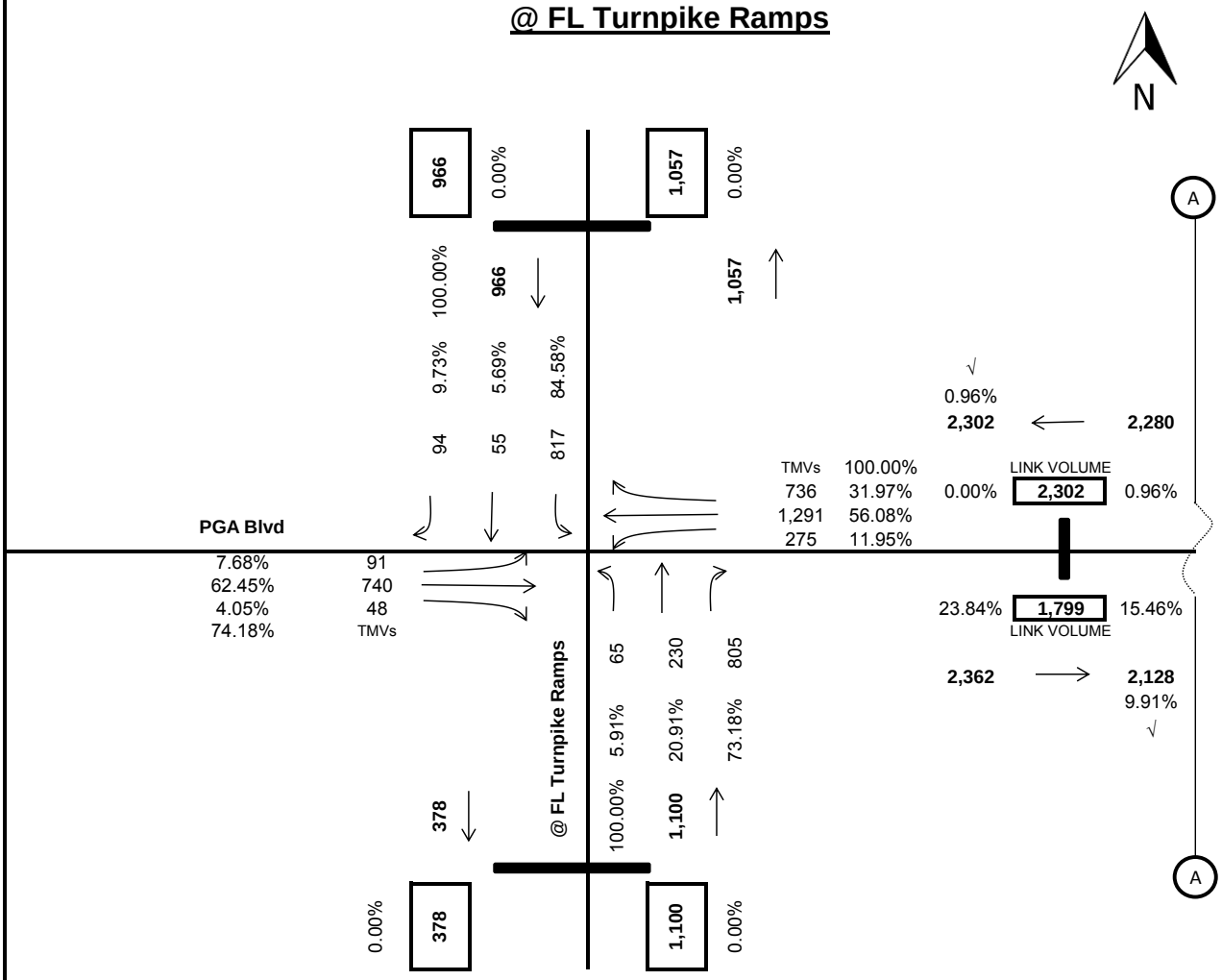
1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

For consistency, balanced peak hour volumes from major street arterial (aka N Military Trail) were used. See N Military Trail Arterial for details

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FPID No. 413675-1-22-01	*Exhibit Name:* **Donald Ross Road** **Turning Movement Volume Development** **2020 Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **5 of 5** *Date:* 9/24/15

@ FL Turnpike Ramps



Turning Movement Volumes
@ FL Turnpike Ramps

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**2,302**			**1,100**			**879**			**966**		
TM Pk Hr Counts	389	1829	1043	65	230	805	182	1486	97	817	55	94
% Turns	12%	56%	32%	6%	21%	73%	10%	84%	5%	85%	6%	10%
Calc. Pk Hr Volumes	275	1291	736	65	230	805	91	740	48	817	55	94
Adjustments												
Bal Pk Hr Volumes	**275**	**1291**	**736**	**65**	**230**	**805**	**91**	**740**	**48**	**817**	**55**	**94**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

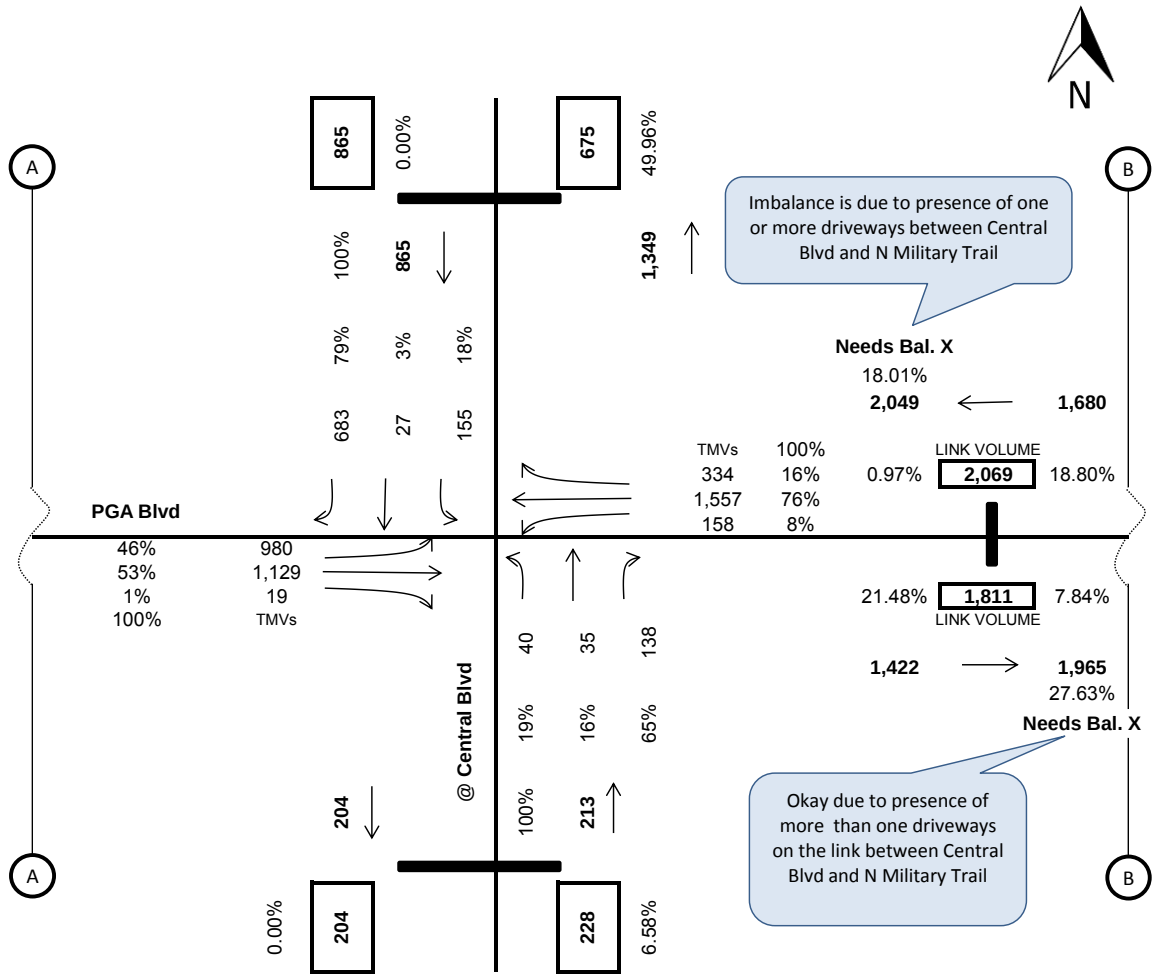
66 → — Turning Movement Volumes (Balanced)

A … A — Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard** **Turning Movement Volume Development** **2020 Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **1 of 8** *Date:* 9/24/15

@ Central Blvd



Turning Movement Volumes
@ Central Blvd

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**2,069**			**228**			**1,799**			**865**		
TM Pk Hr Counts	175	1726	392	40	50	138	1460	1192	29	268	47	1179
% Turns	8%	75%	17%	18%	22%	61%	54%	44%	1%	18%	3%	79%
Calc. Pk Hr Volumes	158	1557	354	40	50	138	980	800	19	155	27	683
Adjustments			-20		-15			329				
Bal Pk Hr Volumes	**158**	**1557**	**334**	**40**	**35**	**138**	**980**	**1129**	**19**	**155**	**27**	**683**

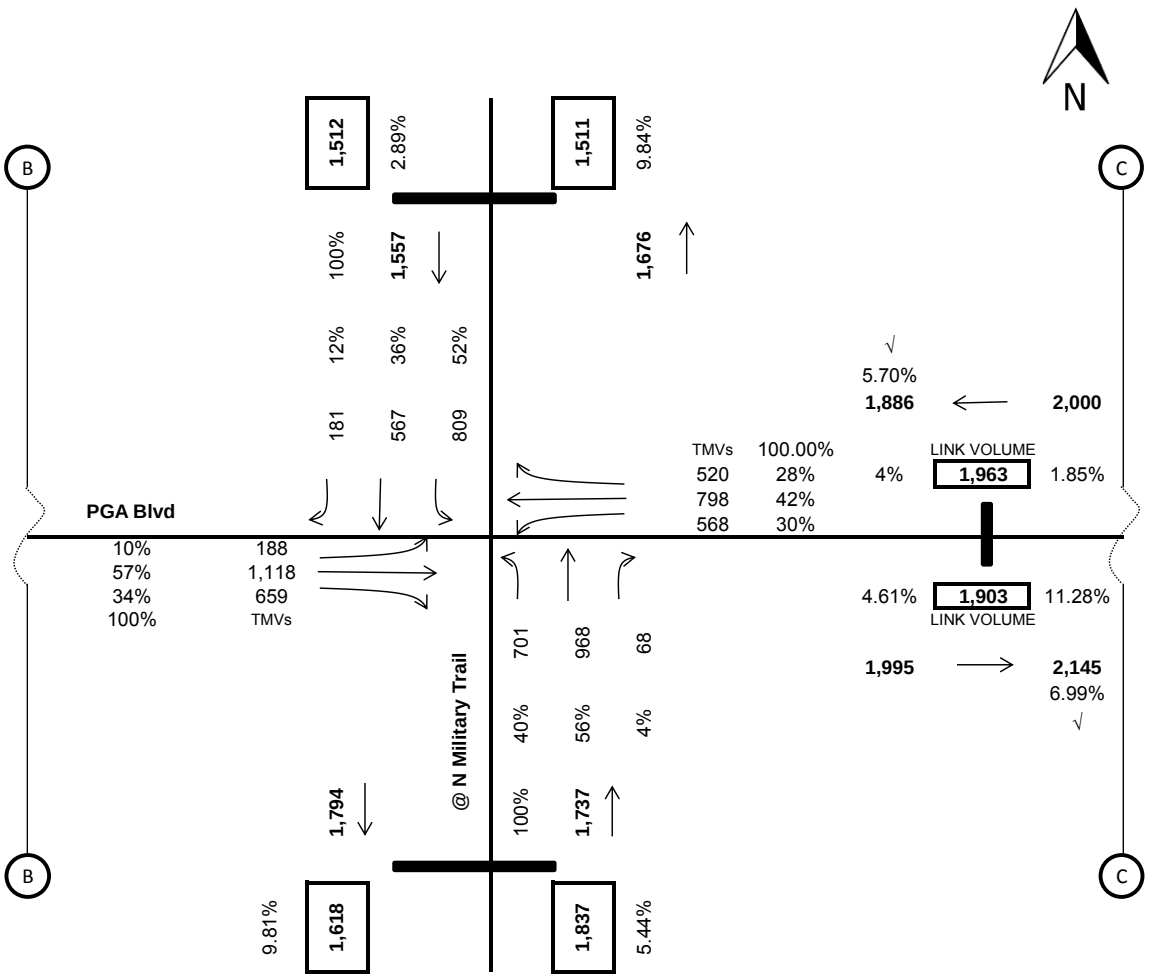
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A … A	Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard, Project Development & Environmental Study, FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard Turning Movement Volume Development 2020 Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **2 of 8** *Date:* 9/24/15

@ N Military Trail



Turning Movement Volumes
@ N Military Trail

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**1,963**			**1,837**			**1,811**			**1,512**		
TM Pk Hr Counts	770	1082	809	1007	1731	105	195	783	559	1191	885	283
% Turns	29%	41%	30%	35%	61%	4%	13%	51%	36%	50%	38%	12%
Calc. Pk Hr Volumes	568	798	597	651	1118	68	230	923	659	763	567	181
Adjustments			-77	50	-150		-42	195		46		
Bal Pk Hr Volumes	**568**	**798**	**520**	**701**	**968**	**68**	**188**	**1118**	**659**	**809**	**567**	**181**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

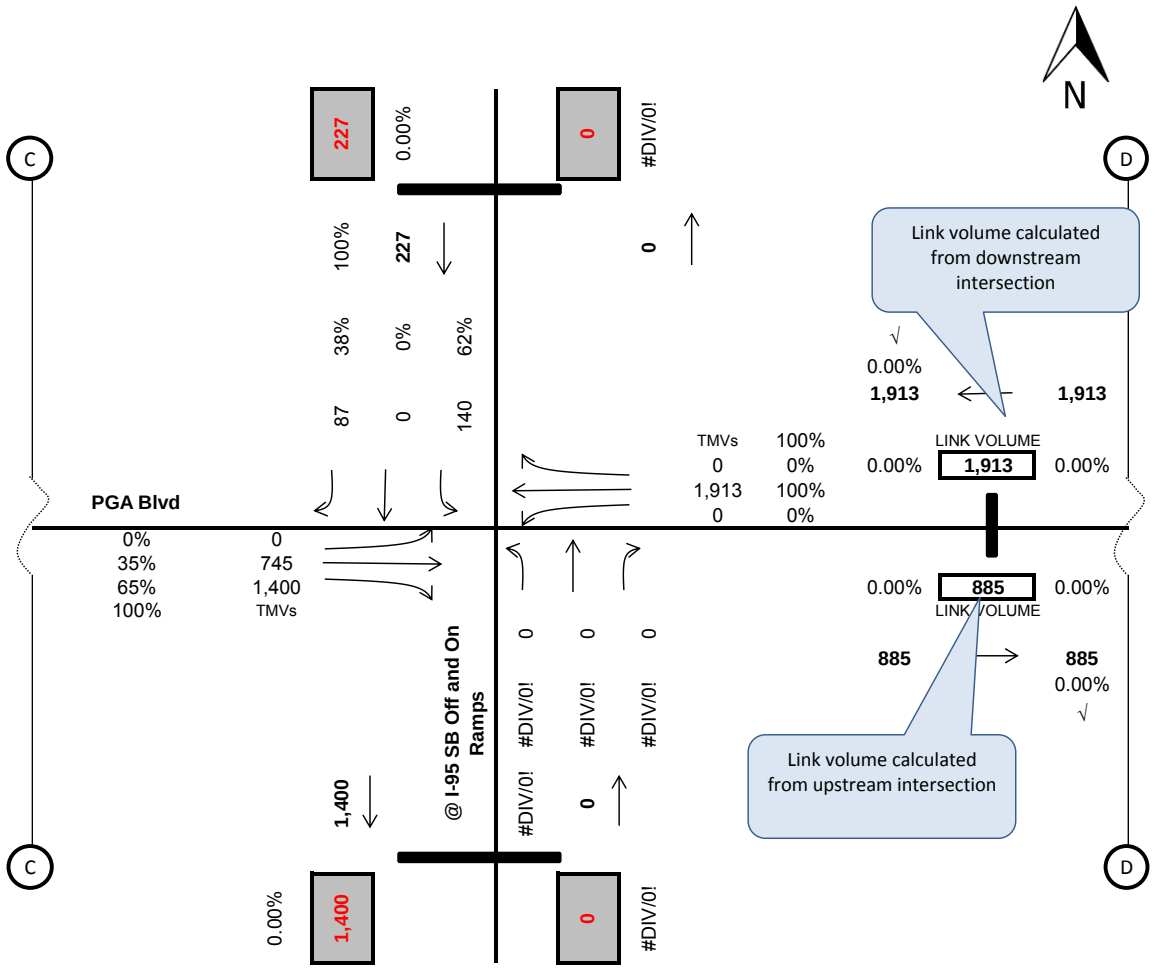
66 → — Turning Movement Volumes (Balanced)

A … A — Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard, Project Development & Environmental Study, FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard Turning Movement Volume Development 2020 Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **3 of 8** *Date:* 9/24/15

@ I-95 SB Off and On Ramps



Turning Movement Volumes
@ I-95 SB Off and On Ramps

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,913**			**0**			**1,903**			**227**	
TM Pk Hr Counts	0	2534	0	0	0	0	0	597	1414	156	0	97
% Turns	0%	100%	0%	0%	0%	0%	0%	30%	70%	62%	0%	38%
Calc. Pk Hr Volumes	0	1913	0	0	0	0	0	565	1338	140	0	87
Adjustments								180	62			
Bal Pk Hr Volumes	**0**	**1913**	**0**	**0**	**0**	**0**	**0**	**745**	**1400**	**140**	**0**	**87**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 → Turning Movement Volumes (Balanced)

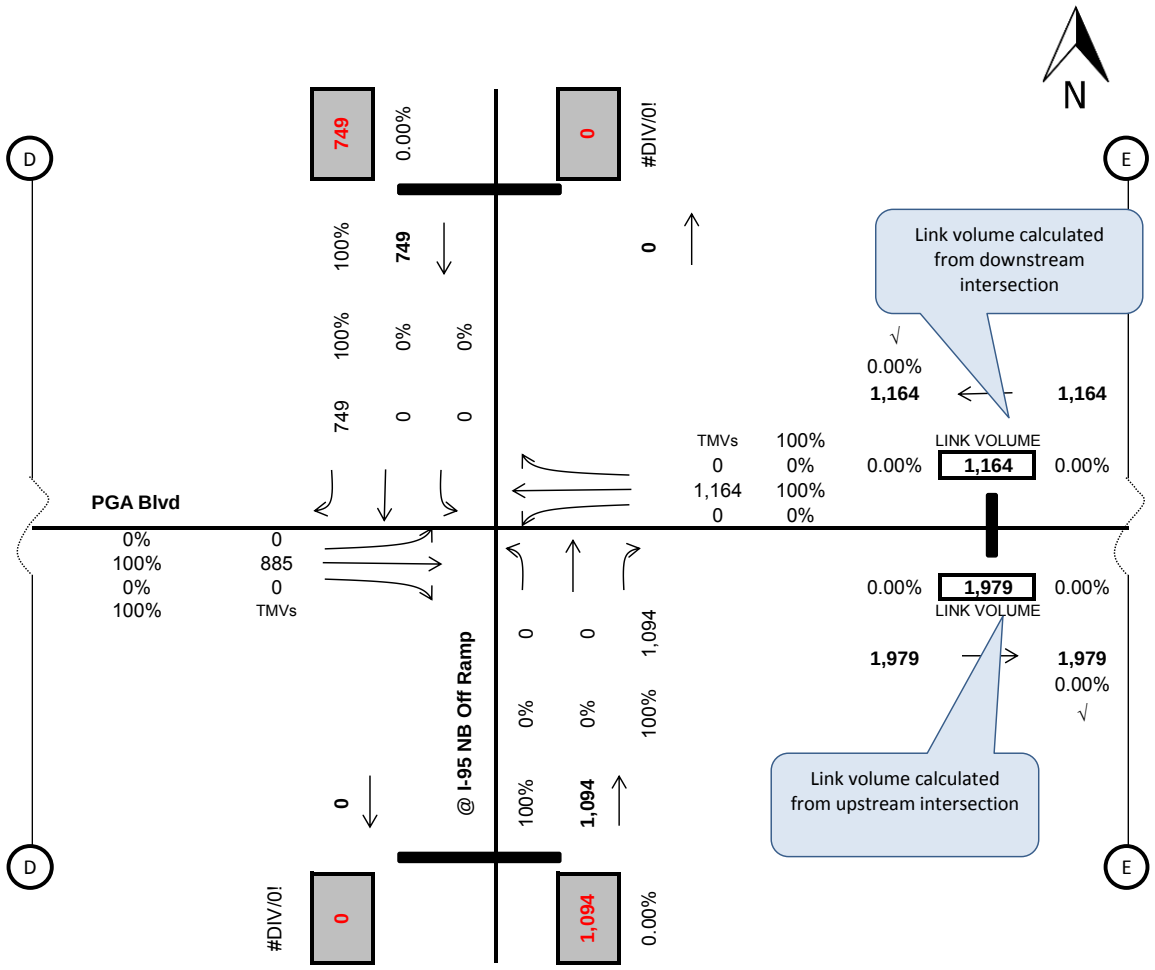
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard** **Turning Movement Volume Development** **2020 Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **4 of 8** *Date:* 9/24/15

@ I-95 NB Off Ramp



Turning Movement Volumes
@ I-95 NB Off Ramp

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,164**			**1,094**			**885**			**749**	
TM Pk Hr Counts	0	2534	0	0	0	1733	0	753	0	0	0	1293
% Turns	0%	100%	0%	0%	0%	100%	0%	100%	0%	0%	0%	100%
Calc. Pk Hr Volumes	0	1164	0	0	0	1094	0	885	0	0	0	749
Adjustments												
Bal Pk Hr Volumes	**0**	**1164**	**0**	**0**	**0**	**1094**	**0**	**885**	**0**	**0**	**0**	**749**

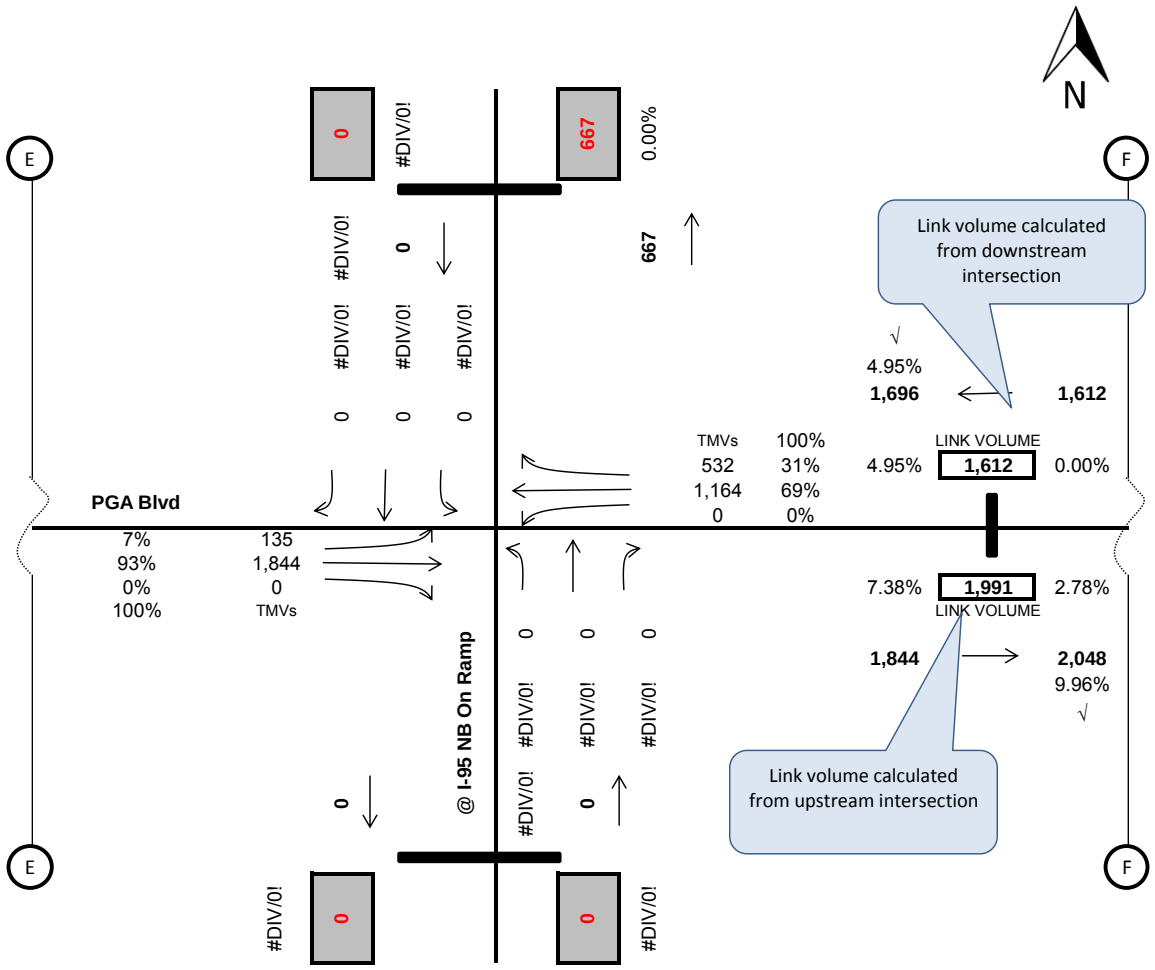
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66 →	Turning Movement Volumes (Balanced)
A … A	Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard** **Turning Movement Volume Development** **2020 Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **5 of 8** *Date:* 9/24/15

@ I-95 NB On Ramp



Turning Movement Volumes
@ I-95 NB On Ramp

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,612**			**0**			**1,979**			**0**	
TM Pk Hr Counts	0	1241	477	0	0	0	143	2340	0	0	0	0
% Turns	0%	72%	28%	0%	0%	0%	6%	94%	0%	0%	0%	0%
Calc. Pk Hr Volumes	0	1164	448	0	0	0	114	1865	0	0	0	0
Adjustments			84		0		21	-21				
Bal Pk Hr Volumes	**0**	**1164**	**532**	**0**	**0**	**0**	**135**	**1844**	**0**	**0**	**0**	**0**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

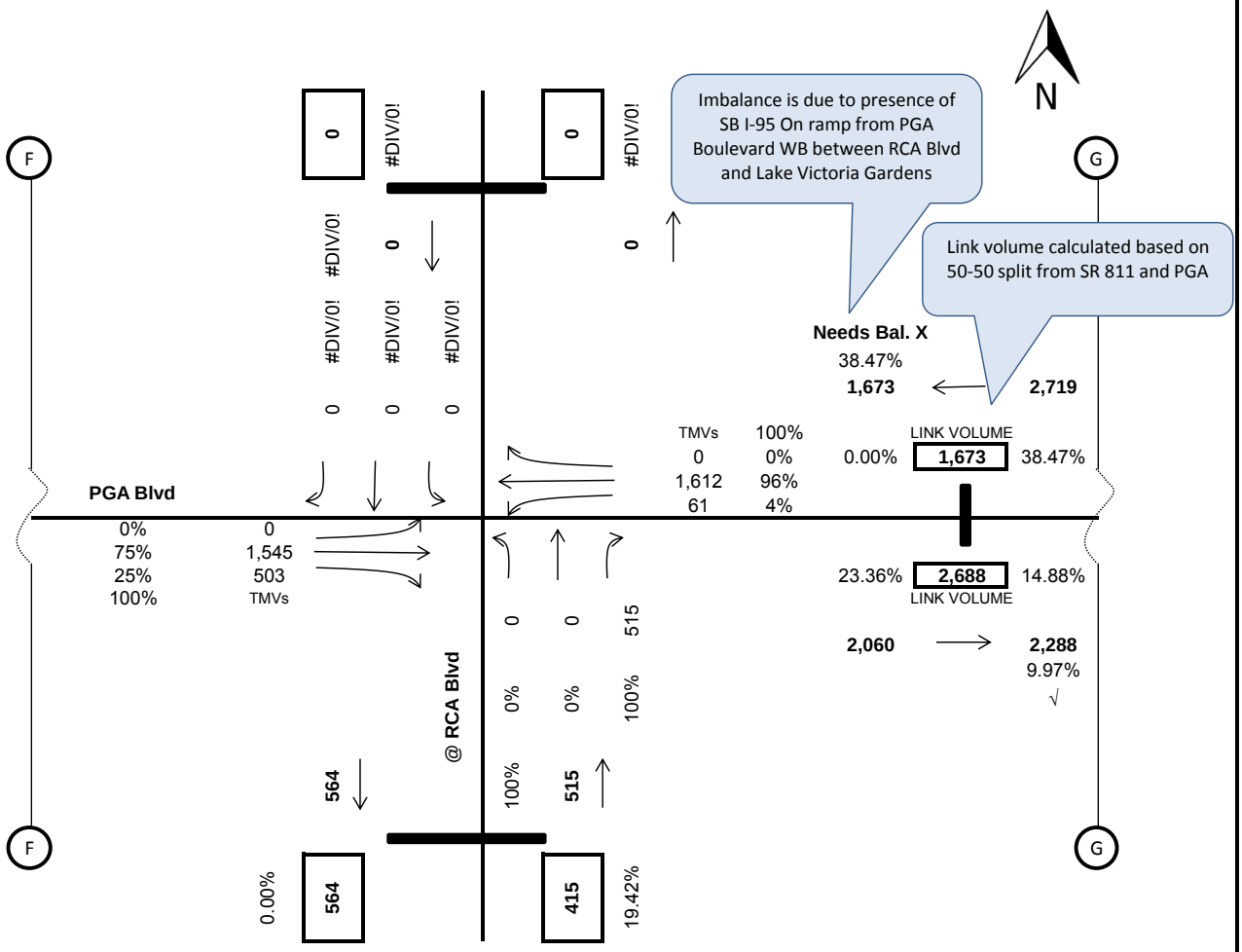
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard** **Turning Movement Volume Development** **2020 Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **6 of 8** *Date:* 9/24/15

@ RCA Blvd



Turning Movement Volumes
@ RCA Blvd

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,673**			**415**			**1,991**			**0**	
TM Pk Hr Counts	65	1718	0	0	0	415	0	1446	885	0	0	0
% Turns	4%	96%	0%	0%	0%	100%	0%	62%	38%	0%	0%	0%
Calc. Pk Hr Volumes	61	1612	0	0	0	415	0	1235	756	0	0	0
Adjustments						100		310	-253			
Bal Pk Hr Volumes	**61**	**1612**	**0**	**0**	**0**	**515**	**0**	**1545**	**503**	**0**	**0**	**0**

Adjustments were made to achieve balance between upstream and downstream intersection volumes as well as reasonable split between movements

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 → Turning Movement Volumes (Balanced)

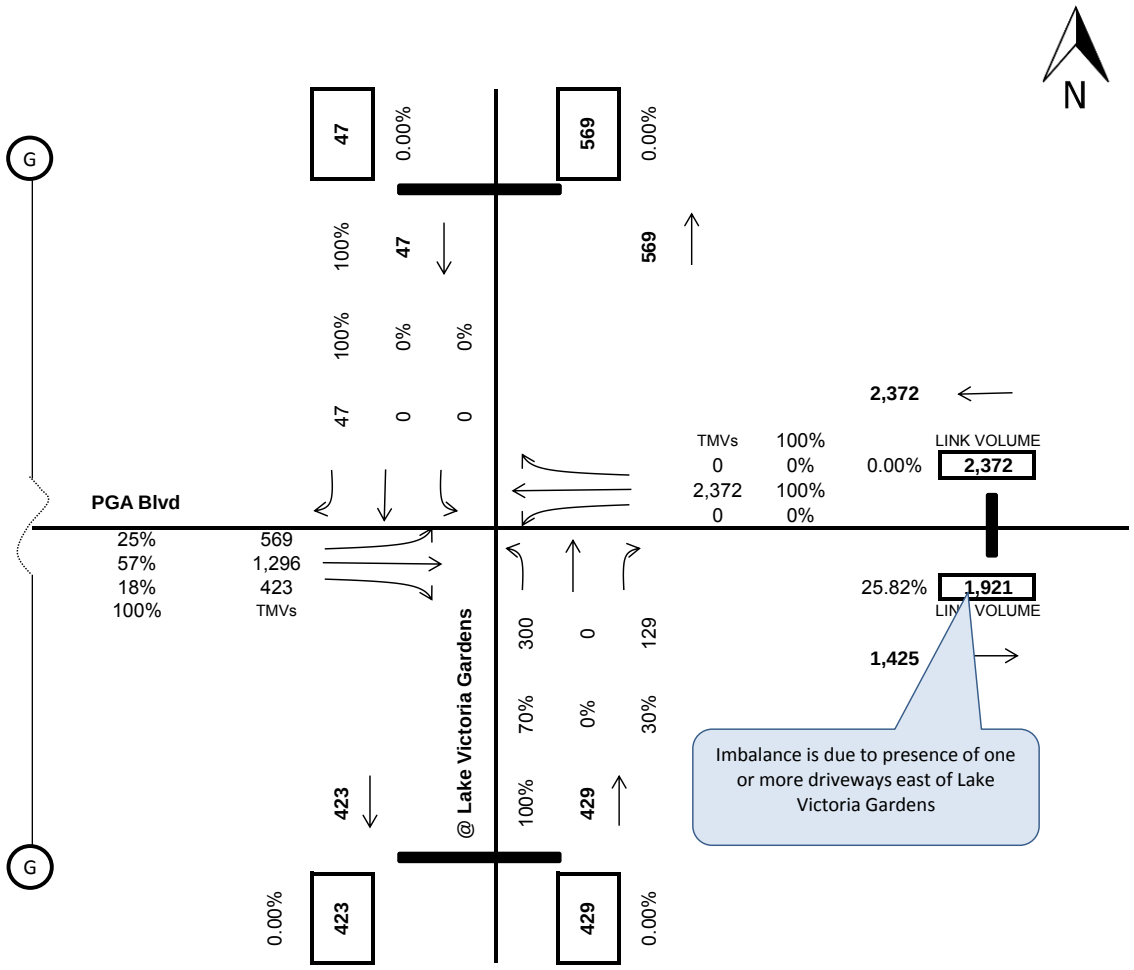
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard** **Turning Movement Volume Development** **2020 Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **7 of 8** *Date:* 9/24/15

@ Lake Victoria Gardens



Turning Movement Volumes
@ Lake Victoria Gardens

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**2,372**			**429**			**2,688**			**47**	
TM Pk Hr Counts	0	2485	0	300	0	129	507	1154	373	0	0	47
% Turns	0%	100%	0%	70%	0%	30%	25%	57%	18%	0%	0%	100%
Calc. Pk Hr Volumes	0	2372	0	300	0	129	670	1525	493	0	0	47
Adjustments							-101	-229	-70			
Bal Pk Hr Volumes	**0**	**2372**	**0**	**300**	**0**	**129**	**569**	**1296**	**423**	**0**	**0**	**47**

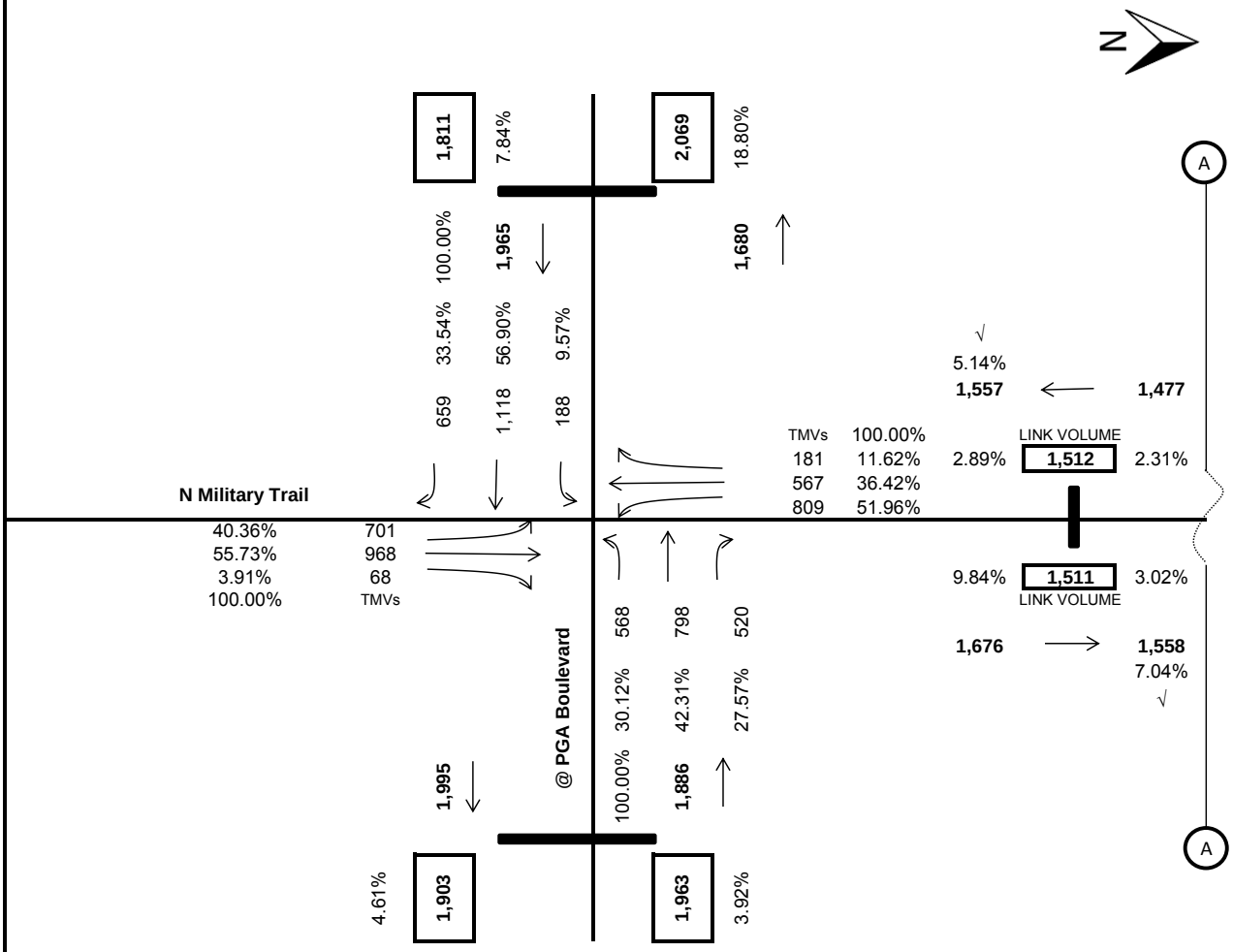
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard** **Turning Movement Volume Development** **2020 Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **8 of 8** *Date:* 9/24/15

@ PGA Boulevard



Turning Movement Volumes
@ PGA Boulevard

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes												
TM Pk Hr Counts												
% Turns												
Calc. Pk Hr Volumes												
Adjustments												
Bal Pk Hr Volumes	**809**	**567**	**181**	**568**	**798**	**520**	**701**	**968**	**68**	**188**	**1118**	**659**

LEGEND

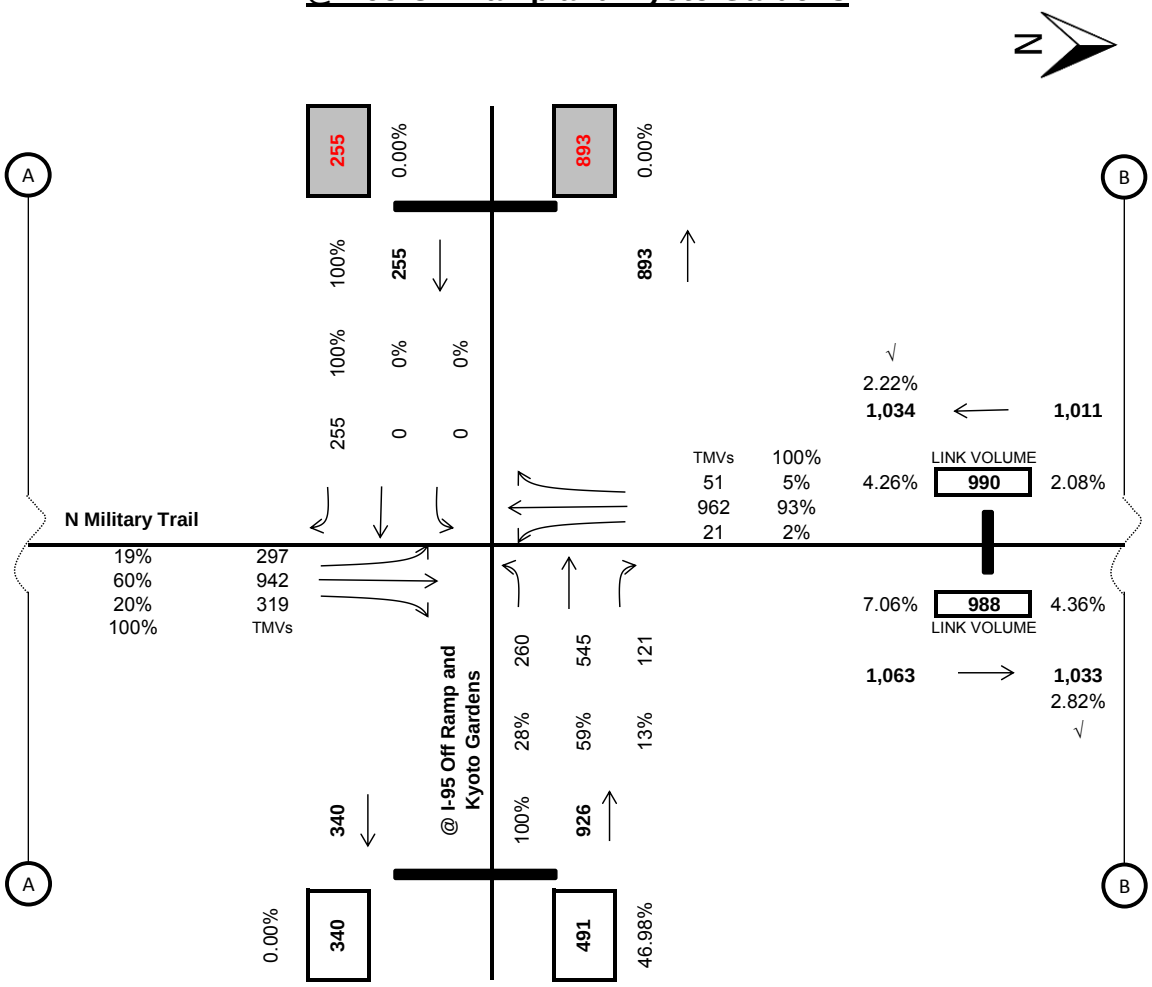
1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A / A	Match Line

For consistency, balanced peak hour volumes from major street arterial (aka PGA Boulevard) were used. See PGA Boulevard Arterial for details

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **N Military Trail** **Turning Movement Volume Development** **2020 Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **1 of 4** *Date:* 9/24/15

@ I-95 Off Ramp and Kyoto Gardens



Turning Movement Volumes
@ I-95 Off Ramp and Kyoto

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**990**			**491**			**1,511**			**255**	
TM Pk Hr Counts	40	1852	13	260	75	156	75	2095	581	0	0	85
% Turns	2%	97%	1%	53%	15%	32%	3%	76%	21%	0%	0%	100%
Calc. Pk Hr Volumes	21	962	7	260	75	156	41	1151	319	0	0	255
Adjustments			44		470	-35	256	-209				
Bal Pk Hr Volumes	**21**	**962**	**51**	**260**	**545**	**121**	**297**	**942**	**319**	**0**	**0**	**255**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 → — Turning Movement Volumes (Balanced)

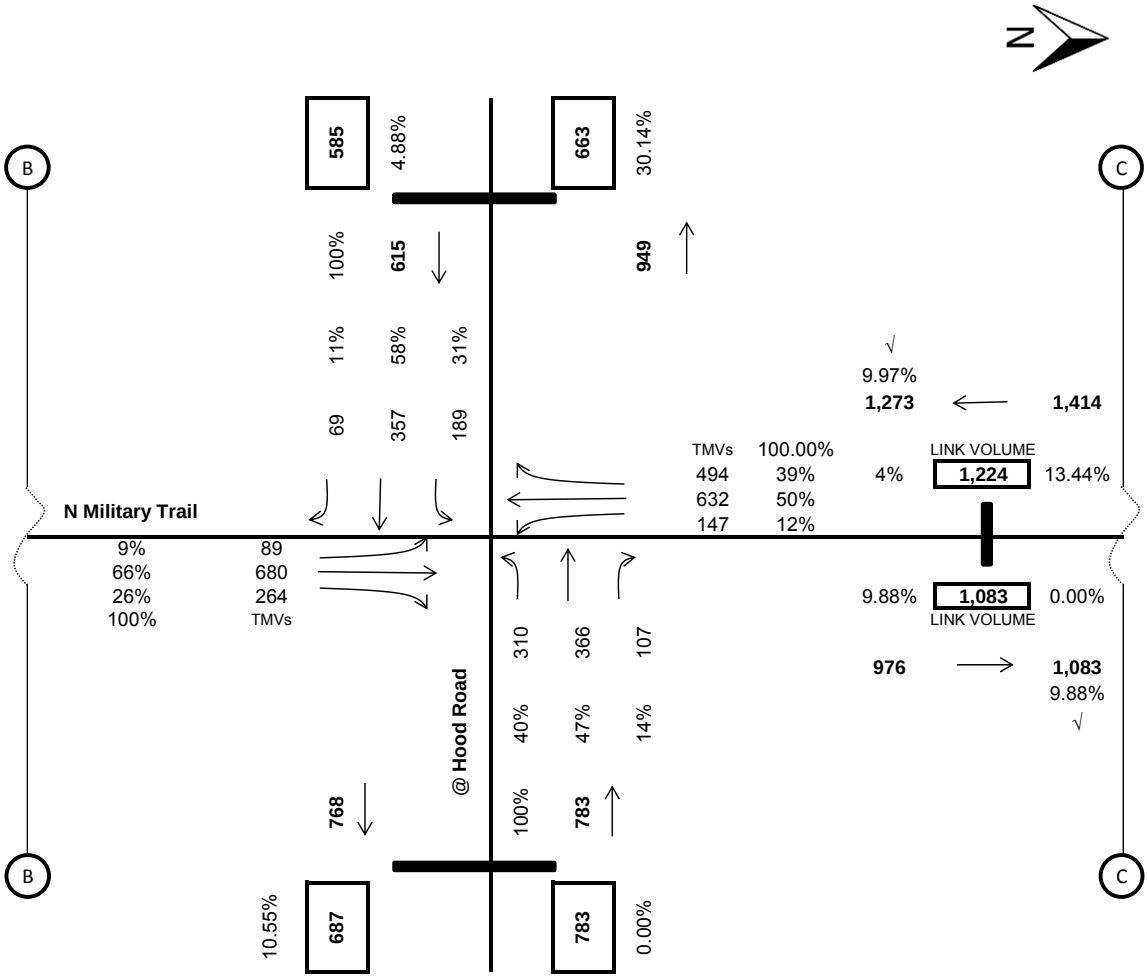
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard, Project Development & Environmental Study, FM No. 413265-1-22-01	*Exhibit Name:* **N Military Trail, Turning Movement Volume Development, 2020 Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **2 of 4** *Date:* 9/24/15

@ Hood Road



Turning Movement Volumes
@ Hood Road

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**1,224**			**783**			**988**			**585**		
TM Pk Hr Counts	212	911	713	670	835	188	191	1329	612	384	946	177
% Turns	12%	50%	39%	40%	49%	11%	9%	62%	29%	25%	63%	12%
Calc. Pk Hr Volumes	141	607	475	310	386	87	89	616	284	149	367	69
Adjustments	6	25	19		-20	20		64	-20	40	-10	
Bal Pk Hr Volumes	**147**	**632**	**494**	**310**	**366**	**107**	**89**	**680**	**264**	**189**	**357**	**69**

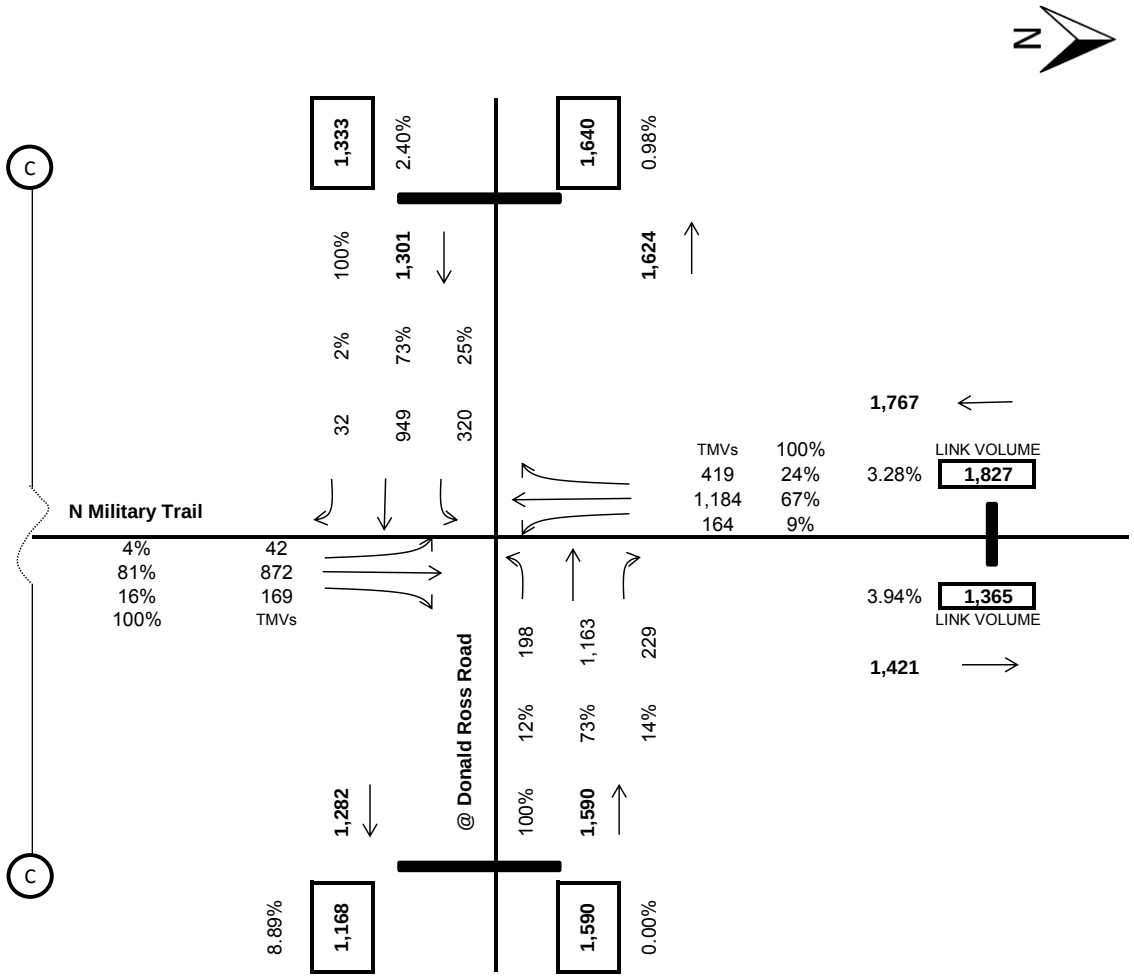
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66 →	Turning Movement Volumes (Balanced)
A … A	Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **N Military Trail** **Turning Movement Volume Development** **2020 Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **3 of 4** *Date:* 9/24/15

@ Donald Ross Road



Turning Movement Volumes
@ Donald Ross Road

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**1,827**			**1,590**			**1,083**			**1,333**		
TM Pk Hr Counts	155	1361	451	204	1091	242	39	1439	157	375	1016	36
% Turns	8%	69%	23%	13%	71%	16%	2%	88%	10%	26%	71%	3%
Calc. Pk Hr Volumes	144	1264	419	211	1129	250	26	953	104	350	949	34
Adjustments	20	-80		-13	34	-21	16	-81	65	-30		-2
Bal Pk Hr Volumes	**164**	**1184**	**419**	**198**	**1163**	**229**	**42**	**872**	**169**	**320**	**949**	**32**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

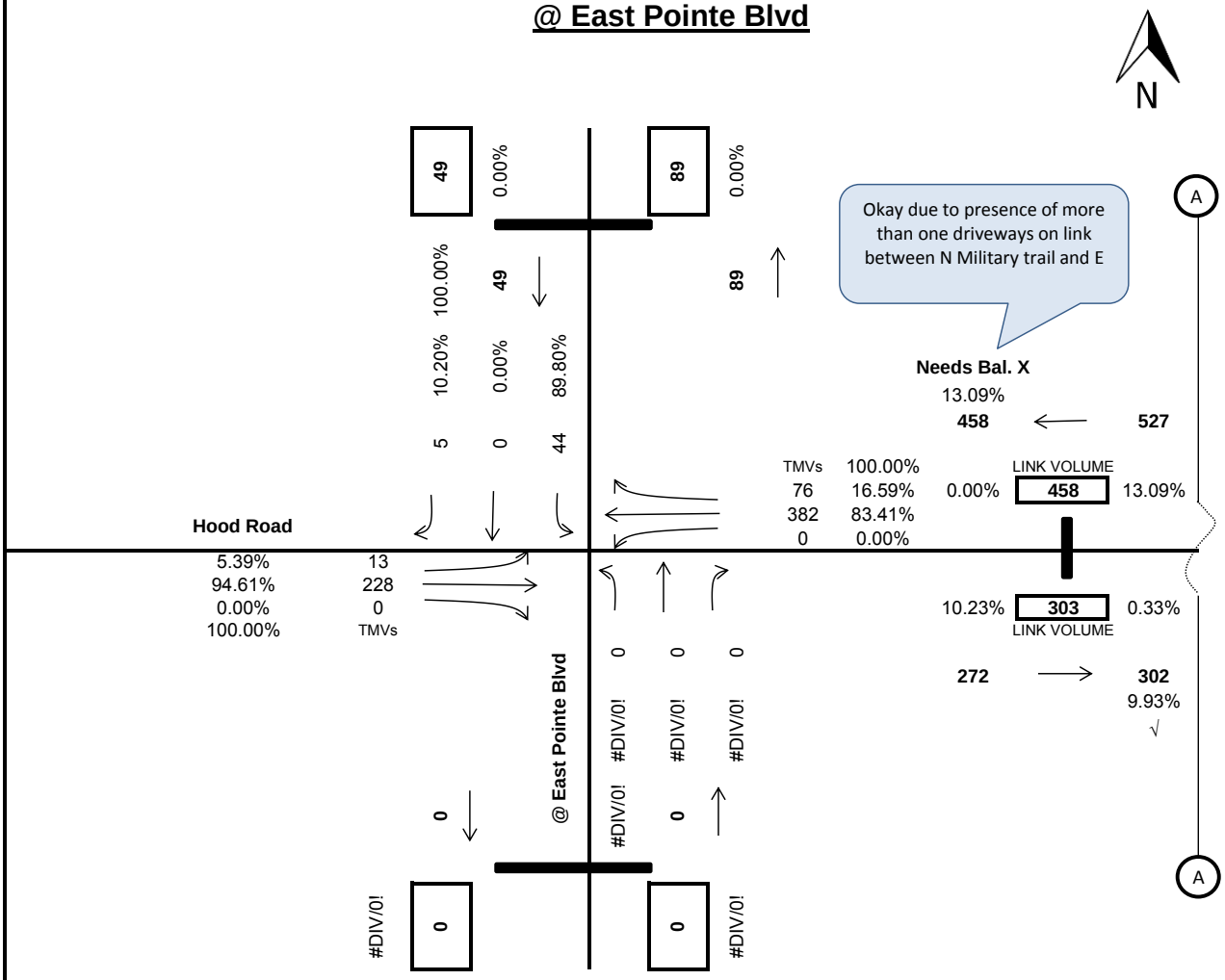
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **N Military Trail** **Turning Movement Volume Development** **2020 Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **4 of 4** *Date:* 9/24/15

@ East Pointe Blvd



Turning Movement Volumes
@ East Pointe Blvd

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**458**			**0**			**231**			**49**	
TM Pk Hr Counts	0	257	51	0	0	0	13	218	0	44	0	5
% Turns	0%	83%	17%	0%	0%	0%	6%	94%	0%	90%	0%	10%
Calc. Pk Hr Volumes	0	382	76	0	0	0	13	218	0	44	0	5
Adjustments								10				
Bal Pk Hr Volumes	**0**	**382**	**76**	**0**	**0**	**0**	**13**	**228**	**0**	**44**	**0**	**5**

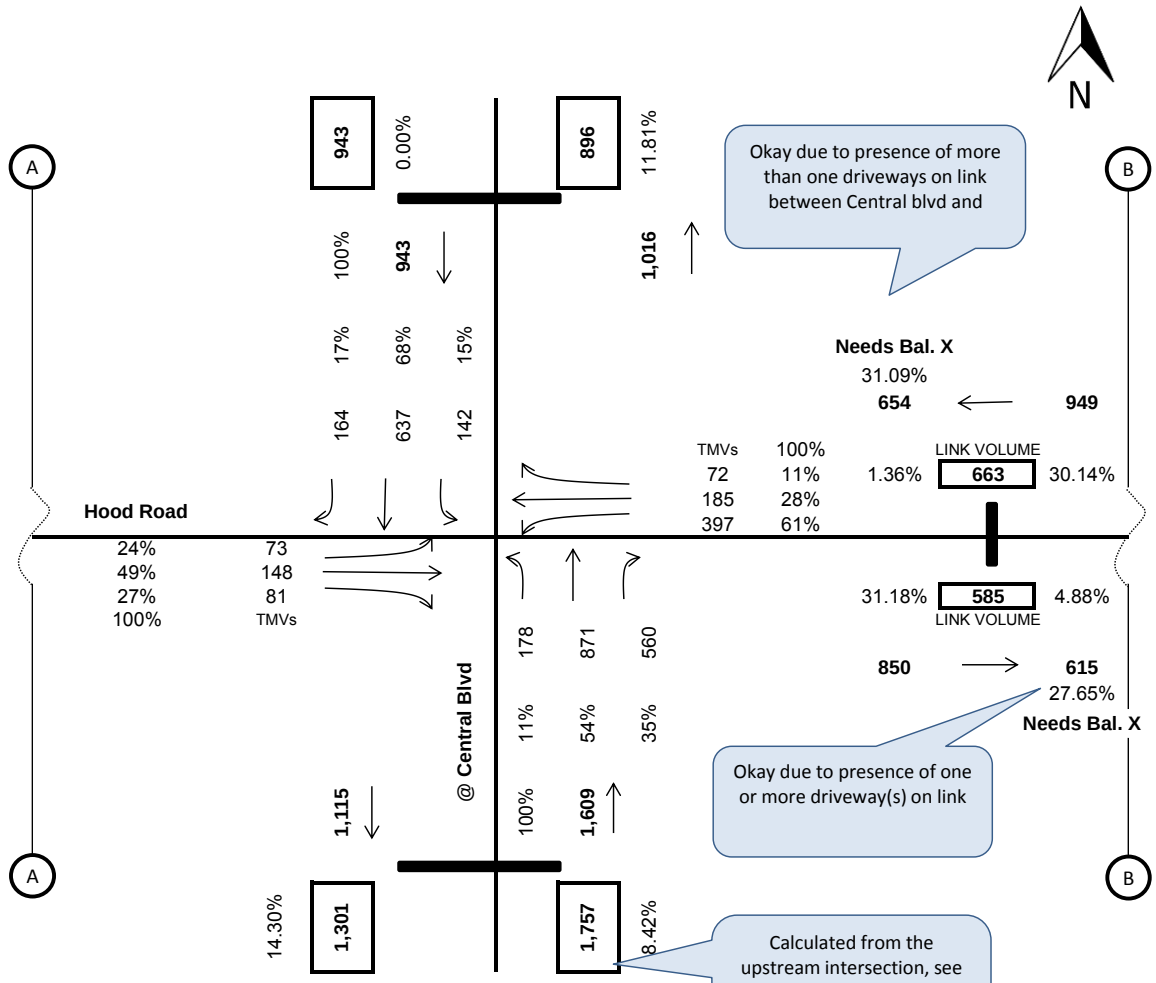
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66 →	Turning Movement Volumes (Balanced)
A … A	Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Hood Road** **Turning Movement Volume Development** **2020 Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **1 of 3** *Date:* 9/24/15

@ Central Blvd



Turning Movement Volumes
@ Central Blvd

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes												
TM Pk Hr Counts												
% Turns												
Calc. Pk Hr Volumes												
Adjustments												
Bal Pk Hr Volumes	**397**	**185**	**72**	**178**	**871**	**560**	**73**	**148**	**81**	**142**	**637**	**164**

LEGEND

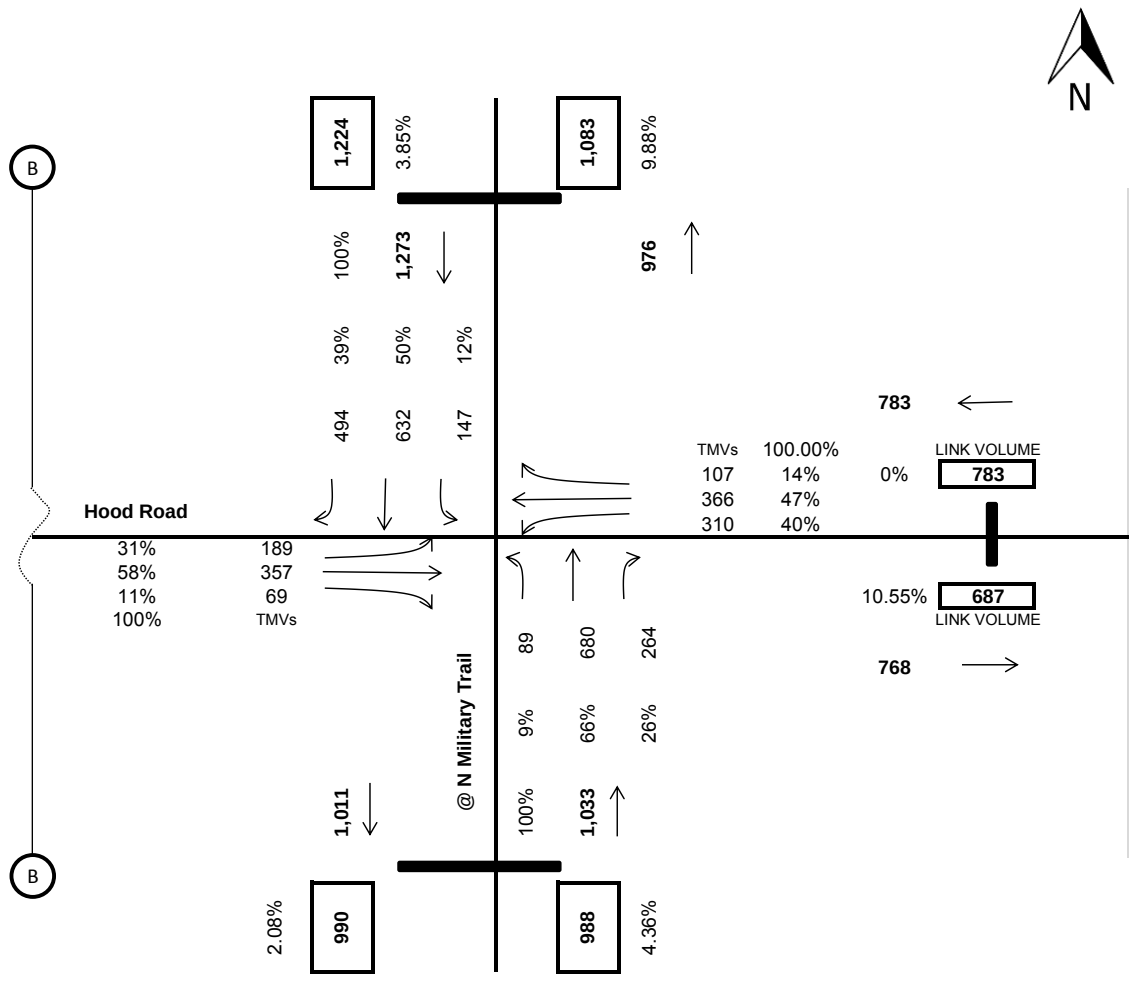
- 1,500 — Control Volumes (Peak Hour)*
- 1,300 — Link Volumes (Peak Hour)
- 66 — Turning Movement Volumes (Balanced)
- A … A — Match Line

For consistency, balanced peak hour volumes from major street arterial (aka Central Boulevard) were used. See Central Boulevard Arterial for details

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name:	Exhibit Name:		
SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	**Hood Road** **Turning Movement Volume Development** **2020 Build PM Peak Hour**	*Exhibit No:*	**TBD**
		Page No:	**2 of 3**
		Date:	9/24/15

@ N Military Trail



Turning Movement Volumes
@ N Military Trail

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes												
TM Pk Hr Counts												
% Turns												
Calc. Pk Hr Volumes												
Adjustments												
Bal Pk Hr Volumes	**310**	**366**	**107**	**89**	**680**	**264**	**189**	**357**	**69**	**147**	**632**	**494**

For consistency, balanced peak hour volumes from major street arterial (aka N Military Trail) were used. See N Military Trail Arterial for details

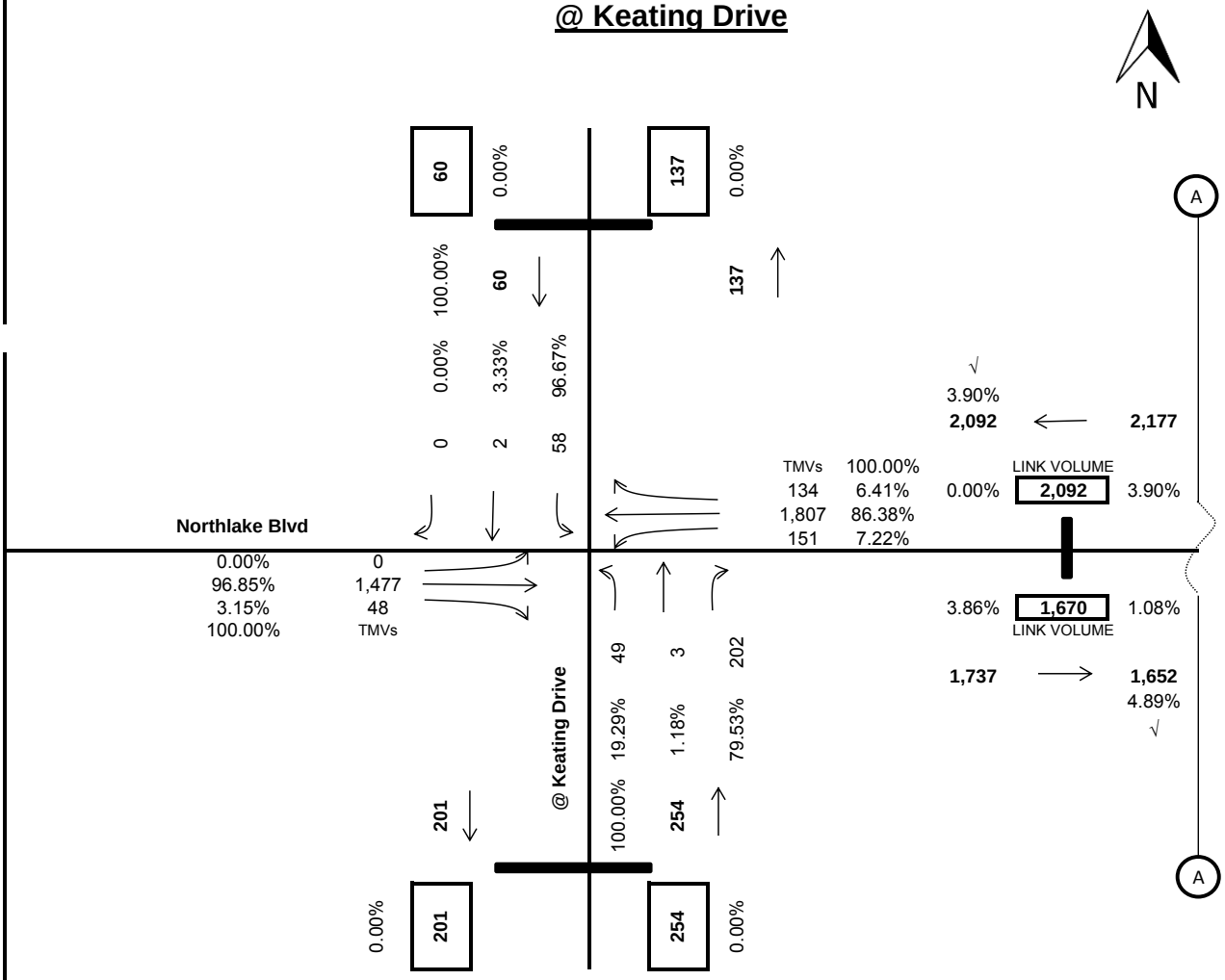
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Hood Road** **Turning Movement Volume Development** **2020 Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **3 of 3** *Date:* 9/24/15

@ Keating Drive



Turning Movement Volumes
@ Keating Drive

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**2,092**			**254**			**1,525**			**60**	
TM Pk Hr Counts	171	2043	151	49	3	202	0	1477	48	58	2	0
% Turns	7%	86%	6%	19%	1%	80%	0%	97%	3%	97%	3%	0%
Calc. Pk Hr Volumes	151	1807	134	49	3	202	0	1477	48	58	2	0
Adjustments												
Bal Pk Hr Volumes	**151**	**1807**	**134**	**49**	**3**	**202**	**0**	**1477**	**48**	**58**	**2**	**0**

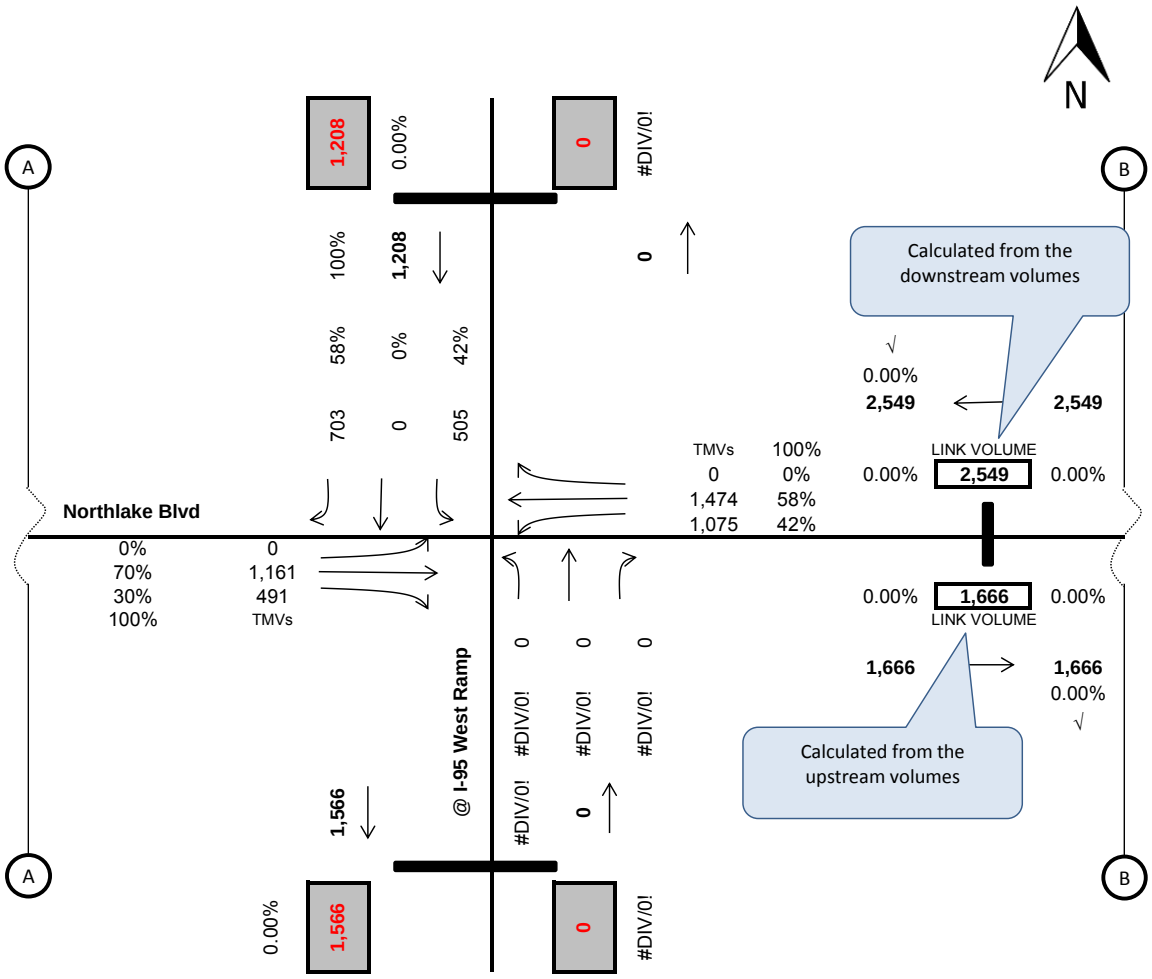
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66 →	Turning Movement Volumes (Balanced)
A … A	Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Northlake Boulevard** **Turning Movement Volume Development** **2020 Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **1 of 5** *Date:* 9/24/15

@ I-95 West Ramp



Turning Movement Volumes
@ I-95 West Ramp

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**2,549**			**0**			**1,670**			**1,208**	
TM Pk Hr Counts	1071	1379	0	0	0	0	0	1209	530	710	0	988
% Turns	44%	56%	0%	0%	0%	0%	0%	70%	30%	42%	0%	58%
Calc. Pk Hr Volumes	1114	1435	0	0	0	0	0	1161	509	505	0	703
Adjustments	-39	39							-18		0	
Bal Pk Hr Volumes	**1075**	**1474**	**0**	**0**	**0**	**0**	**0**	**1161**	**491**	**505**	**0**	**703**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

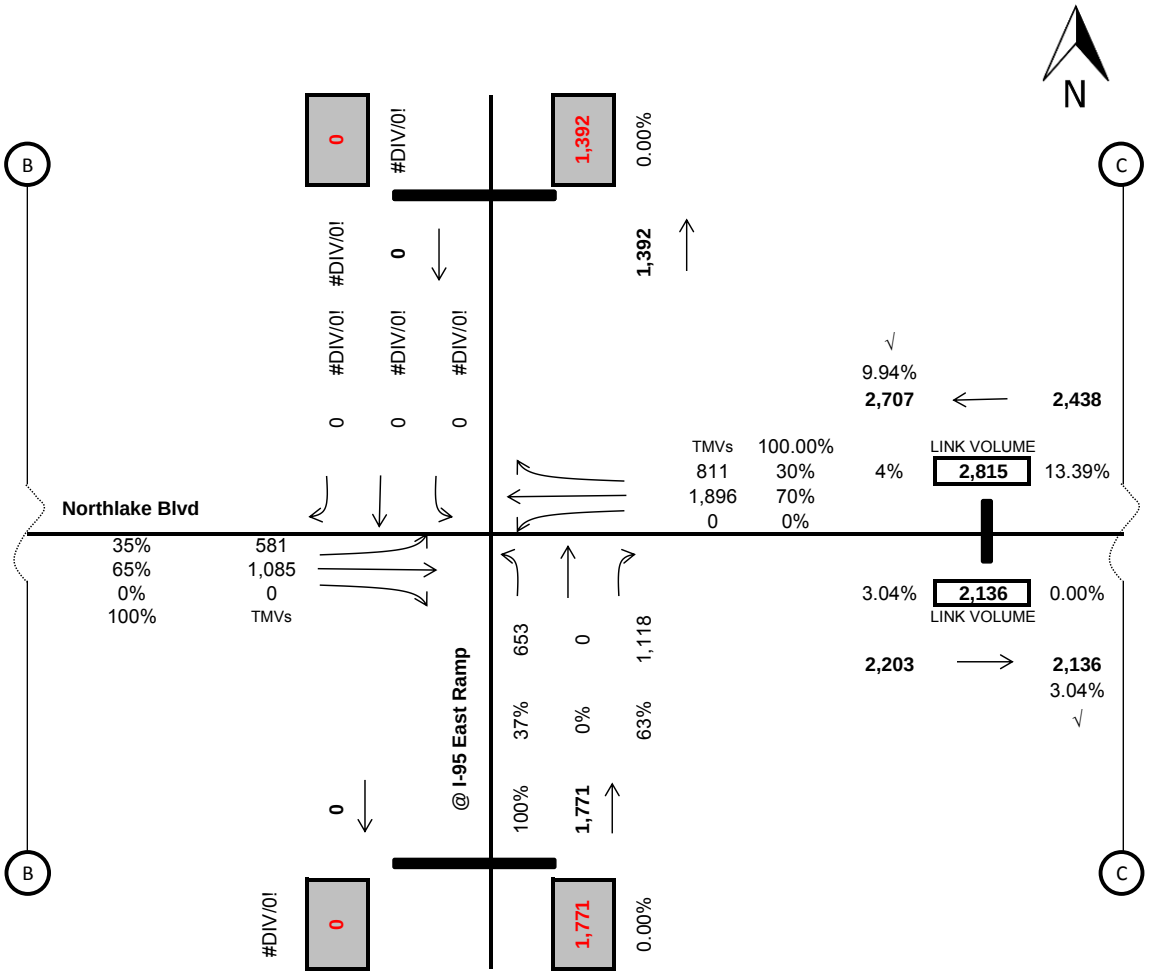
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Northlake Boulevard** **Turning Movement Volume Development** **2020 Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **2 of 5** *Date:* 9/24/15

@ I-95 East Ramp



Turning Movement Volumes
@ I-95 East Ramp

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**2,815**			**1,771**			**1,666**			**0**		
TM Pk Hr Counts	0	1795	865	655	0	1122	756	1164	0	0	0	0
% Turns	0%	67%	33%	37%	0%	63%	39%	61%	0%	0%	0%	0%
Calc. Pk Hr Volumes	0	1900	915	653	0	1118	656	1010	0	0	0	0
Adjustments		-4	-104	0	0		-75	75				
Bal Pk Hr Volumes	**0**	**1896**	**811**	**653**	**0**	**1118**	**581**	**1085**	**0**	**0**	**0**	**0**

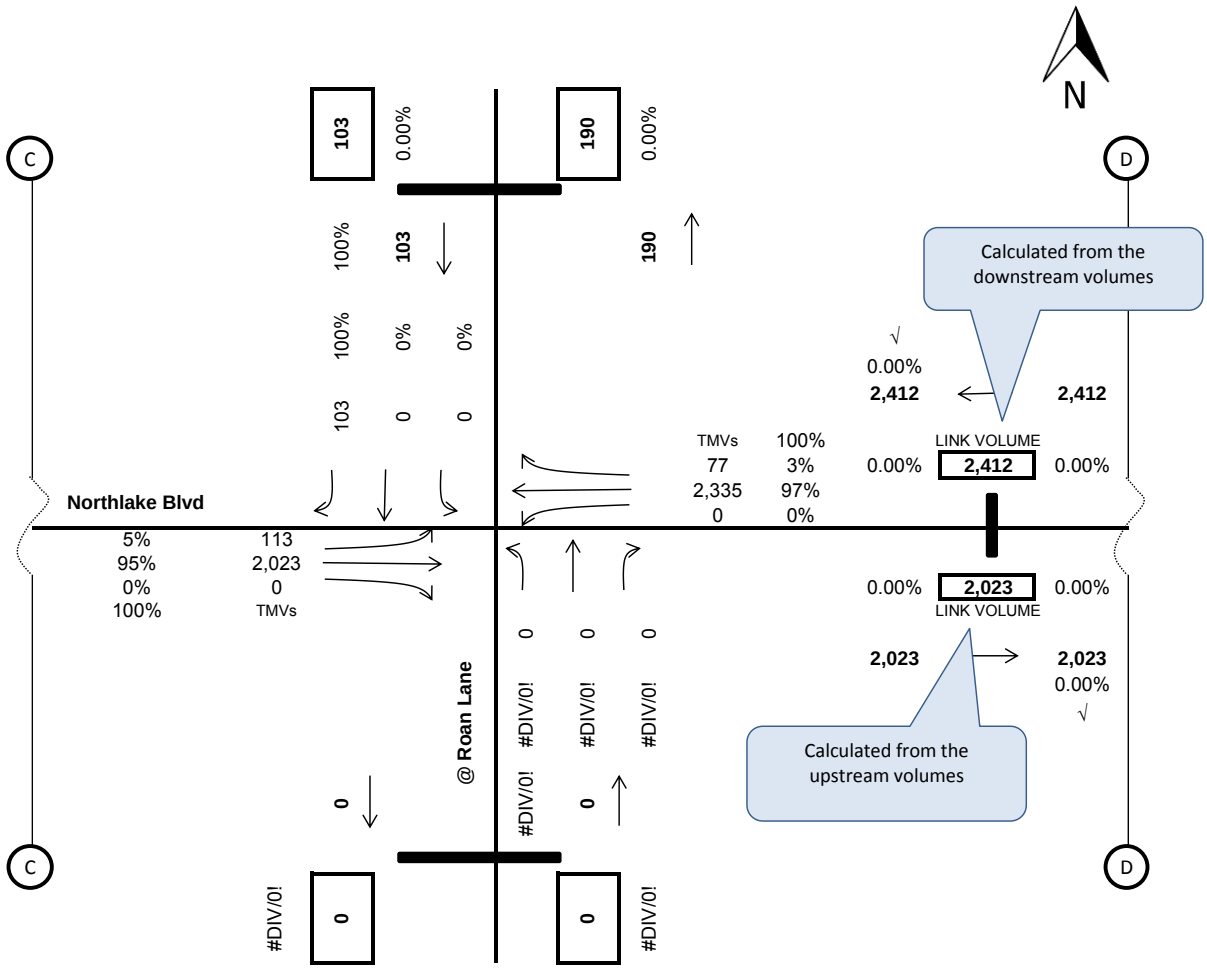
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Northlake Boulevard** **Turning Movement Volume Development** **2020 Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **3 of 5** *Date:* 9/24/15

@ Roan Lane



Turning Movement Volumes
@ Roan Lane

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**2,412**			**0**			**2,136**			**103**	
TM Pk Hr Counts	0	2749	91	0	0	0	127	2271	0	0	0	103
% Turns	0%	97%	3%	0%	0%	0%	5%	95%	0%	0%	0%	100%
Calc. Pk Hr Volumes	0	2335	77	0	0	0	113	2023	0	0	0	103
Adjustments												
Bal Pk Hr Volumes	**0**	**2335**	**77**	**0**	**0**	**0**	**113**	**2023**	**0**	**0**	**0**	**103**

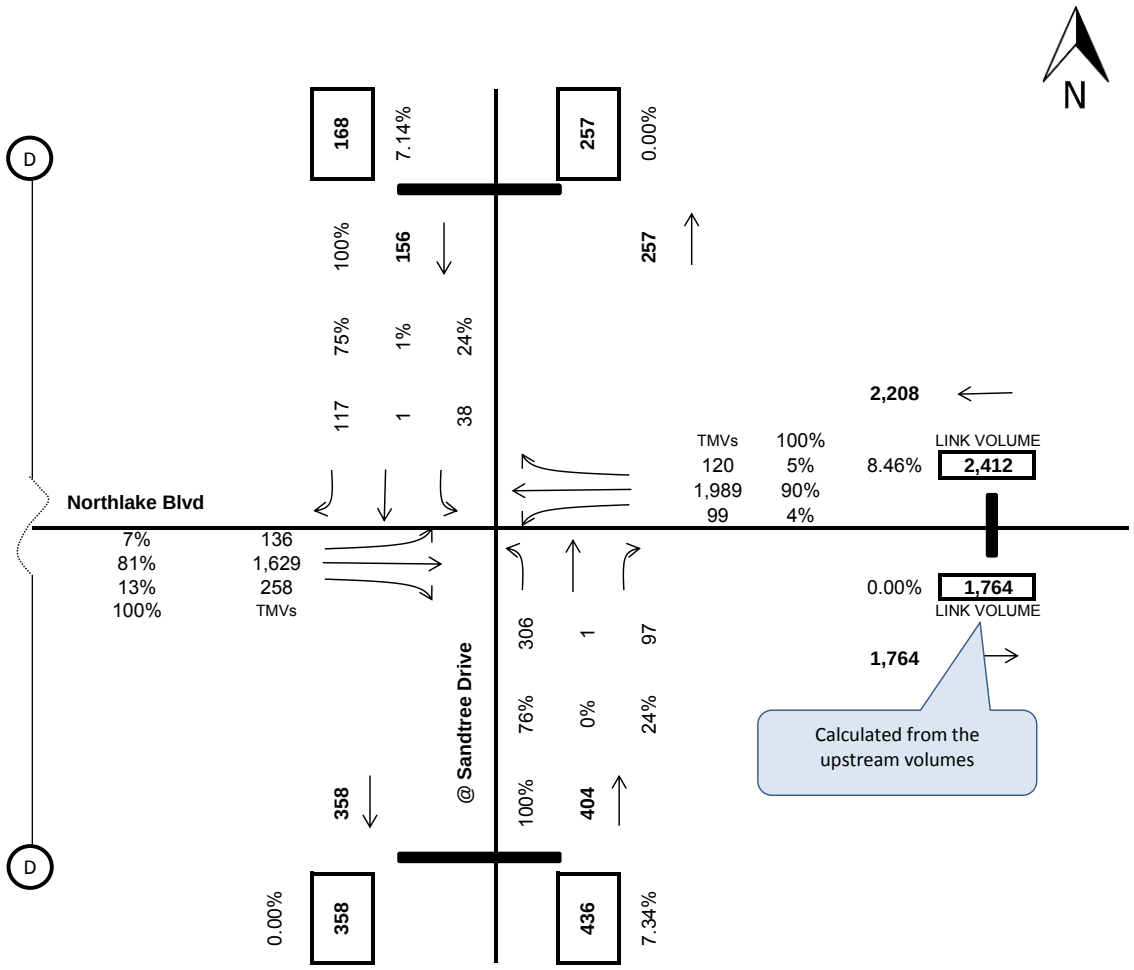
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Northlake Boulevard Turning Movement Volume Development 2020 Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **4 of 5** *Date:* 9/24/15

@ Sandtree Drive



Turning Movement Volumes
@ Sandtree Drive

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**2,412**			**436**			**2,023**			**168**	
TM Pk Hr Counts	99	2193	120	338	1	97	154	1841	291	38	1	129
% Turns	4%	91%	5%	78%	0%	22%	7%	81%	13%	23%	1%	77%
Calc. Pk Hr Volumes	99	2193	120	338	1	97	136	1629	258	38	1	129
Adjustments		-204		-32								-12
Bal Pk Hr Volumes	**99**	**1989**	**120**	**306**	**1**	**97**	**136**	**1629**	**258**	**38**	**1**	**117**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

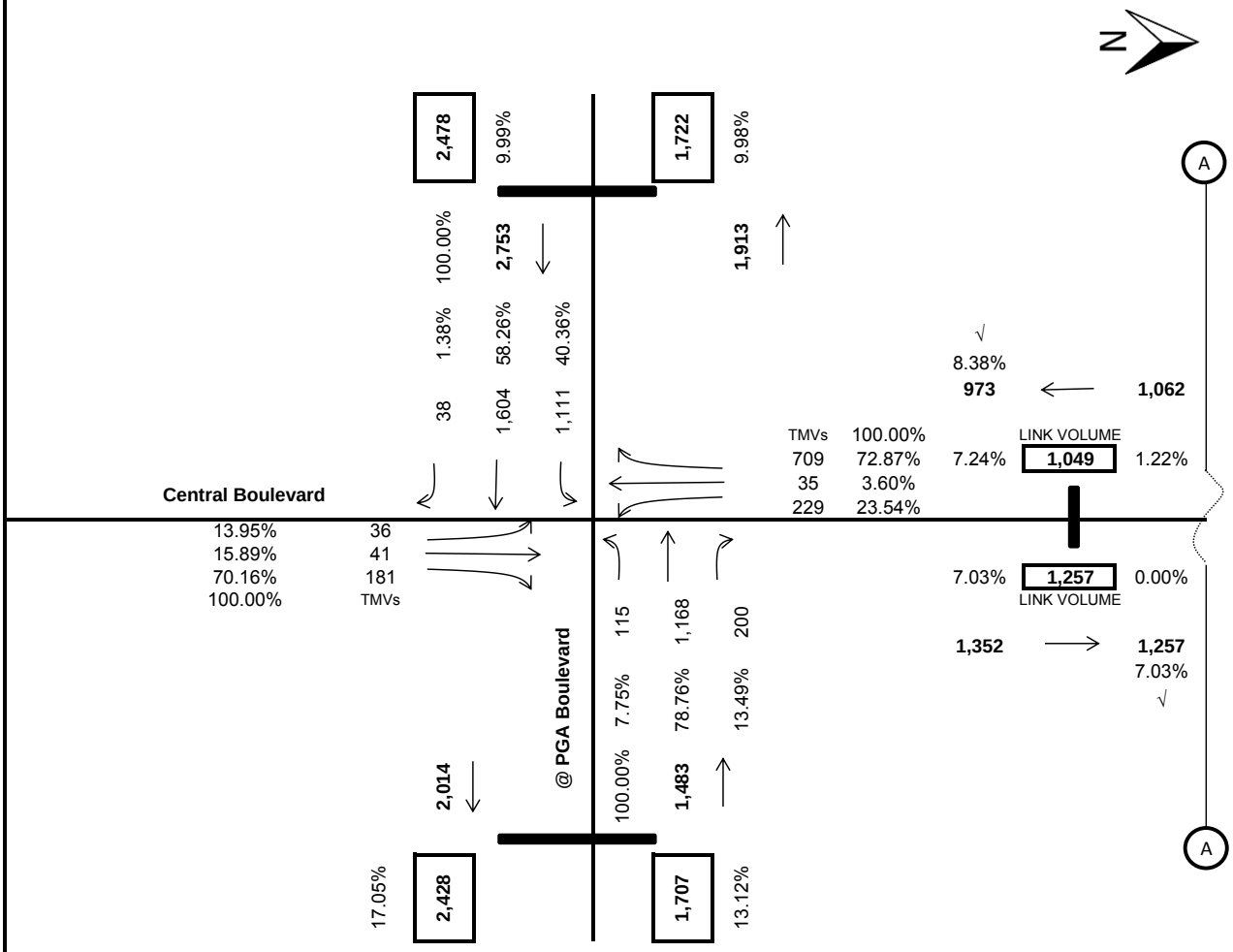
Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Northlake Boulevard Turning Movement Volume Development 2020 Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **5 of 5** *Date:* 9/24/15

APPENDIX AF

BALANCED TURNING MOVEMENT DEVELOPMENT SHEETS

2030 BUILD AM PEAK HOUR

@ PGA Boulevard



Turning Movement Volumes
@ PGA Boulevard

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes												
TM Pk Hr Counts												
% Turns												
Calc. Pk Hr Volumes												
Adjustments												
Bal Pk Hr Volumes	**229**	**35**	**709**	**115**	**1168**	**200**	**36**	**41**	**181**	**1111**	**1604**	**38**

LEGEND

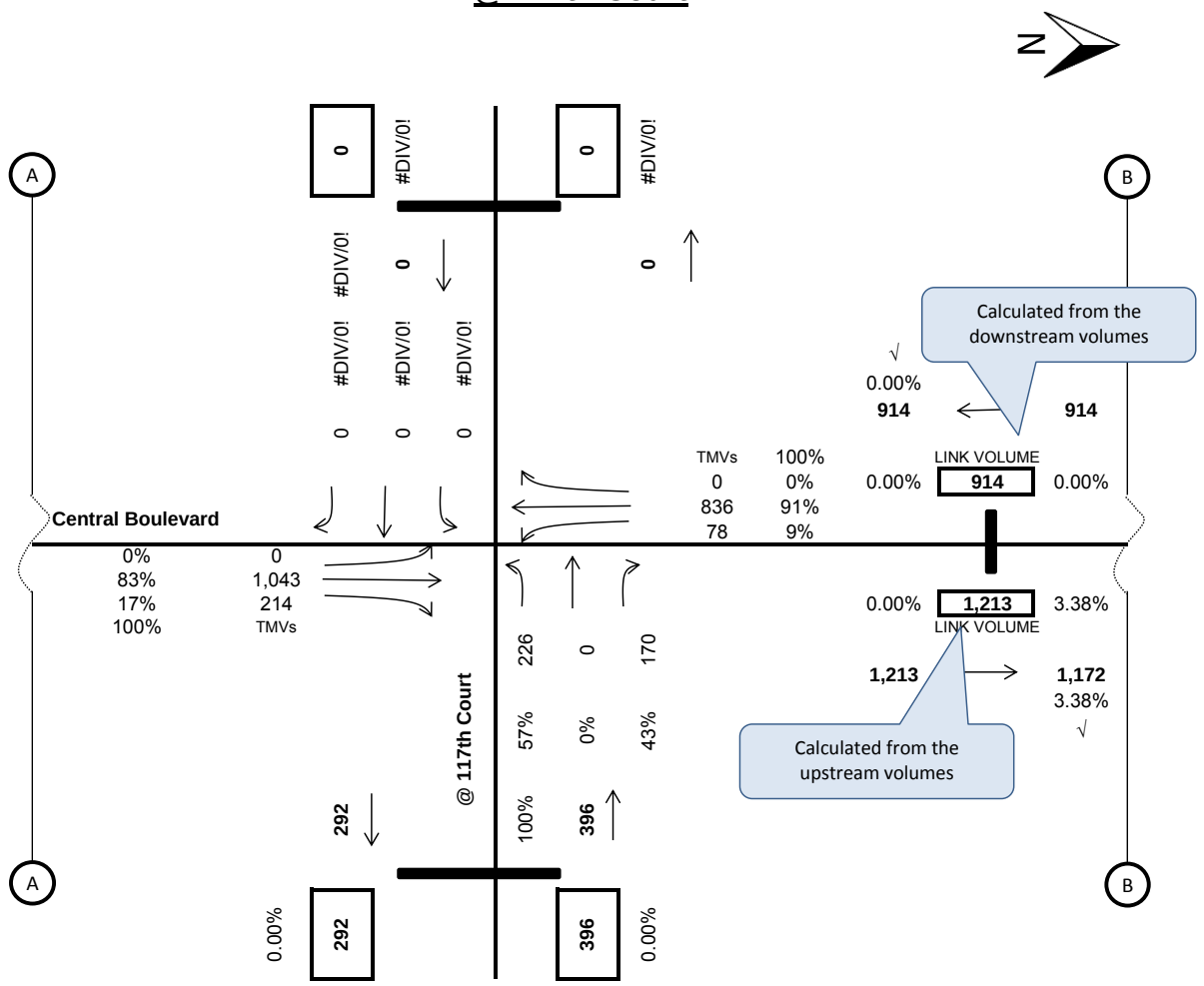
1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

For consistency, balanced peak hour volumes from major street arterial (aka PGA Boulevard) were used. See PGA Boulevard Arterial for details

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Central Boulevard** **Turning Movement Volume Development** **2030 Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **1 of 6** *Date:* 9/24/15

@ 117th Court



Turning Movement Volumes
@ 117th Court

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**914**			**396**			**1,257**			**0**		
TM Pk Hr Counts	121	1300	0	226	0	170	0	1193	245	0	0	0
% Turns	9%	91%	0%	57%	0%	43%	0%	83%	17%	0%	0%	0%
Calc. Pk Hr Volumes	78	836	0	226	0	170	0	1043	214	0	0	0
Adjustments												
Bal Pk Hr Volumes	**78**	**836**	**0**	**226**	**0**	**170**	**0**	**1043**	**214**	**0**	**0**	**0**

1230
1230

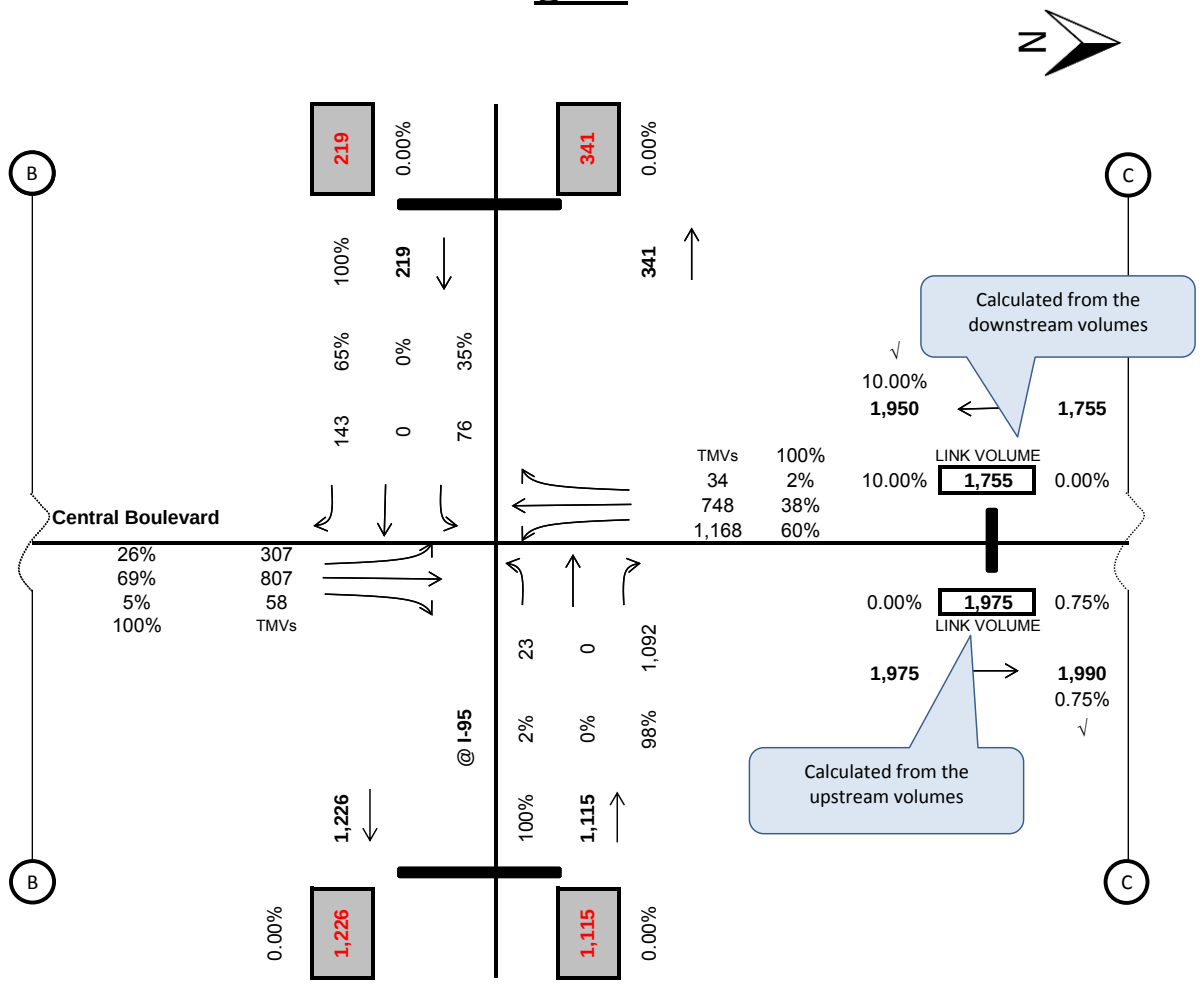
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Central Boulevard** **Turning Movement Volume Development** **2030 Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **2 of 6** *Date:* 9/24/15

@ I-95



Turning Movement Volumes
@ I-95

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**1,755**			**1,115**			**1,213**			**219**		
TM Pk Hr Counts	1587	1226	65	30	0	1449	458	1033	61	117	0	220
% Turns	55%	43%	2%	2%	0%	98%	30%	67%	4%	35%	0%	65%
Calc. Pk Hr Volumes	968	748	40	23	0	1092	358	807	48	76	0	143
Adjustments	200		-6				-51		10			
Bal Pk Hr Volumes	**1168**	**748**	**34**	**23**	**0**	**1092**	**307**	**807**	**58**	**76**	**0**	**143**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

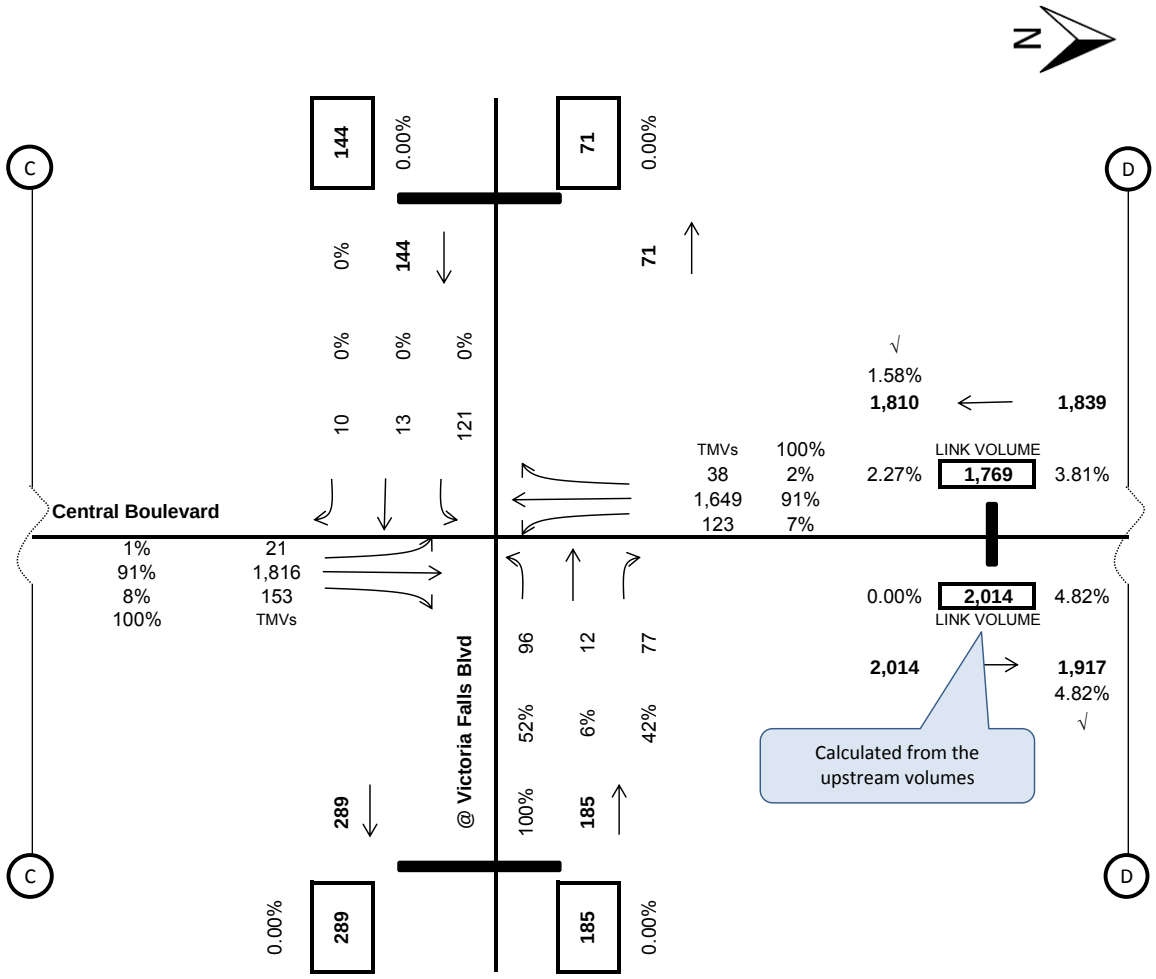
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name:	Exhibit Name:		
SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	**Central Boulevard** **Turning Movement Volume Development** **2030 Build AM Peak Hour**	*Exhibit No:*	**TBD**
		Page No:	**3 of 6**
		Date:	9/24/15

@ Victoria Falls Blvd



Turning Movement Volumes
@ Victoria Falls Blvd

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,769**			**185**			**1,975**			**144**	
TM Pk Hr Counts	210	2751	65	96	12	77	27	2287	195	121	13	10
% Turns	7%	91%	2%	52%	6%	42%	1%	91%	8%	84%	9%	7%
Calc. Pk Hr Volumes	123	1608	38	96	12	77	21	1800	153	121	13	10
Adjustments		41						16				
Bal Pk Hr Volumes	**123**	**1649**	**38**	**96**	**12**	**77**	**21**	**1816**	**153**	**121**	**13**	**10**

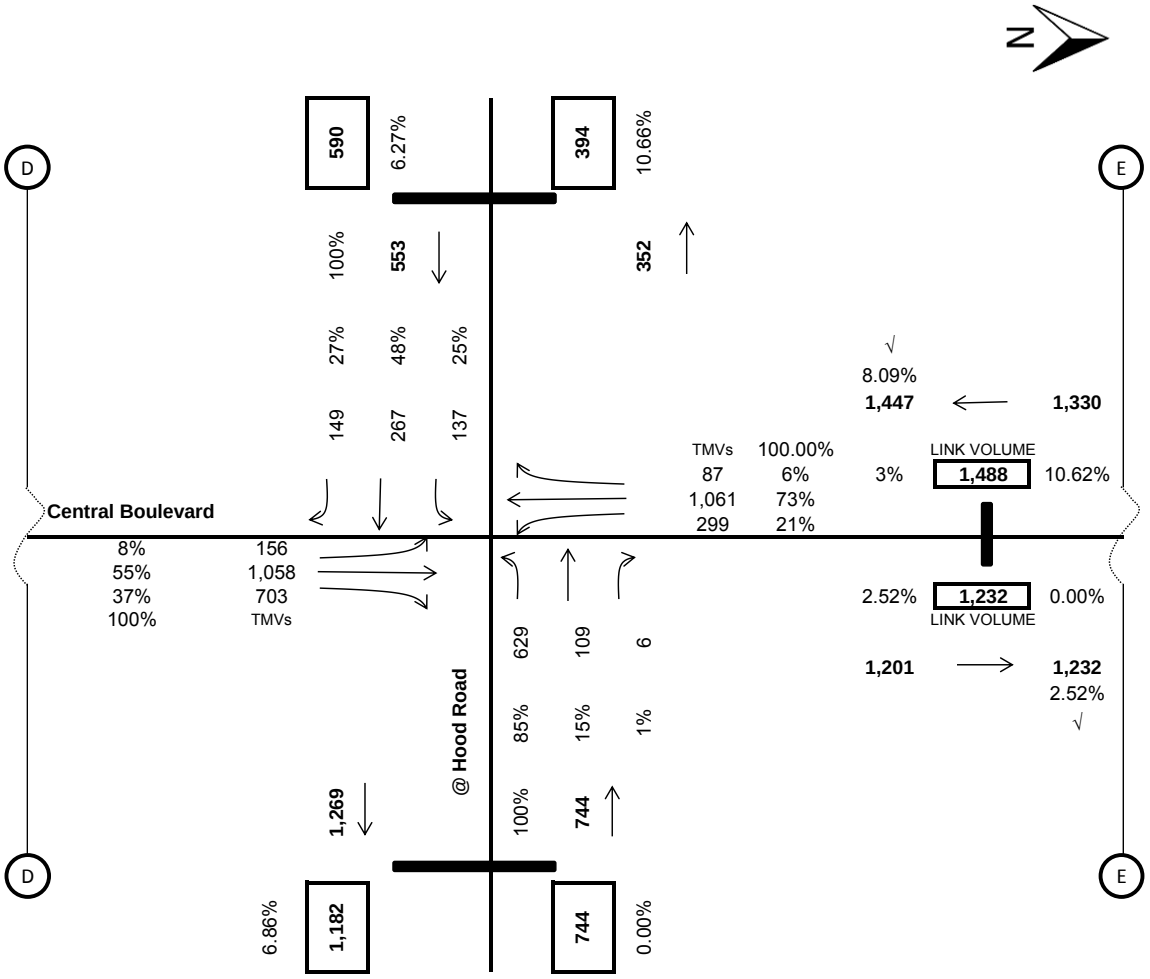
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A … A	Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Central Boulevard Turning Movement Volume Development 2030 Build AM Peak Hour**	*Exhibit No:* **TBD**
		Page No: **4 of 6**
		Date: 9/24/15

@ Hood Road



Turning Movement Volumes
@ Hood Road

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**1,488**			**744**			**2,014**			**590**		
TM Pk Hr Counts	455	1420	117	1241	215	11	183	1241	939	275	610	300
% Turns	23%	71%	6%	85%	15%	1%	8%	53%	40%	23%	51%	25%
Calc. Pk Hr Volumes	340	1061	87	629	109	6	156	1058	800	137	304	149
Adjustments	-41								-97		-37	
Bal Pk Hr Volumes	**299**	**1061**	**87**	**629**	**109**	**6**	**156**	**1058**	**703**	**137**	**267**	**149**

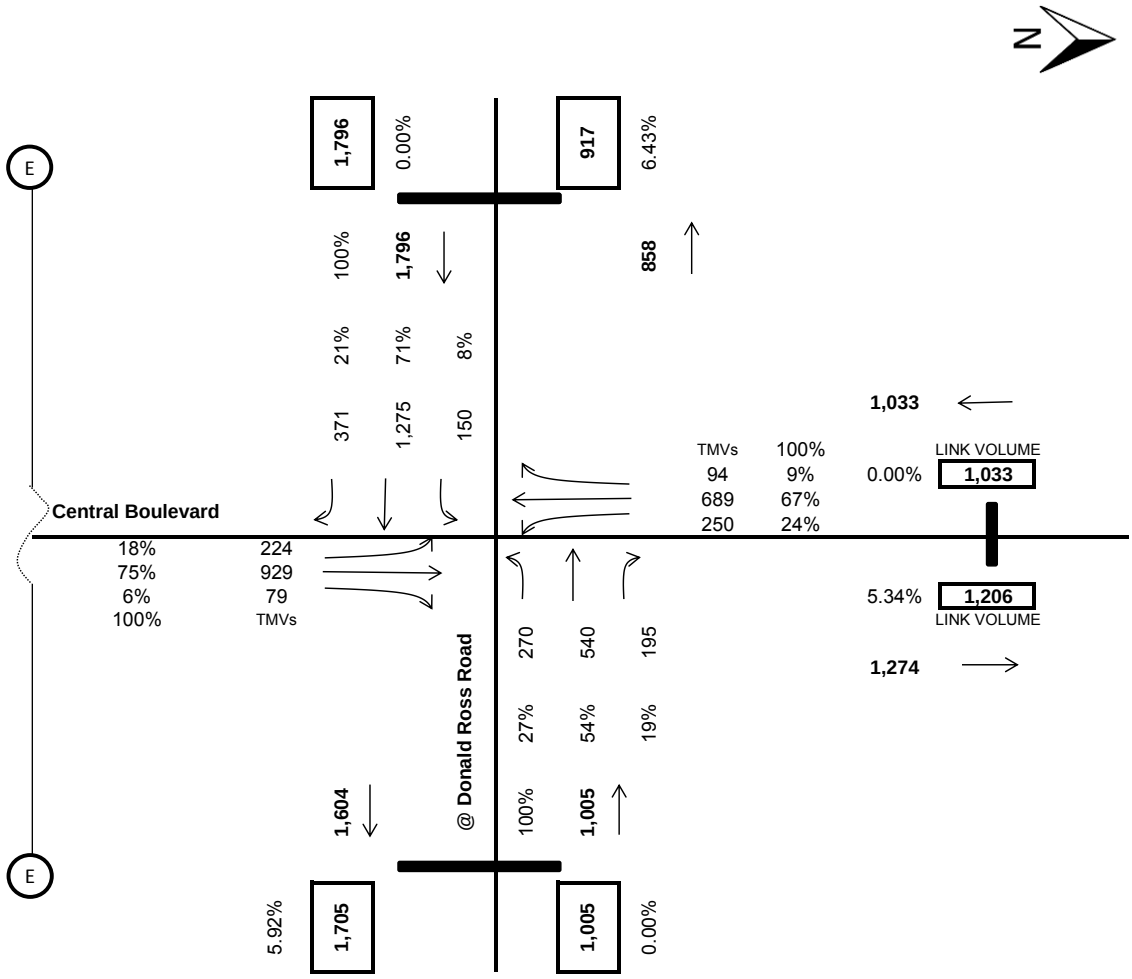
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Central Boulevard Turning Movement Volume Development 2030 Build AM Peak Hour**	*Exhibit No:* **TBD**
		Page No: **5 of 6**
		Date: 9/24/15

@ Donald Ross Road



Turning Movement Volumes
@ Donald Ross Road

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**1,033**			**1,005**			**1,232**			**1,796**		
TM Pk Hr Counts	598	1651	226	354	708	256	327	1354	115	115	979	285
% Turns	24%	67%	9%	27%	54%	19%	18%	75%	6%	8%	71%	21%
Calc. Pk Hr Volumes	250	689	94	270	540	195	224	929	79	150	1275	371
Adjustments												
Bal Pk Hr Volumes	**250**	**689**	**94**	**270**	**540**	**195**	**224**	**929**	**79**	**150**	**1275**	**371**

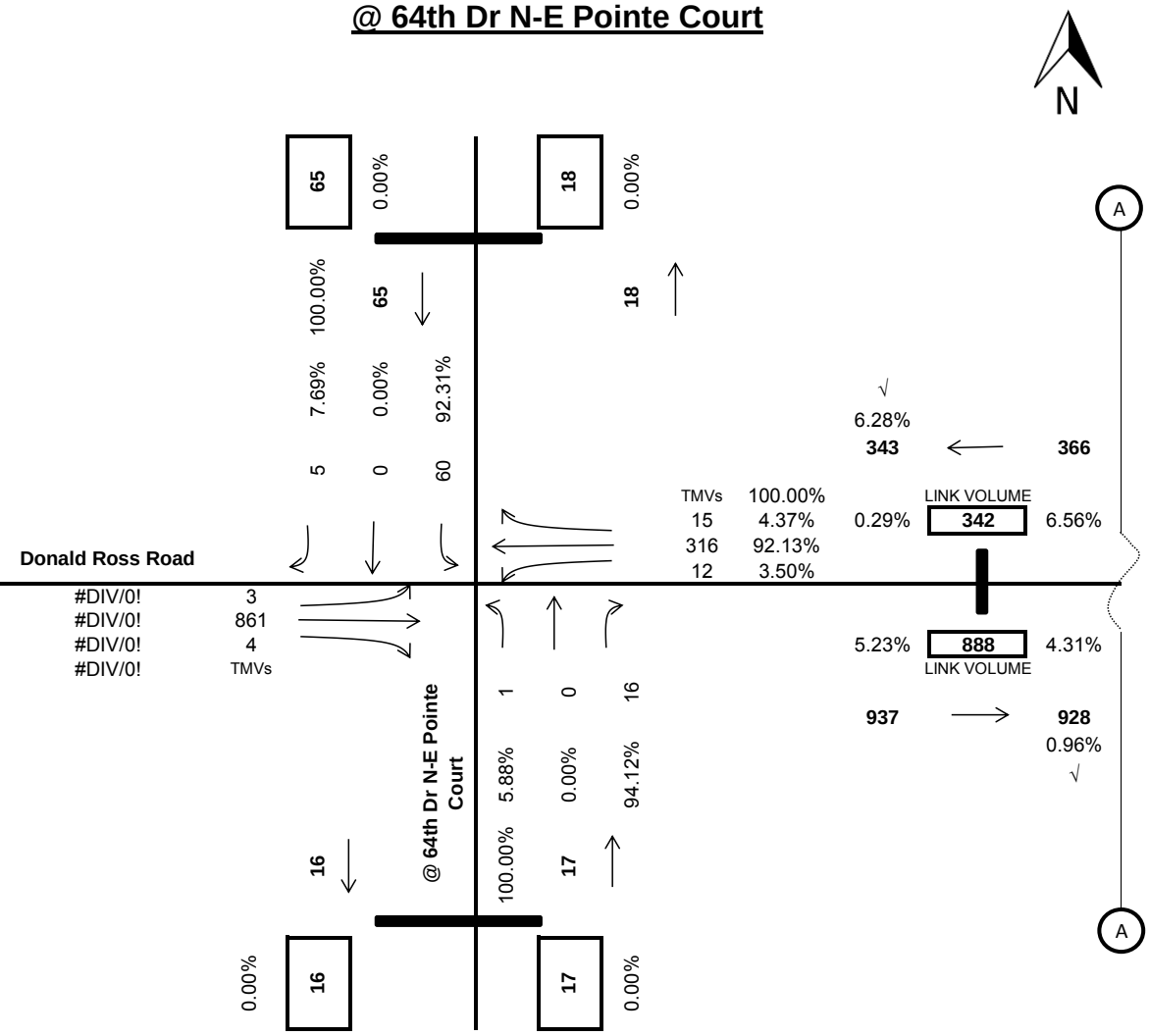
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A … A	Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Central Boulevard** **Turning Movement Volume Development** **2030 Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **6 of 6** *Date:* 9/24/15

@ 64th Dr N-E Pointe Court



Turning Movement Volumes
@ 64th Dr N-E Pointe Court

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**342**			**17**			**868**			**65**	
TM Pk Hr Counts	14	399	19	1	0	16	3	861	4	60	0	5
% Turns	3%	92%	4%	6%	0%	94%	0%	99%	0%	92%	0%	8%
Calc. Pk Hr Volumes	12	316	15	1	0	16	3	861	4	60	0	5
Adjustments												
Bal Pk Hr Volumes	**12**	**316**	**15**	**1**	**0**	**16**	**3**	**861**	**4**	**60**	**0**	**5**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

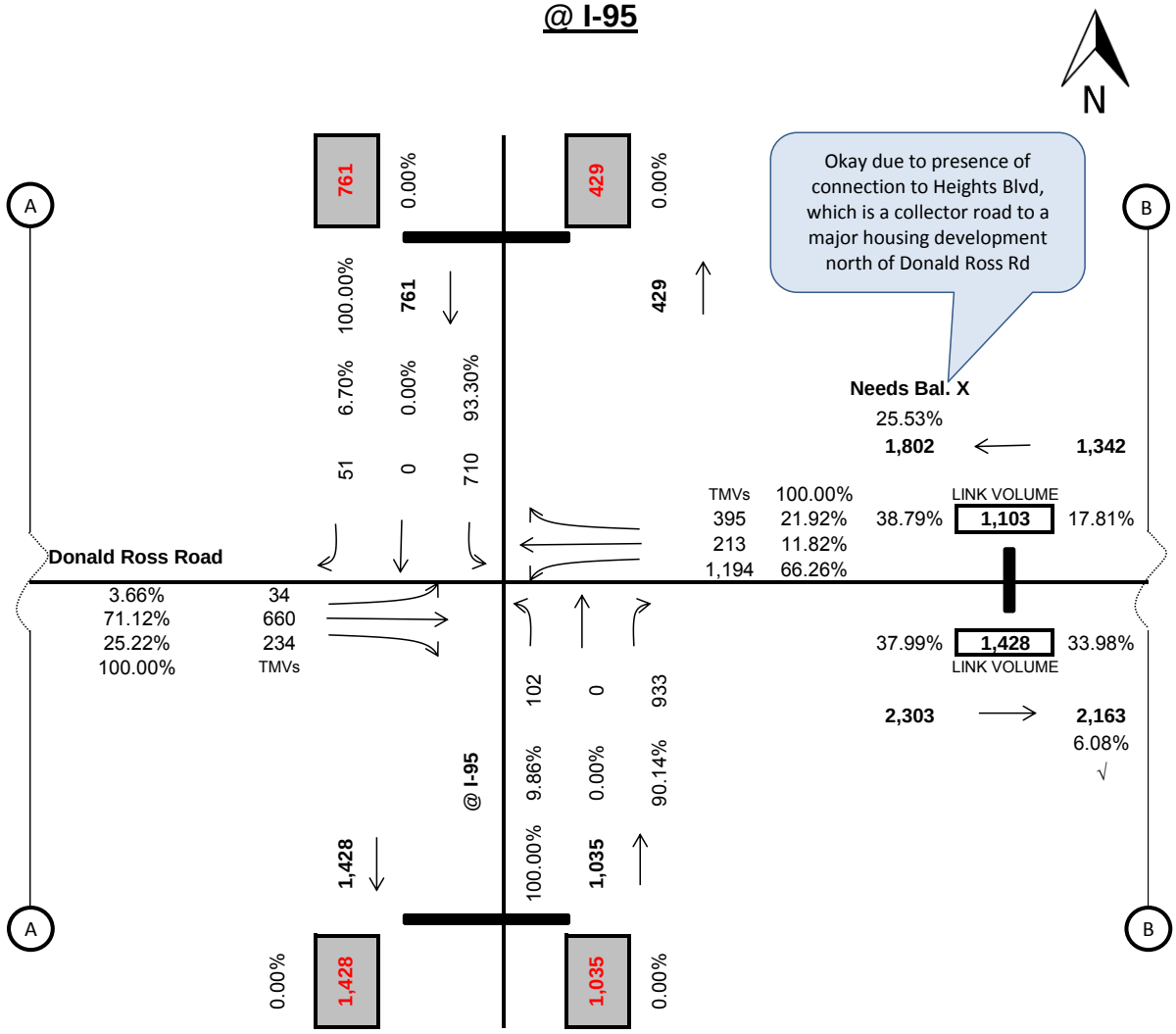
66 → — Turning Movement Volumes (Balanced)

A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

@ I-95



Turning Movement Volumes
@ I-95

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,103**			**1,035**			**888**			**761**	
TM Pk Hr Counts	1165	350	297	128	0	1172	39	1077	333	647	0	46
% Turns	64%	19%	16%	10%	0%	90%	3%	74%	23%	93%	0%	7%
Calc. Pk Hr Volumes	709	213	181	102	0	933	24	660	204	710	0	51
Adjustments	485		214				10		30			
Bal Pk Hr Volumes	**1194**	**213**	**395**	**102**	**0**	**933**	**34**	**660**	**234**	**710**	**0**	**51**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

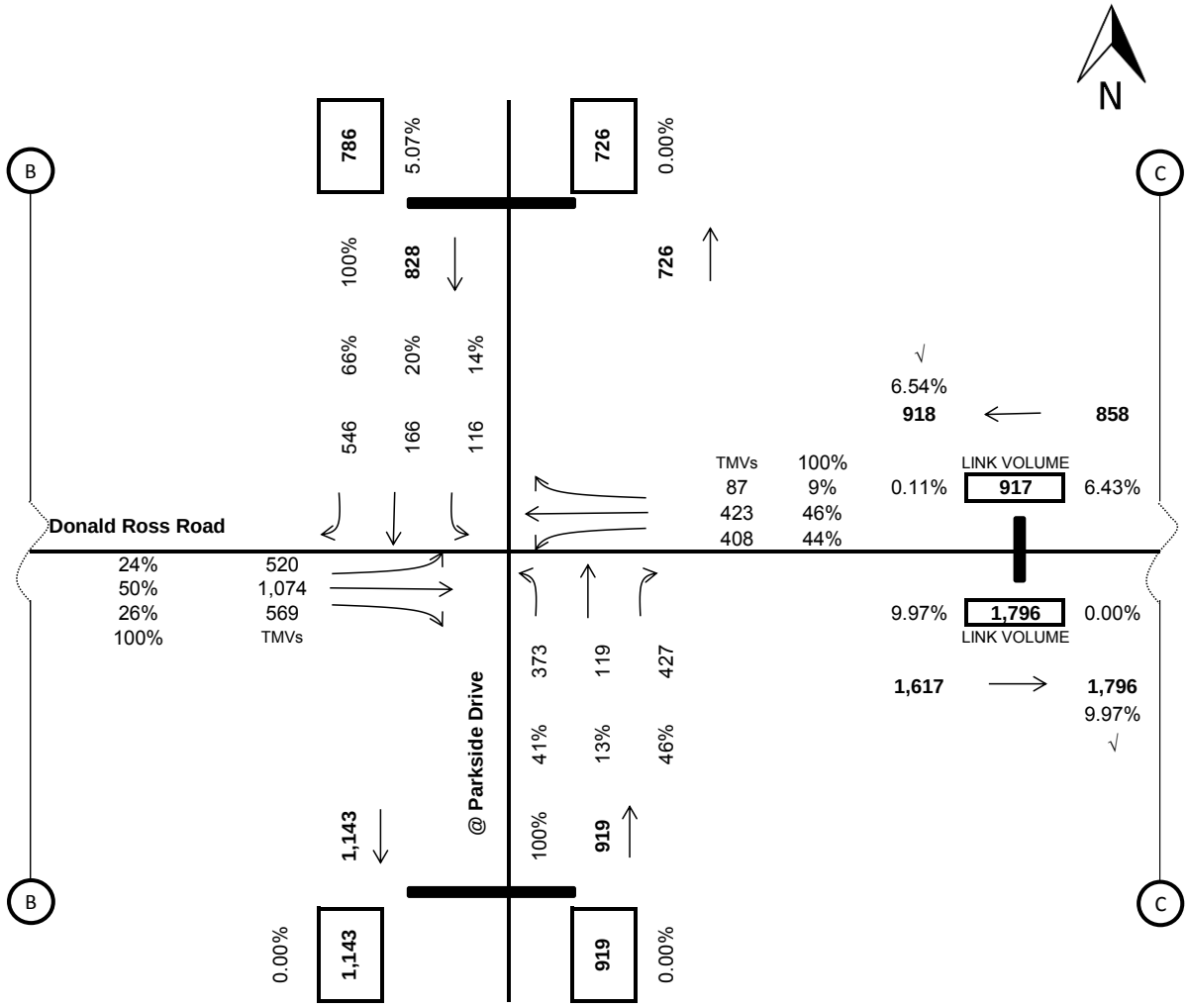
66 — Turning Movement Volumes (Balanced)

A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

@ Parkside Drive



Turning Movement Volumes
@ Parkside Drive

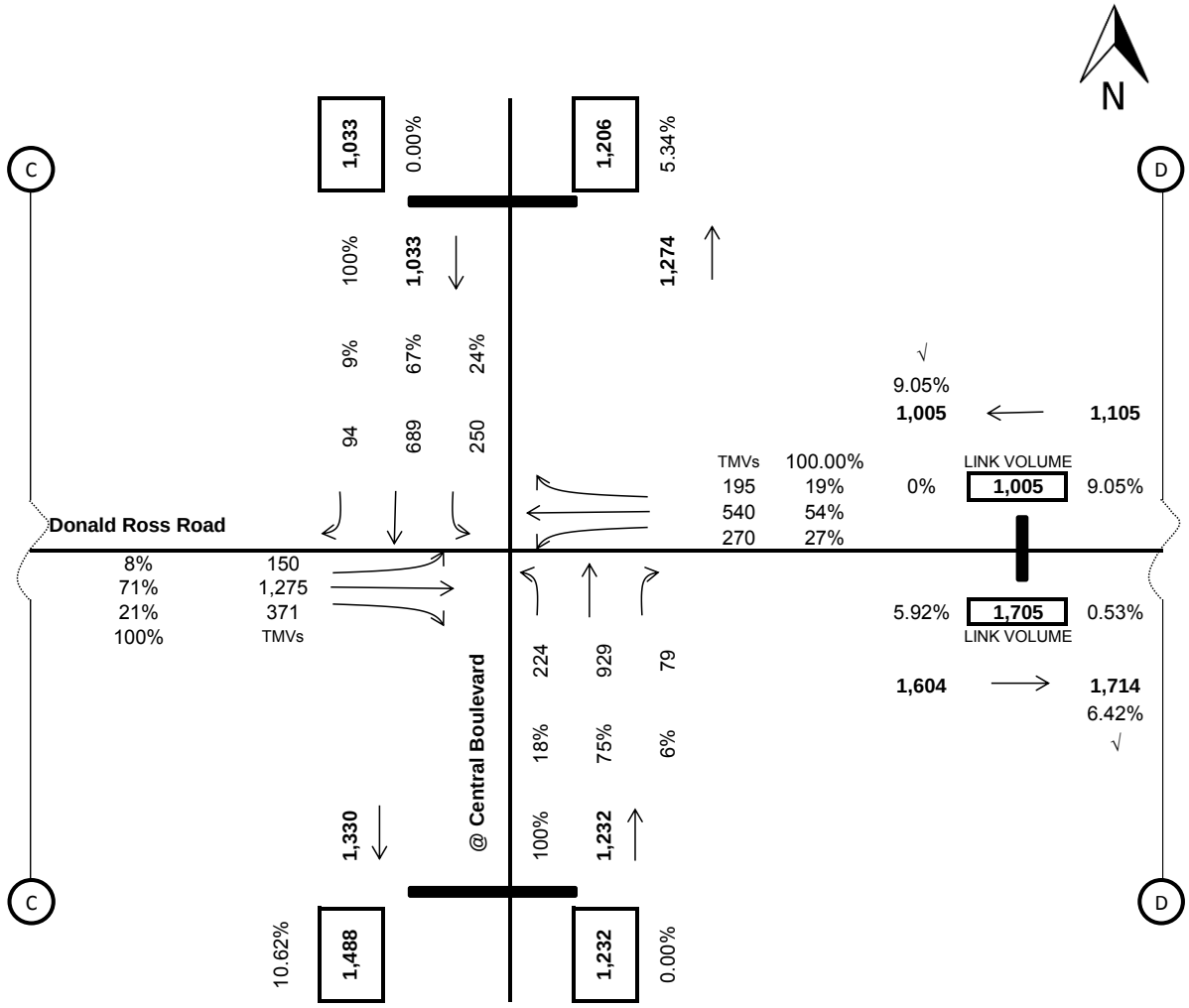
Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**917**			**919**			**1,428**			**786**	
TM Pk Hr Counts	573	594	122	373	119	427	639	1029	700	74	166	546
% Turns	44%	46%	9%	41%	13%	46%	27%	43%	30%	9%	21%	69%
Calc. Pk Hr Volumes	408	423	87	373	119	427	385	621	422	74	166	546
Adjustments							135	453	147	42		
Bal Pk Hr Volumes	**408**	**423**	**87**	**373**	**119**	**427**	**520**	**1074**	**569**	**116**	**166**	**546**

LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66 →	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

@ Central Boulevard



Turning Movement Volumes
@ Central Boulevard

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes												
TM Pk Hr Counts												
% Turns												
Calc. Pk Hr Volumes												
Adjustments												
Bal Pk Hr Volumes	**270**	**540**	**195**	**224**	**929**	**79**	**150**	**1275**	**371**	**250**	**689**	**94**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 → Turning Movement Volumes (Balanced)

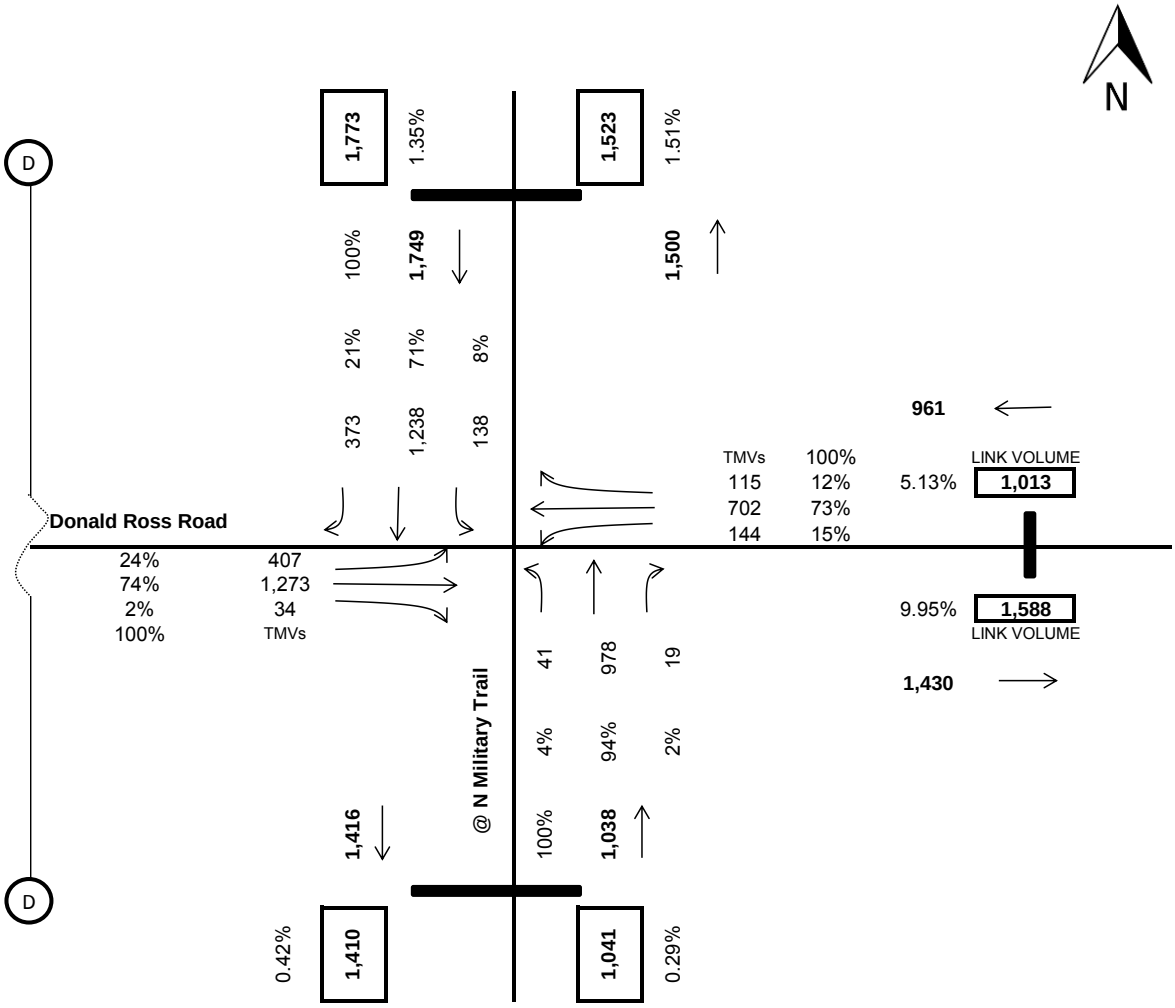
A — Match Line

A

For consistency, balanced peak hour volumes from major street arterial (aka Central Boulevard) were used. See Central Boulevard Arterial for details

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

@ N Military Trail



Turning Movement Volumes
@ N Military Trail

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes												
TM Pk Hr Counts												
% Turns												
Calc. Pk Hr Volumes												
Adjustments												
Bal Pk Hr Volumes	**144**	**702**	**115**	**41**	**978**	**19**	**407**	**1273**	**34**	**138**	**1238**	**373**

LEGEND

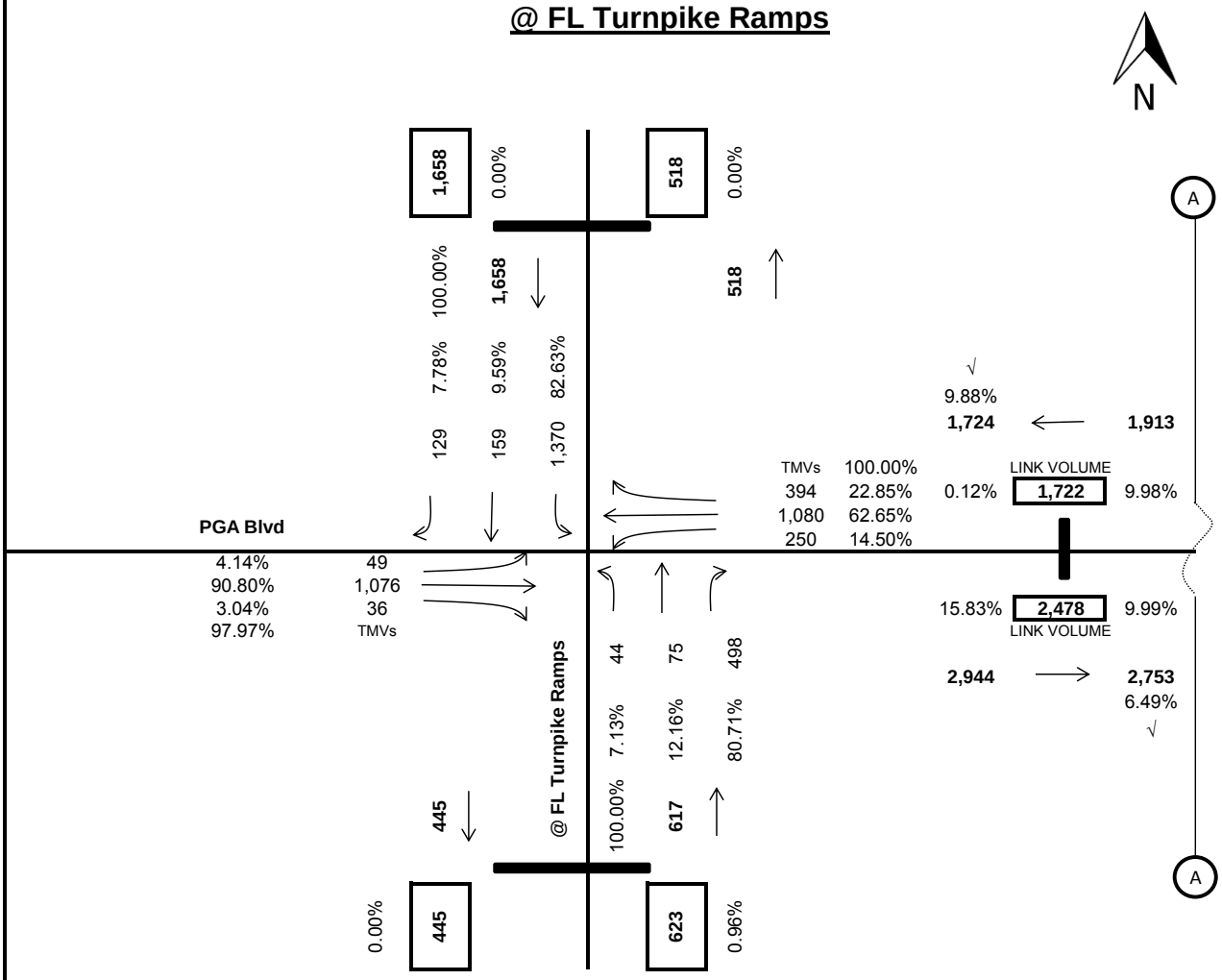
1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

For consistency, balanced peak hour volumes from major street arterial (aka N Military Trail) were used. See N Military Trail Arterial for details

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FPID No. 413265-1-22-01	*Exhibit Name:* **Donald Ross Road** **Turning Movement Volume Development** **2030 Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **5 of 5** *Date:* 9/24/15

@ FL Turnpike Ramps



Turning Movement Volumes
@ FL Turnpike Ramps

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,722**			**623**			**1,107**			**1,658**	
TM Pk Hr Counts	410	1783	650	45	77	501	77	1595	53	1370	159	129
% Turns	14%	63%	23%	7%	12%	80%	4%	92%	3%	83%	10%	8%
Calc. Pk Hr Volumes	248	1080	394	44	75	498	49	1024	34	1370	159	129
Adjustments	2							52	2			
Bal Pk Hr Volumes	**250**	**1080**	**394**	**44**	**75**	**498**	**49**	**1076**	**36**	**1370**	**159**	**129**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

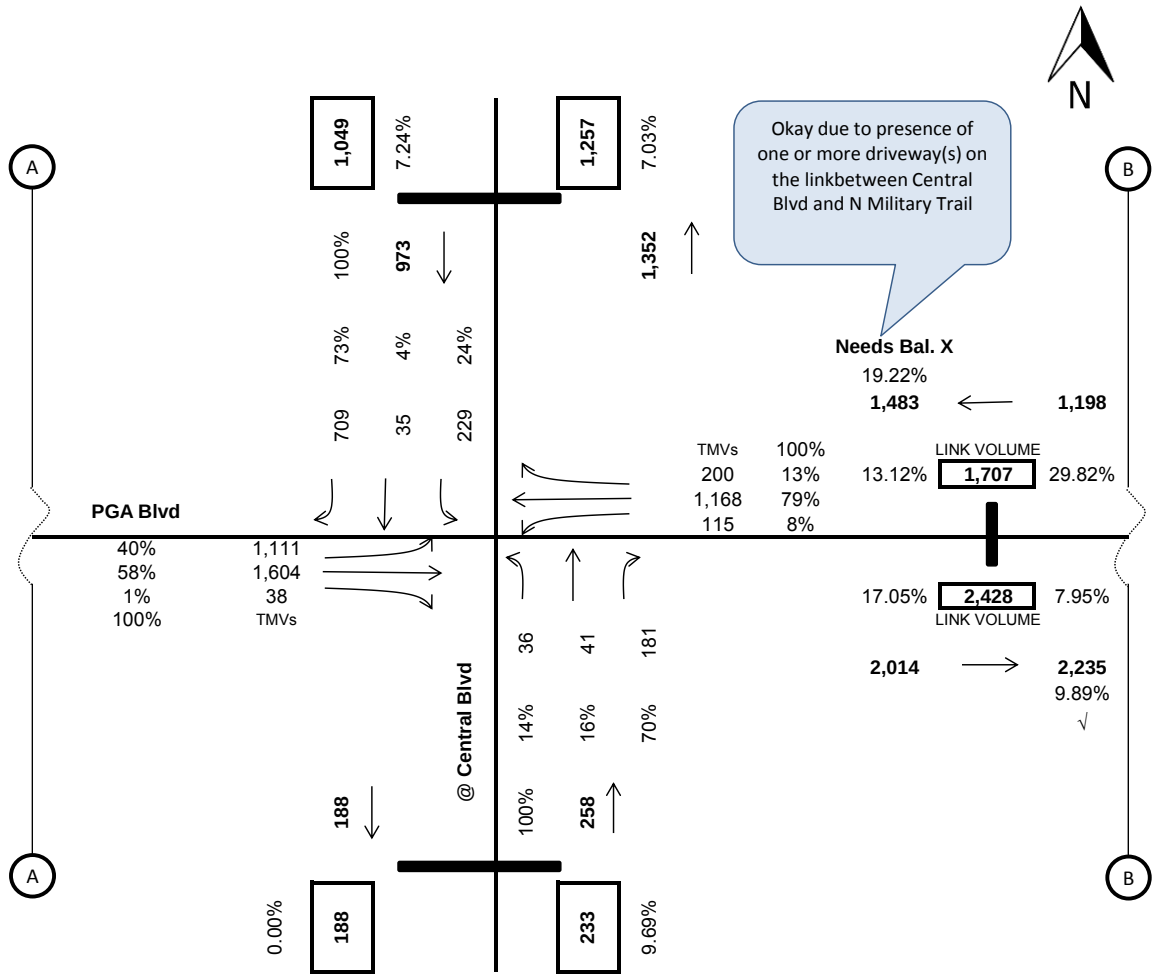
66 → Turning Movement Volumes (Balanced)

A … A — Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard** **Turning Movement Volume Development** **2030 Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **1 of 8** *Date:* 9/24/15

@ Central Blvd



Turning Movement Volumes
@ Central Blvd

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**1,707**			**233**			**2,478**			**1,049**		
TM Pk Hr Counts	135	1233	229	36	41	156	1218	1758	40	334	57	1294
% Turns	8%	77%	14%	15%	18%	67%	40%	58%	1%	20%	3%	77%
Calc. Pk Hr Volumes	144	1318	245	36	41	156	1001	1444	33	208	35	806
Adjustments	-29	-150	-45			25	110	160	5	21		-97
Bal Pk Hr Volumes	**115**	**1168**	**200**	**36**	**41**	**181**	**1111**	**1604**	**38**	**229**	**35**	**709**

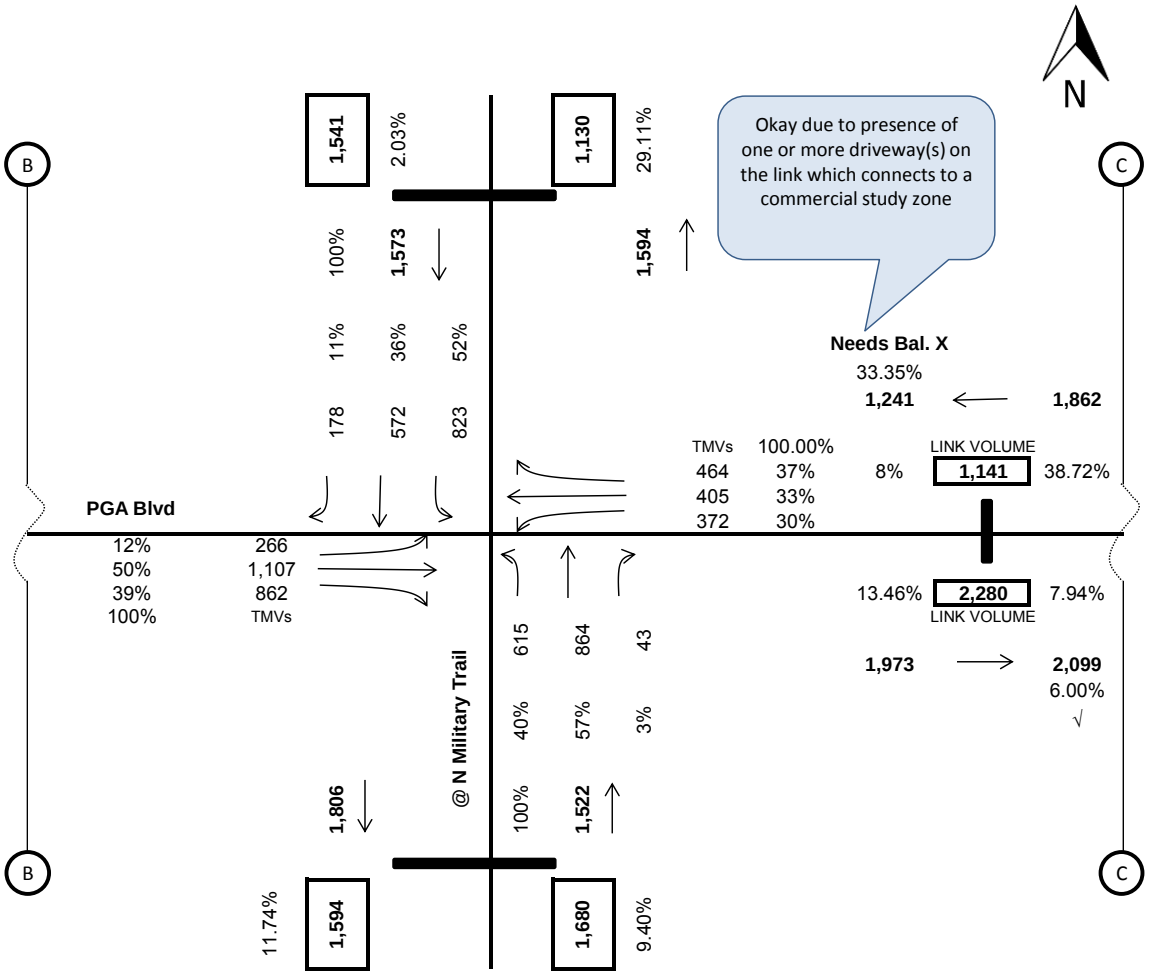
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66 →	Turning Movement Volumes (Balanced)
A / A	Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard, Project Development & Environmental Study, FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard Turning Movement Volume Development 2030 Build AM Peak Hour**	*Exhibit No:* **TBD**
		Page No: **2 of 8**
		Date: 9/24/15

@ N Military Trail



Turning Movement Volumes
@ N Military Trail

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,141**			**1,680**			**2,428**			**1,541**	
TM Pk Hr Counts	690	567	862	852	1429	45	307	1155	957	1423	1016	297
% Turns	33%	27%	41%	37%	61%	2%	13%	48%	40%	52%	37%	11%
Calc. Pk Hr Volumes	372	305	464	615	1032	33	308	1159	961	801	572	167
Adjustments		100			-168	10	-42	-52	-99	22		11
Bal Pk Hr Volumes	**372**	**405**	**464**	**615**	**864**	**43**	**266**	**1107**	**862**	**823**	**572**	**178**

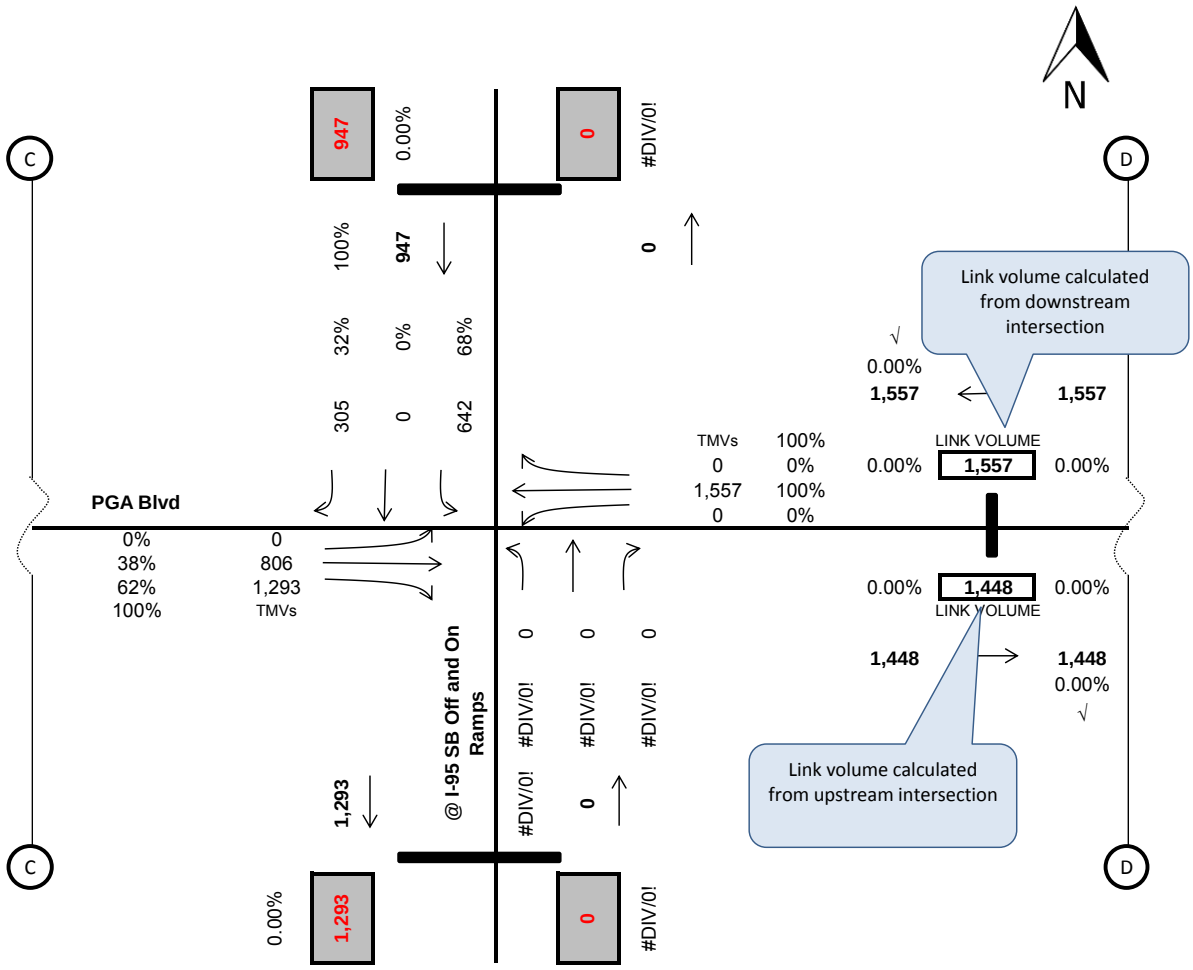
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard, Project Development & Environmental Study, FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard Turning Movement Volume Development 2030 Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **3 of 8** *Date:* 9/24/15

@ I-95 SB Off and On Ramps



Turning Movement Volumes
@ I-95 SB Off and On Ramps

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,557**			**0**			**2,280**			**947**	
TM Pk Hr Counts	0	1890	0	0	0	0	0	865	1655	544	0	258
% Turns	0%	100%	0%	0%	0%	0%	0%	34%	66%	68%	0%	32%
Calc. Pk Hr Volumes	0	1557	0	0	0	0	0	783	1497	642	0	305
Adjustments								23	-204			
Bal Pk Hr Volumes	**0**	**1557**	**0**	**0**	**0**	**0**	**0**	**806**	**1293**	**642**	**0**	**305**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

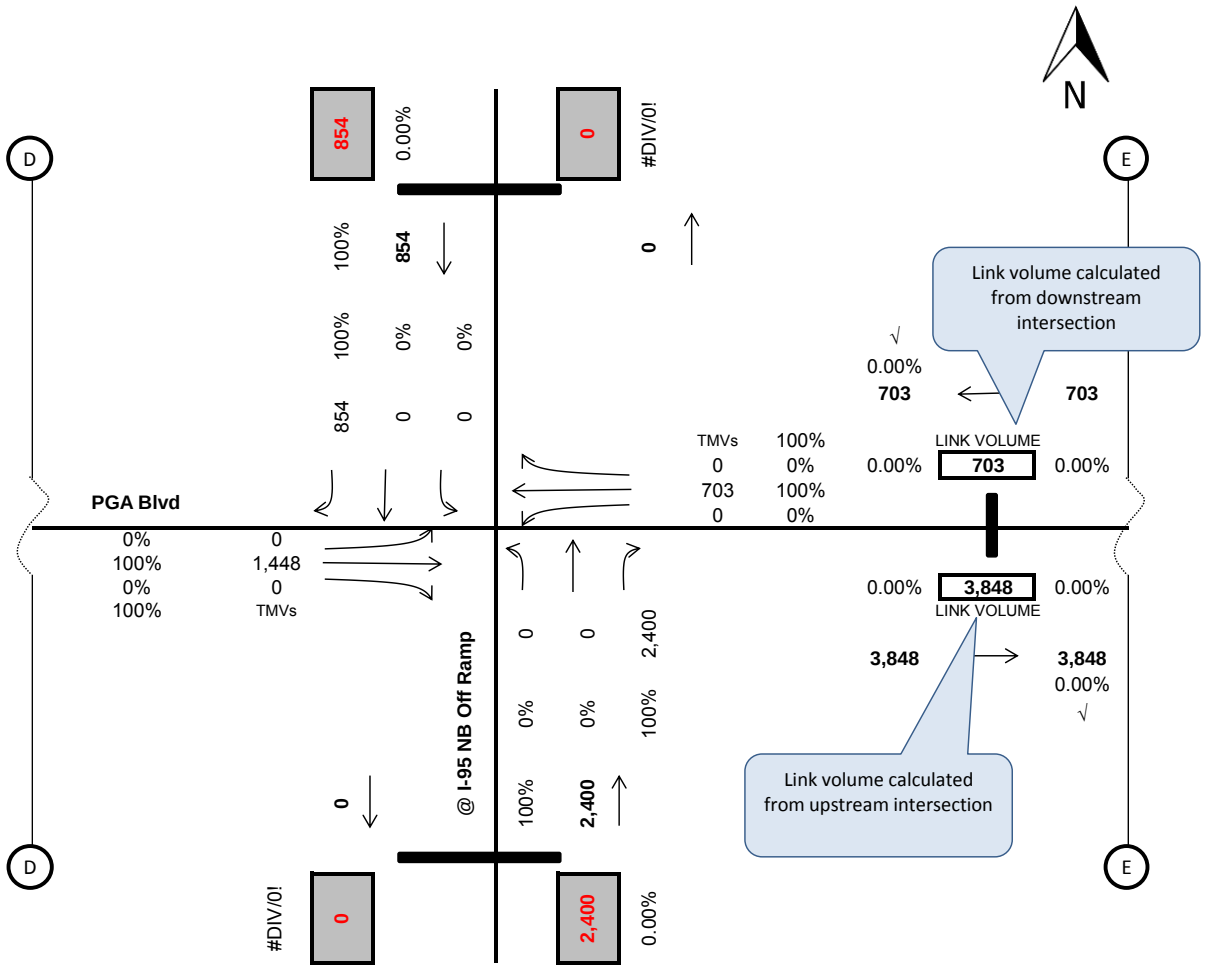
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard** **Turning Movement Volume Development** **2030 Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **4 of 8** *Date:* 9/24/15

@ I-95 NB Off Ramp



Turning Movement Volumes
@ I-95 NB Off Ramp

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**703**			**2,400**			**1,448**			**854**	
TM Pk Hr Counts	0	1890	0	0	0	1987	0	1408	0	0	0	1196
% Turns	0%	100%	0%	0%	0%	100%	0%	100%	0%	0%	0%	100%
Calc. Pk Hr Volumes	0	703	0	0	0	2400	0	1448	0	0	0	854
Adjustments												
Bal Pk Hr Volumes	**0**	**703**	**0**	**0**	**0**	**2400**	**0**	**1448**	**0**	**0**	**0**	**854**

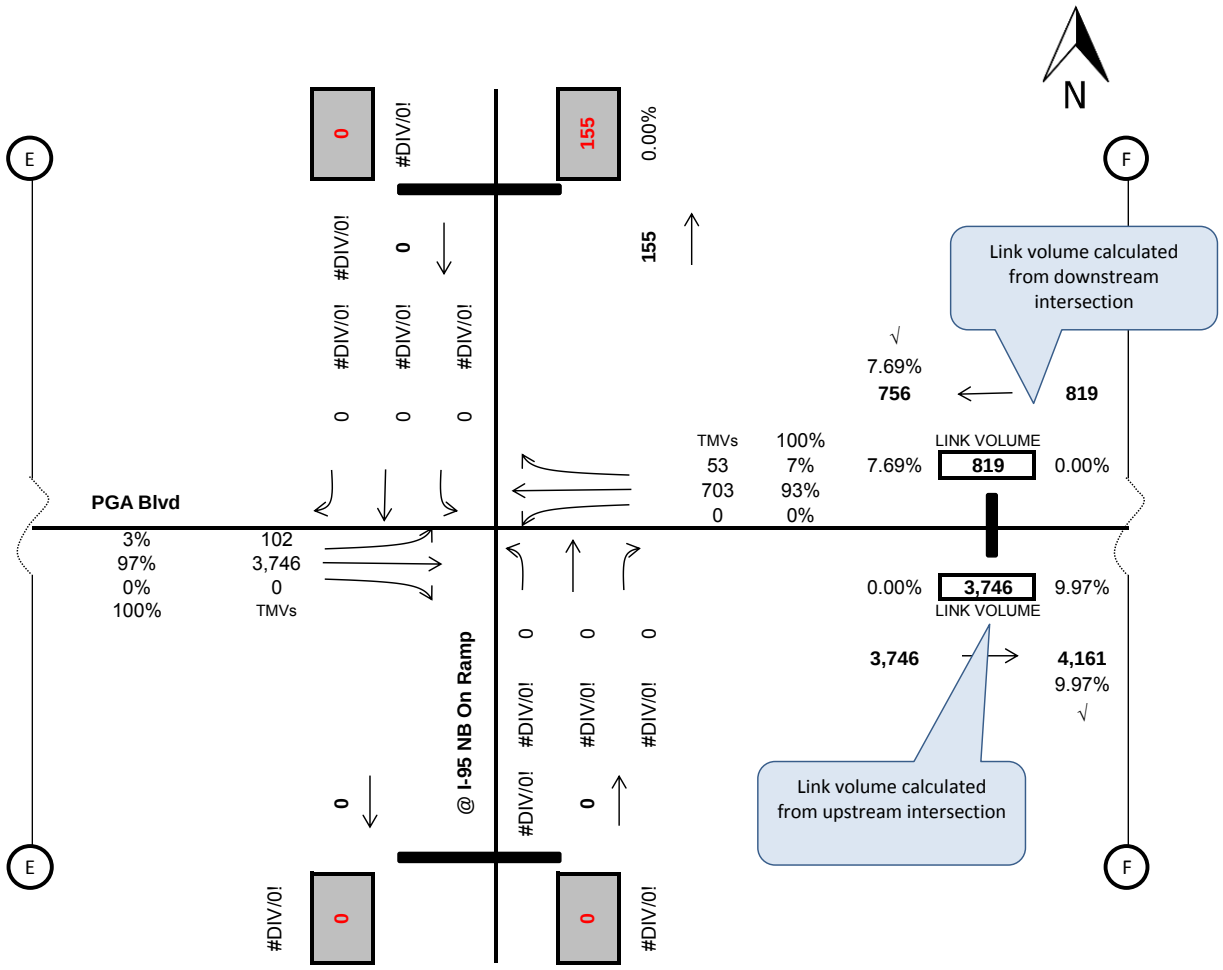
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard** **Turning Movement Volume Development** **2030 Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **5 of 8** *Date:* 9/24/15

@ I-95 NB On Ramp



Turning Movement Volumes
@ I-95 NB On Ramp

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**819**			**0**			**3,848**			**0**	
TM Pk Hr Counts	0	694	115	0	0	0	179	2913	0	0	0	0
% Turns	0%	86%	14%	0%	0%	0%	6%	94%	0%	0%	0%	0%
Calc. Pk Hr Volumes	0	703	116	0	0	0	223	3625	0	0	0	0
Adjustments			-63		0		-121	121				
Bal Pk Hr Volumes	**0**	**703**	**53**	**0**	**0**	**0**	**102**	**3746**	**0**	**0**	**0**	**0**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

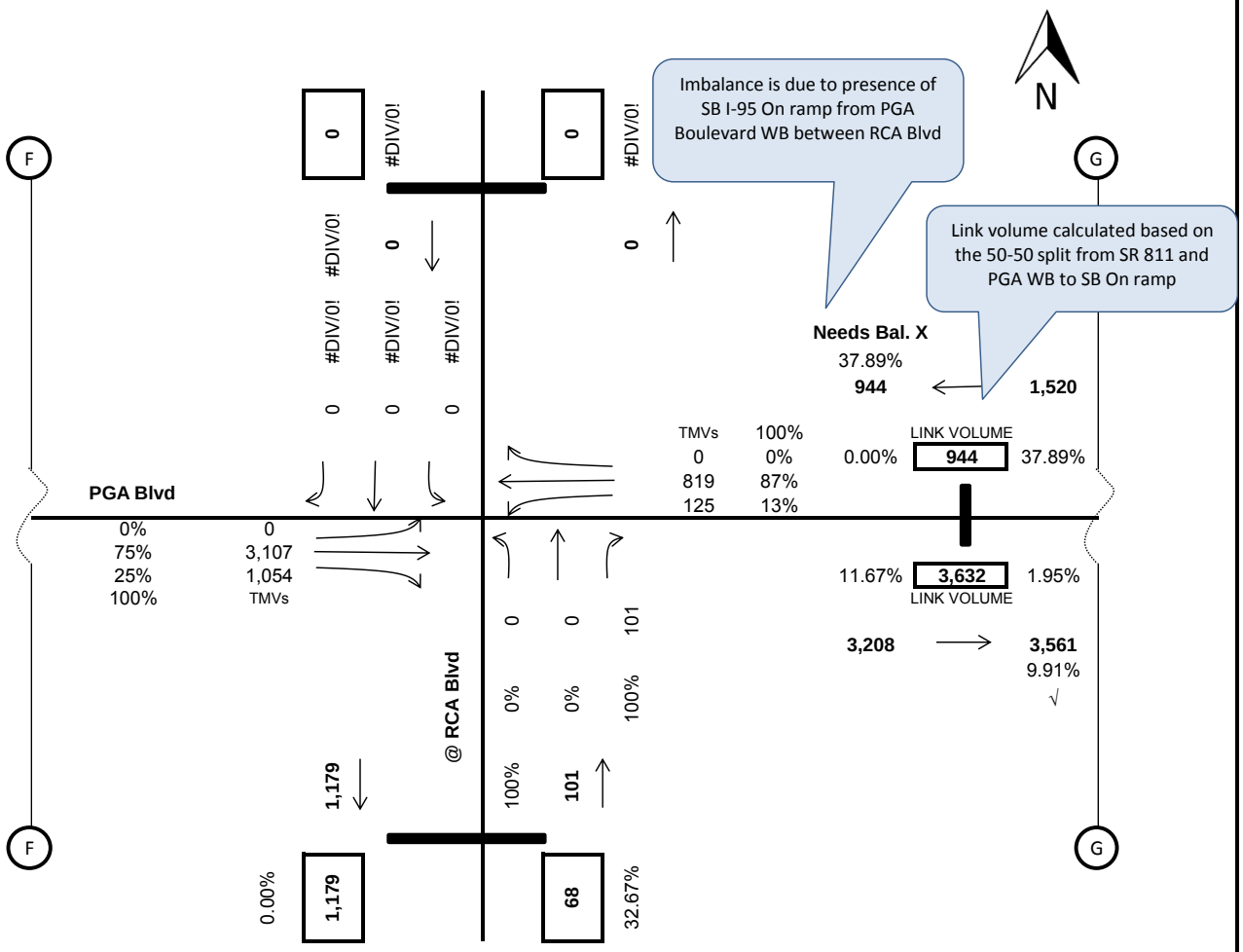
66 → — Turning Movement Volumes (Balanced)

A … A — Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard** **Turning Movement Volume Development** **2030 Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **6 of 8** *Date:* 9/24/15

@ RCA Blvd



Turning Movement Volumes
@ RCA Blvd

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**944**			**68**			**3,746**			**0**	
TM Pk Hr Counts	123	809	0	0	0	68	0	2246	1144	0	0	0
% Turns	13%	87%	0%	0%	0%	100%	0%	66%	34%	0%	0%	0%
Calc. Pk Hr Volumes	125	819	0	0	0	68	0	2482	1264	0	0	0
Adjustments						33		625	-210			
Bal Pk Hr Volumes	**125**	**819**	**0**	**0**	**0**	**101**	**0**	**3107**	**1054**	**0**	**0**	**0**

To achieve the existing counts, those adjustments are done. But found a lot of discrpency in the split change

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 → Turning Movement Volumes (Balanced)

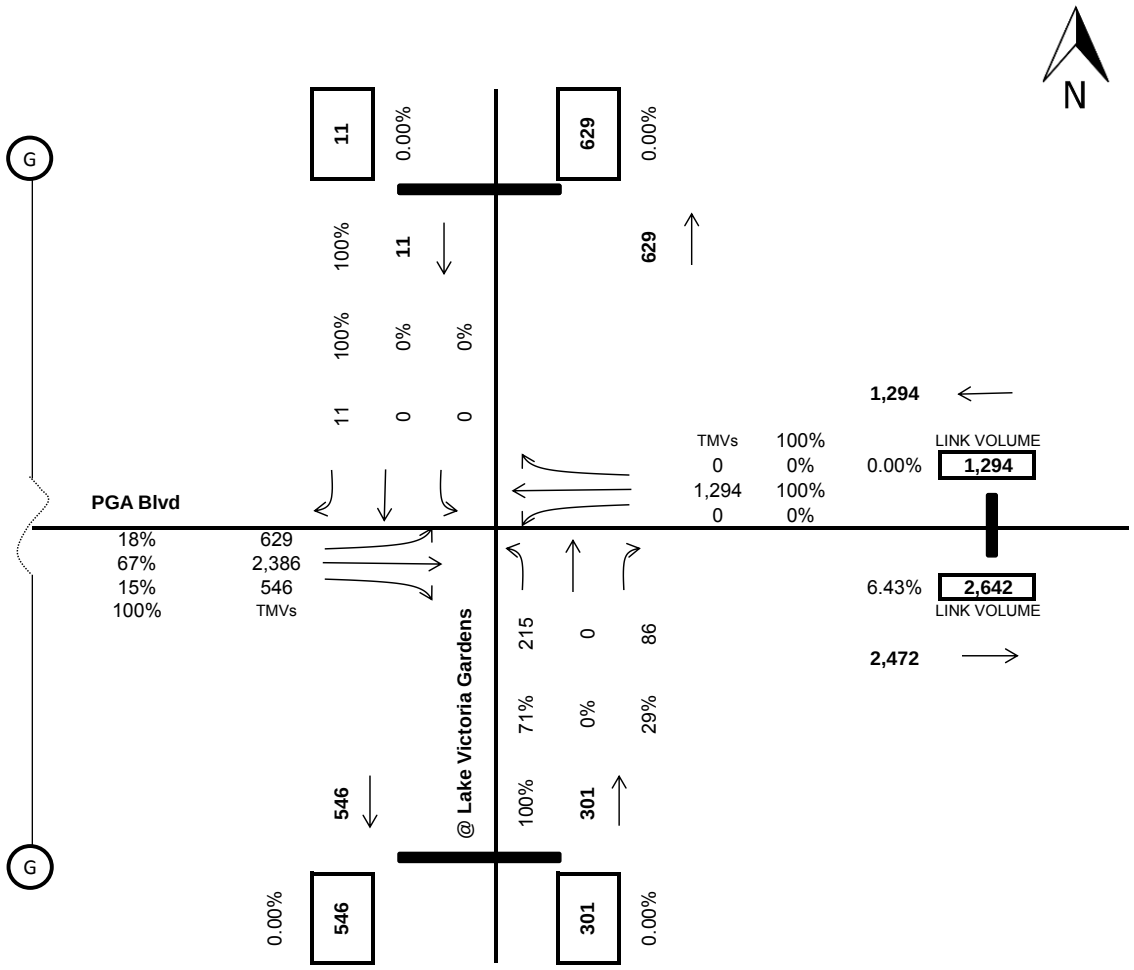
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard** **Turning Movement Volume Development** **2030 Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **7 of 8** *Date:* 9/24/15

@ Lake Victoria Gardens



Turning Movement Volumes
@ Lake Victoria Gardens

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,294**			**301**			**3,632**			**11**	
TM Pk Hr Counts	0	1345	0	215	0	86	424	1604	368	0	0	11
% Turns	0%	100%	0%	71%	0%	29%	18%	67%	15%	0%	0%	100%
Calc. Pk Hr Volumes	0	1294	0	215	0	86	643	2431	558	0	0	11
Adjustments							-14	-45	-12			
Bal Pk Hr Volumes	**0**	**1294**	**0**	**215**	**0**	**86**	**629**	**2386**	**546**	**0**	**0**	**11**

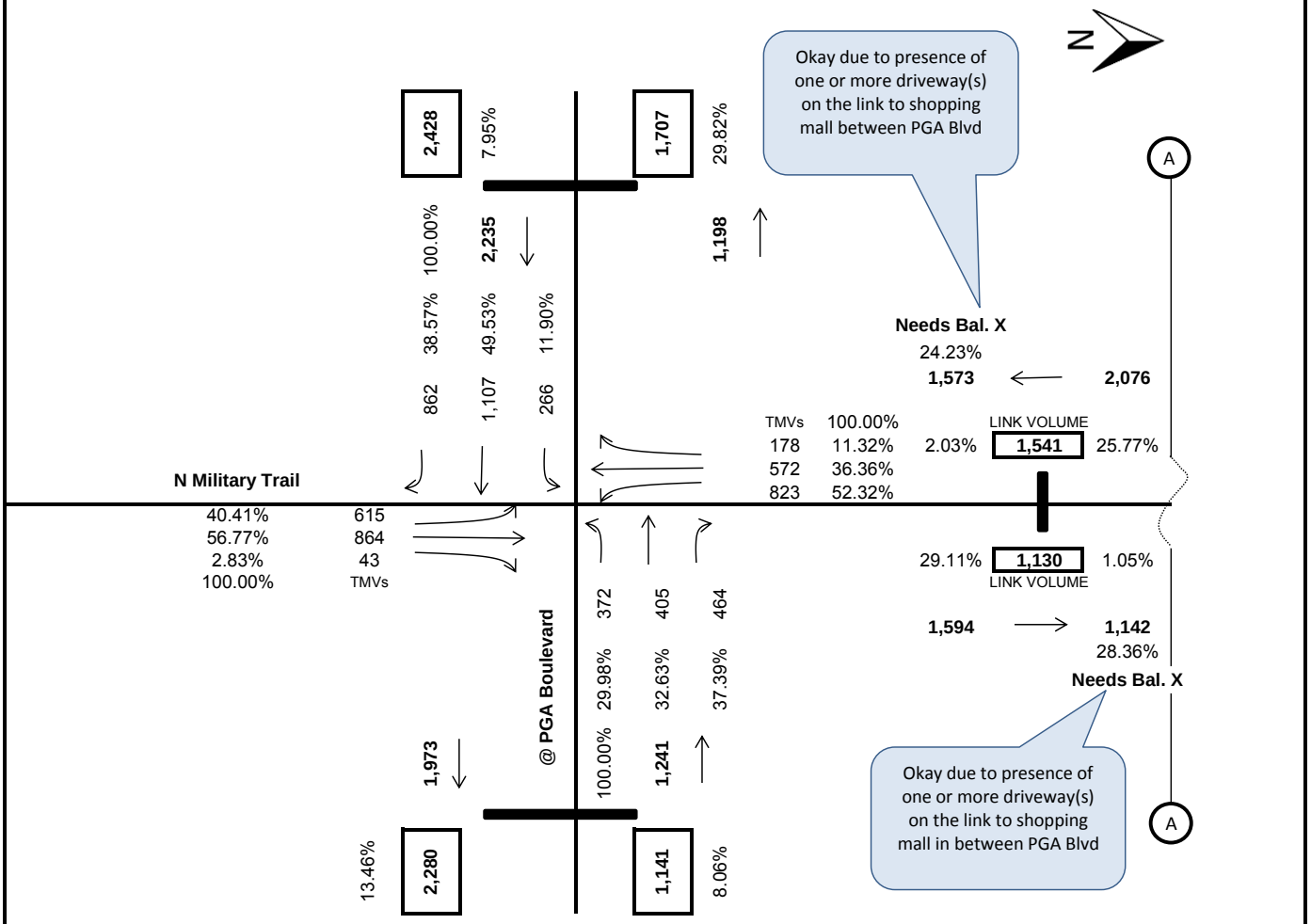
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard** **Turning Movement Volume Development** **2030 Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **8 of 8** *Date:* 9/24/15

@ PGA Boulevard



Turning Movement Volumes
@ PGA Boulevard

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes												
TM Pk Hr Counts												
% Turns												
Calc. Pk Hr Volumes												
Adjustments												
Bal Pk Hr Volumes	**823**	**572**	**178**	**372**	**405**	**464**	**615**	**864**	**43**	**266**	**1107**	**862**

For consistency, balanced peak hour volumes from major street arterial (aka PGA Boulevard) were used. See PGA Boulevard Arterial for details

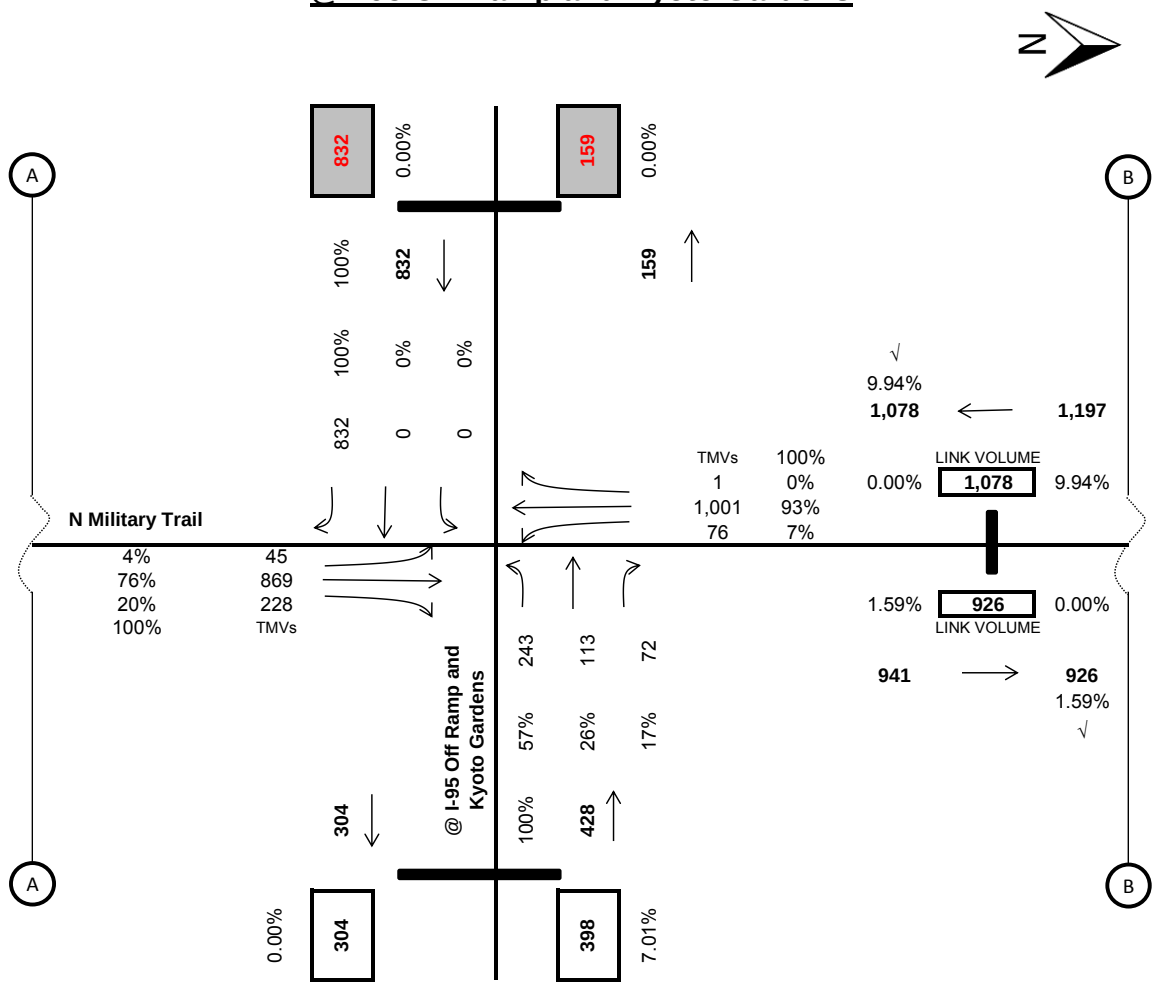
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66 →	Turning Movement Volumes (Balanced)
A … A	Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **N Military Trail** **Turning Movement Volume Development** **2030 Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **1 of 4** *Date:* 9/24/15

@ I-95 Off Ramp and Kyoto Gardens



Turning Movement Volumes
@ I-95 Off Ramp and Kyoto

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**1,078**			**398**			**1,130**			**832**		
TM Pk Hr Counts	184	2418	3	243	83	72	71	1877	493	0	0	150
% Turns	7%	93%	0%	61%	21%	18%	3%	77%	20%	0%	0%	100%
Calc. Pk Hr Volumes	76	1001	1	243	83	72	33	869	228	0	0	832
Adjustments			0		30		12					
Bal Pk Hr Volumes	**76**	**1001**	**1**	**243**	**113**	**72**	**45**	**869**	**228**	**0**	**0**	**832**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

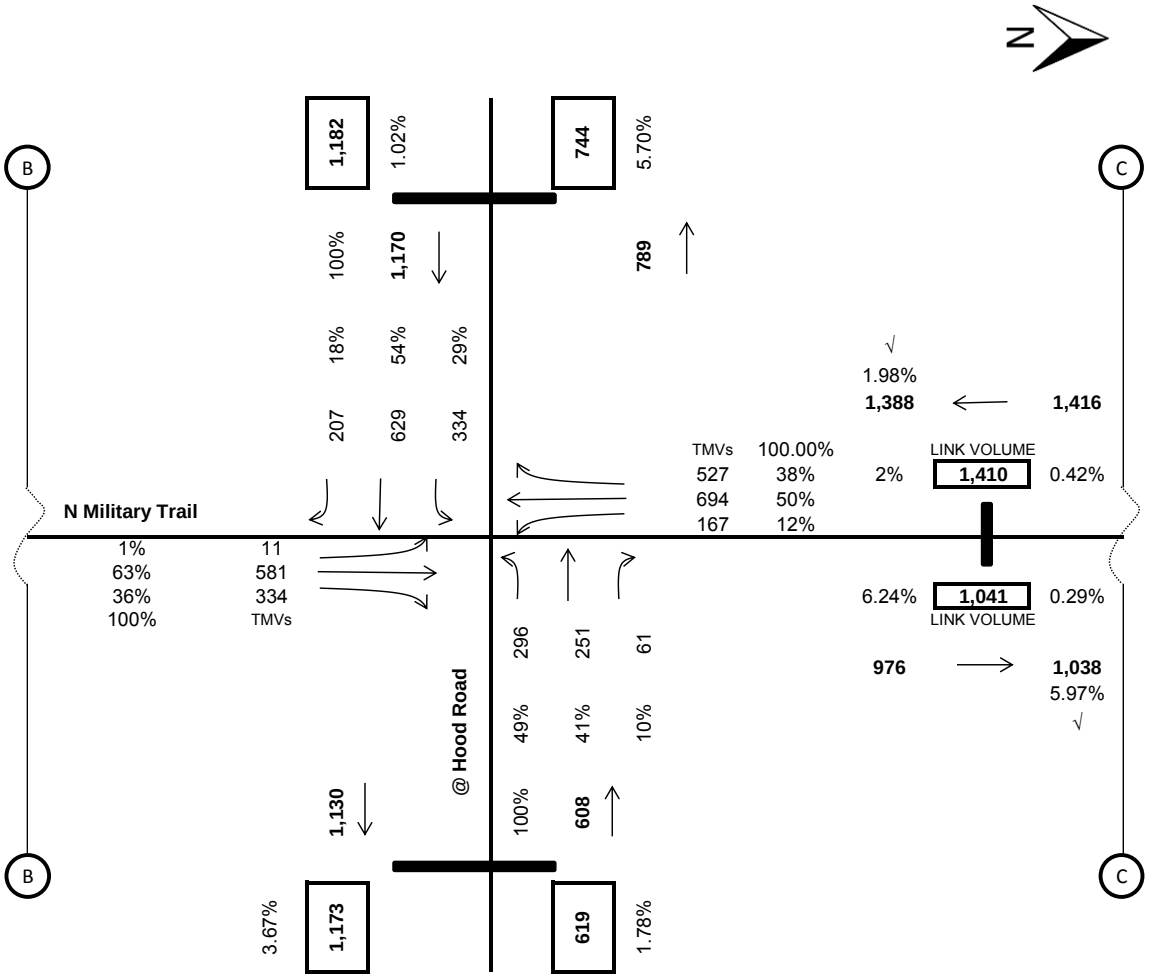
66 → Turning Movement Volumes (Balanced)

A … A — Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard, Project Development & Environmental Study, FM No. 413265-1-22-01	*Exhibit Name:* **N Military Trail Turning Movement Volume Development 2030 Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **2 of 4** *Date:* 9/24/15

@ Hood Road



Turning Movement Volumes
@ Hood Road

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**1,410**			**619**			**926**			**1,182**		
TM Pk Hr Counts	255	1094	805	781	638	156	23	1195	686	567	1067	370
% Turns	12%	51%	37%	50%	41%	10%	1%	63%	36%	28%	53%	18%
Calc. Pk Hr Volumes	167	716	527	307	251	61	11	581	334	334	629	218
Adjustments		-22		-11								-11
Bal Pk Hr Volumes	**167**	**694**	**527**	**296**	**251**	**61**	**11**	**581**	**334**	**334**	**629**	**207**

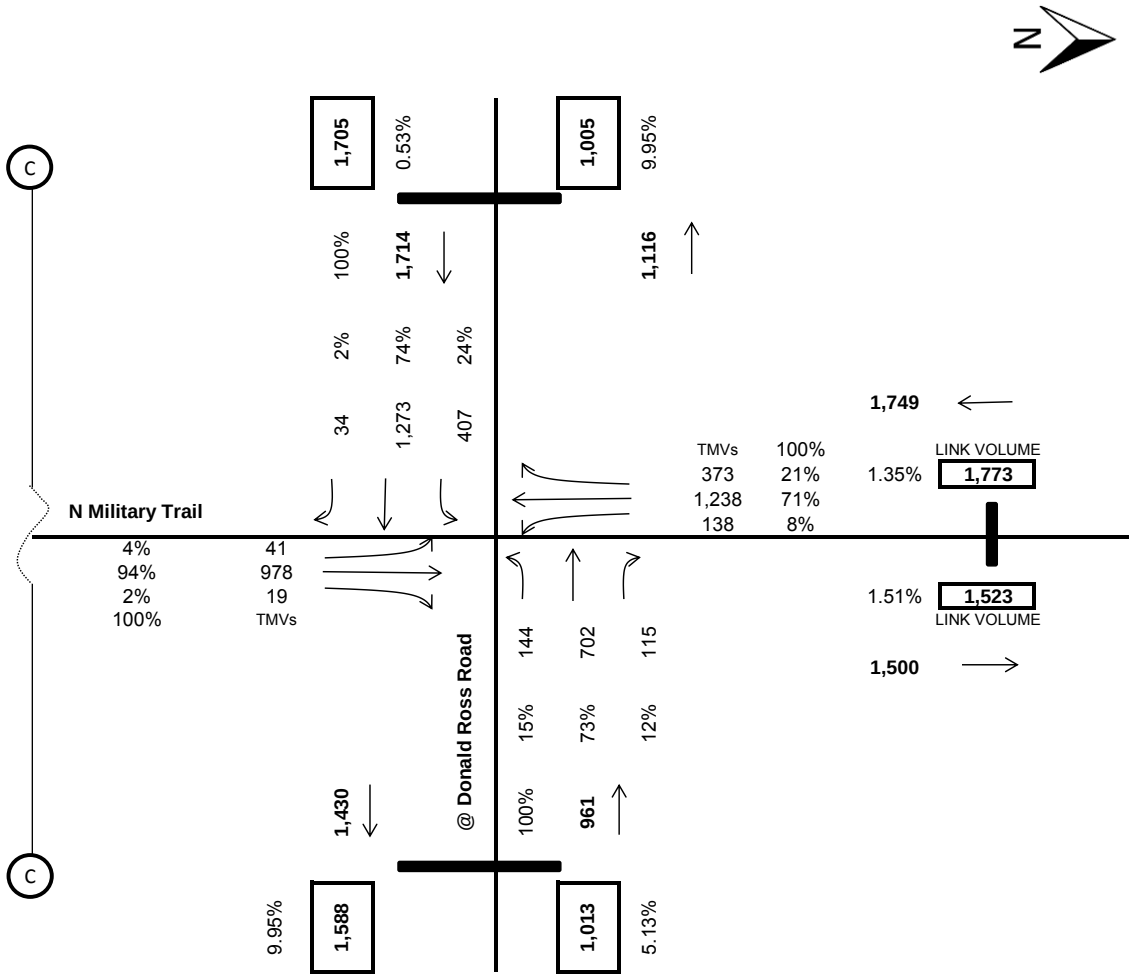
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66 →	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **N Military Trail** **Turning Movement Volume Development** **2030 Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **3 of 4** *Date:* 9/24/15

@ Donald Ross Road



Turning Movement Volumes
@ Donald Ross Road

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,773**			**1,013**			**1,041**			**1,705**	
TM Pk Hr Counts	188	1689	542	138	721	110	68	1522	30	401	1246	34
% Turns	8%	70%	22%	14%	74%	11%	4%	94%	2%	24%	74%	2%
Calc. Pk Hr Volumes	138	1238	397	144	754	115	44	978	19	407	1264	34
Adjustments			-24		-52		-3				9	
Bal Pk Hr Volumes	**138**	**1238**	**373**	**144**	**702**	**115**	**41**	**978**	**19**	**407**	**1273**	**34**

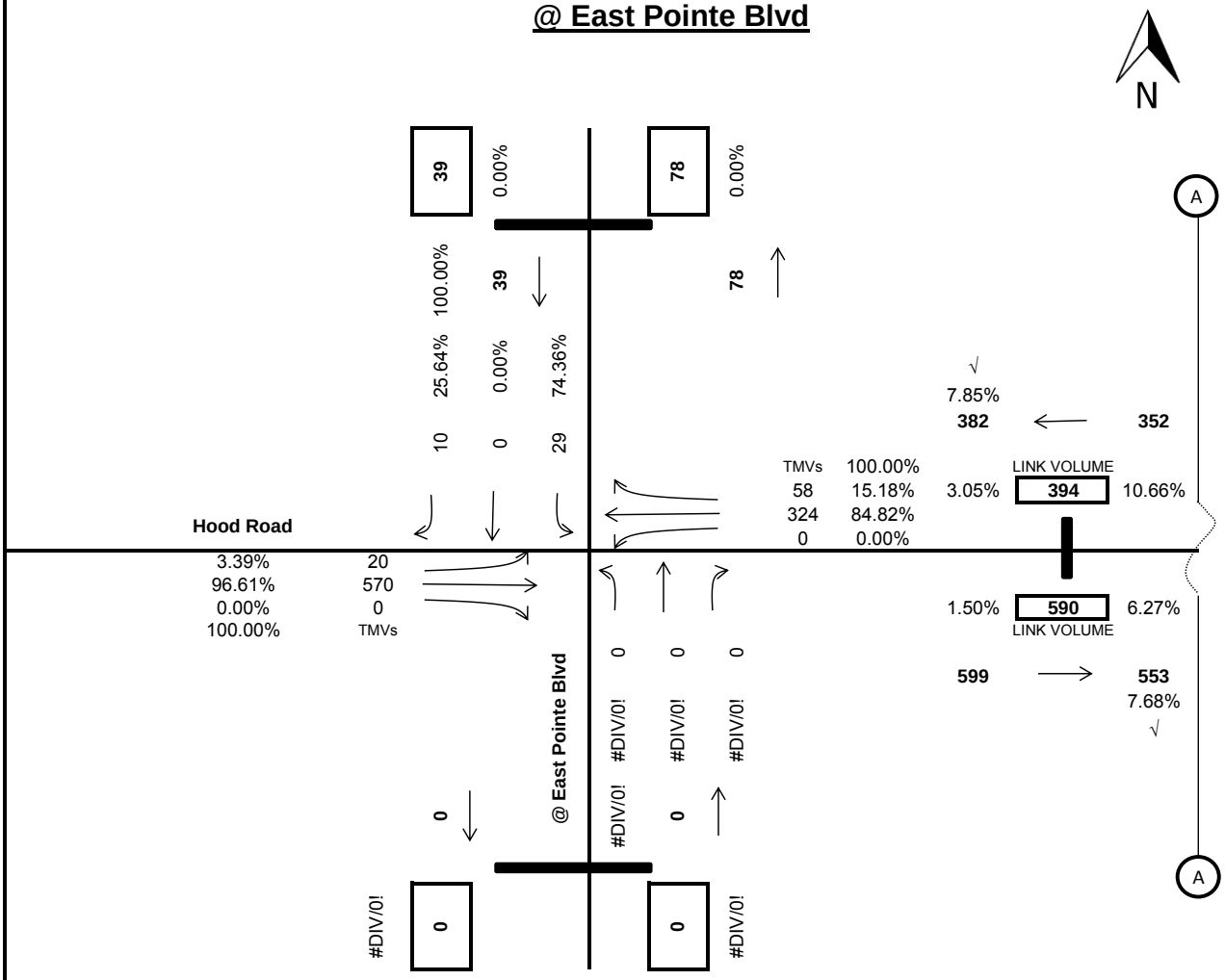
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **N Military Trail** **Turning Movement Volume Development** **2030 Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **4 of 4** *Date:* 9/24/15

@ East Pointe Blvd



Turning Movement Volumes
@ East Pointe Blvd

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**394**			**0**			**590**			**39**	
TM Pk Hr Counts	0	175	30	0	0	0	10	283	0	29	0	10
% Turns	0%	85%	15%	0%	0%	0%	3%	97%	0%	74%	0%	26%
Calc. Pk Hr Volumes	0	336	58	0	0	0	20	570	0	29	0	10
Adjustments		-12										
Bal Pk Hr Volumes	**0**	**324**	**58**	**0**	**0**	**0**	**20**	**570**	**0**	**29**	**0**	**10**

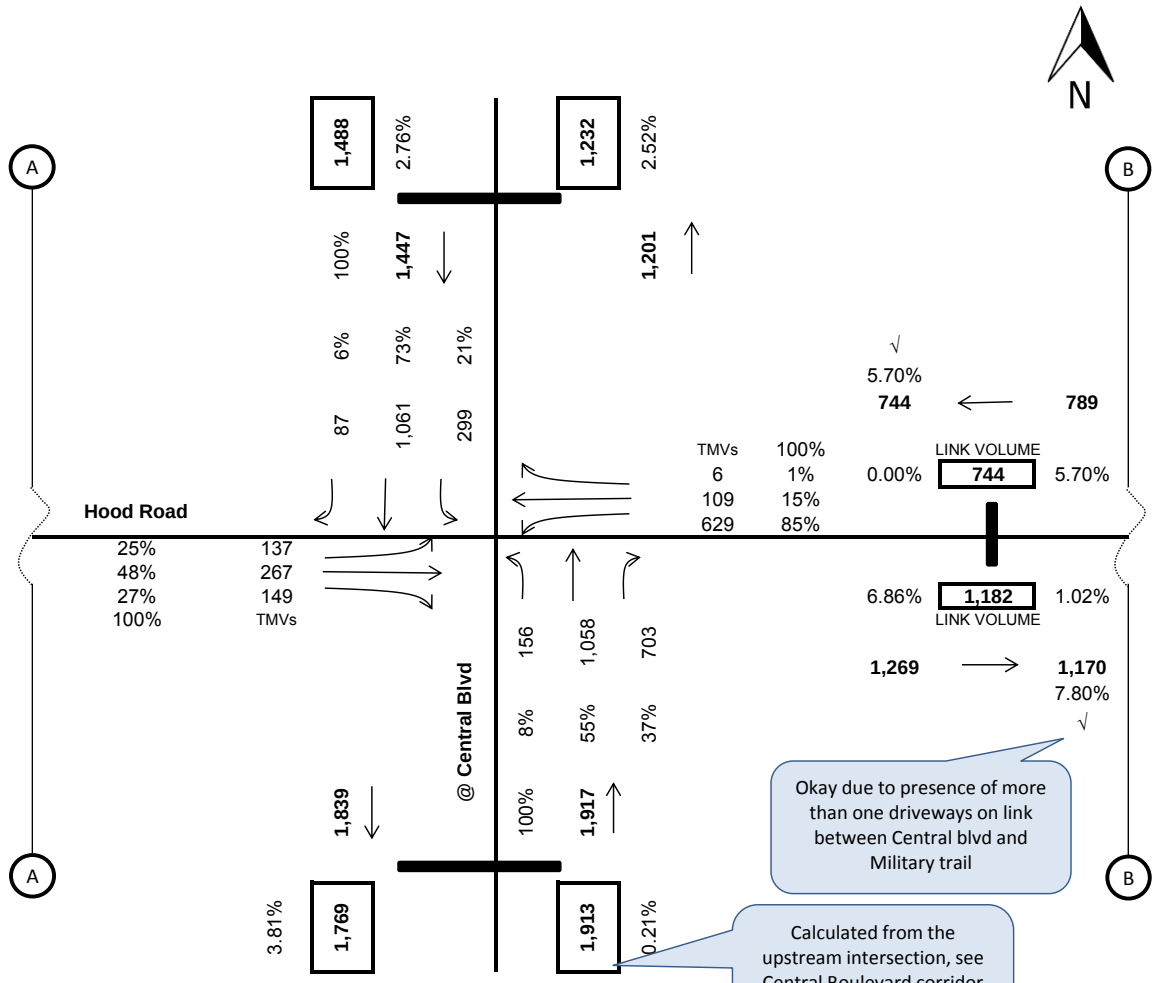
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66 →	Turning Movement Volumes (Balanced)
A / A	Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Hood Road** **Turning Movement Volume Development** **2030 Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **1 of 3** *Date:* 9/24/15

@ Central Blvd



Turning Movement Volumes
@ Central Blvd

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes												
TM Pk Hr Counts												
% Turns												
Calc. Pk Hr Volumes												
Adjustments												
Bal Pk Hr Volumes	**629**	**109**	**6**	**156**	**1058**	**703**	**137**	**267**	**149**	**299**	**1061**	**87**

LEGEND

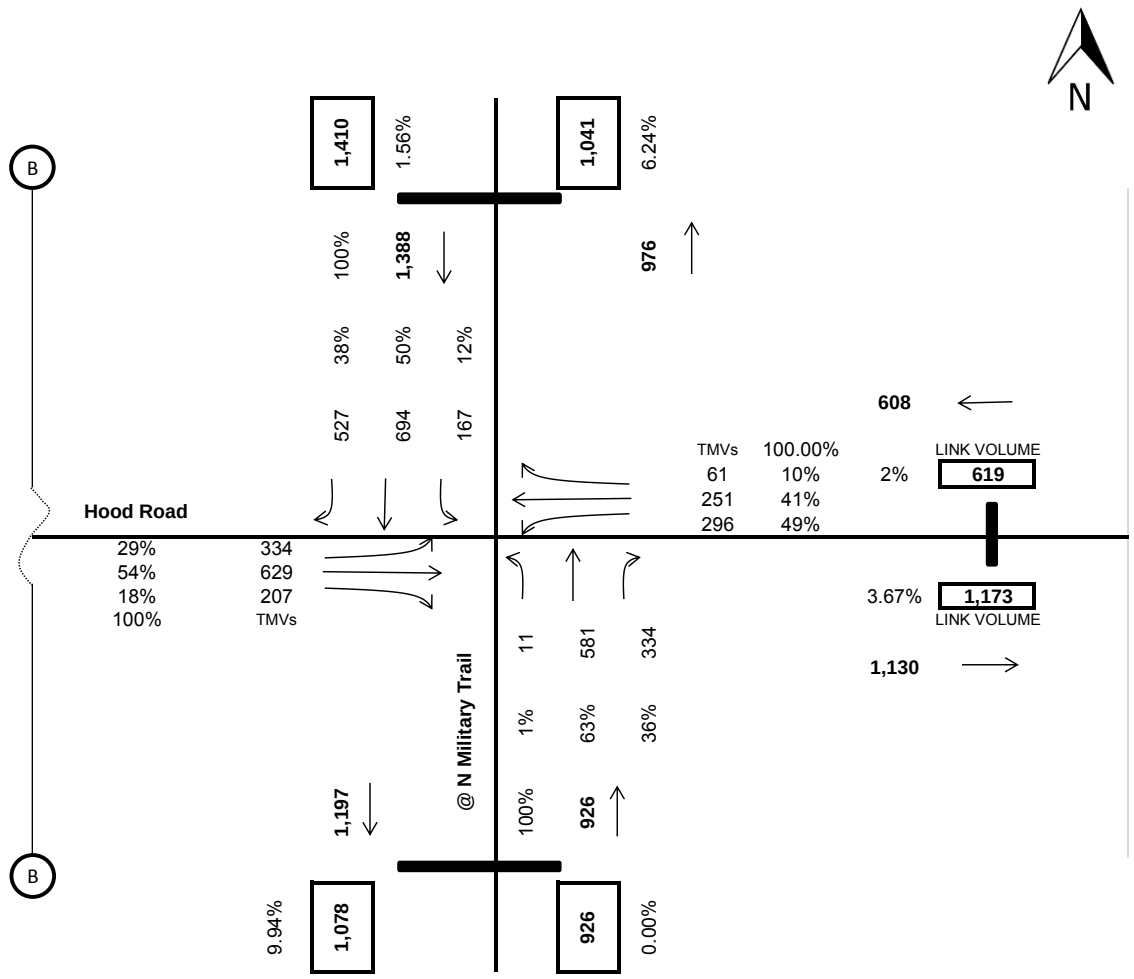
1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

For consistency, balanced peak hour volumes from major street arterial (aka Central Boulevard) were used. See Central Boulevard Arterial for details

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Hood Road** **Turning Movement Volume Development** **2030 Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **2 of 3** *Date:* 9/24/15

@ N Military Trail



Turning Movement Volumes
@ N Military Trail

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes												
TM Pk Hr Counts												
% Turns												
Calc. Pk Hr Volumes												
Adjustments												
Bal Pk Hr Volumes	**296**	**251**	**61**	**11**	**581**	**334**	**334**	**629**	**207**	**167**	**694**	**527**

For consistency, balanced peak hour volumes from major street arterial (aka N Military Trail) were used. See N Military Trail Arterial for details

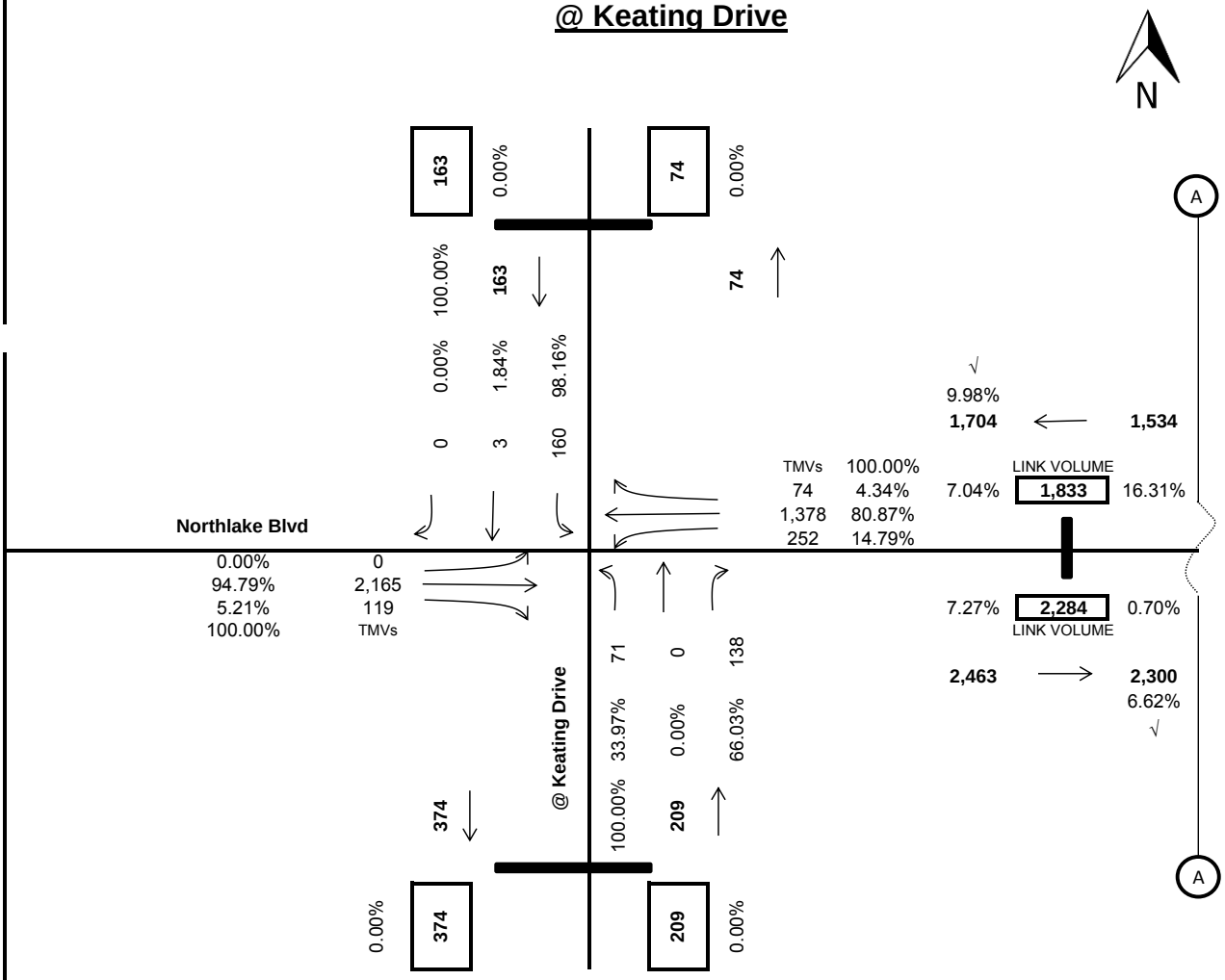
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66 →	Turning Movement Volumes (Balanced)
A … A	Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Hood Road** **Turning Movement Volume Development** **2030 Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **3 of 3** *Date:* 9/24/15

@ Keating Drive



Turning Movement Volumes
@ Keating Drive

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,833**			**209**			**2,284**			**163**	
TM Pk Hr Counts	258	1402	77	71	0	138	0	2555	140	160	3	0
% Turns	15%	81%	4%	34%	0%	66%	0%	95%	5%	98%	2%	0%
Calc. Pk Hr Volumes	272	1479	81	71	0	138	0	2165	119	160	3	0
Adjustments	-20	-101	-7									
Bal Pk Hr Volumes	**252**	**1378**	**74**	**71**	**0**	**138**	**0**	**2165**	**119**	**160**	**3**	**0**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

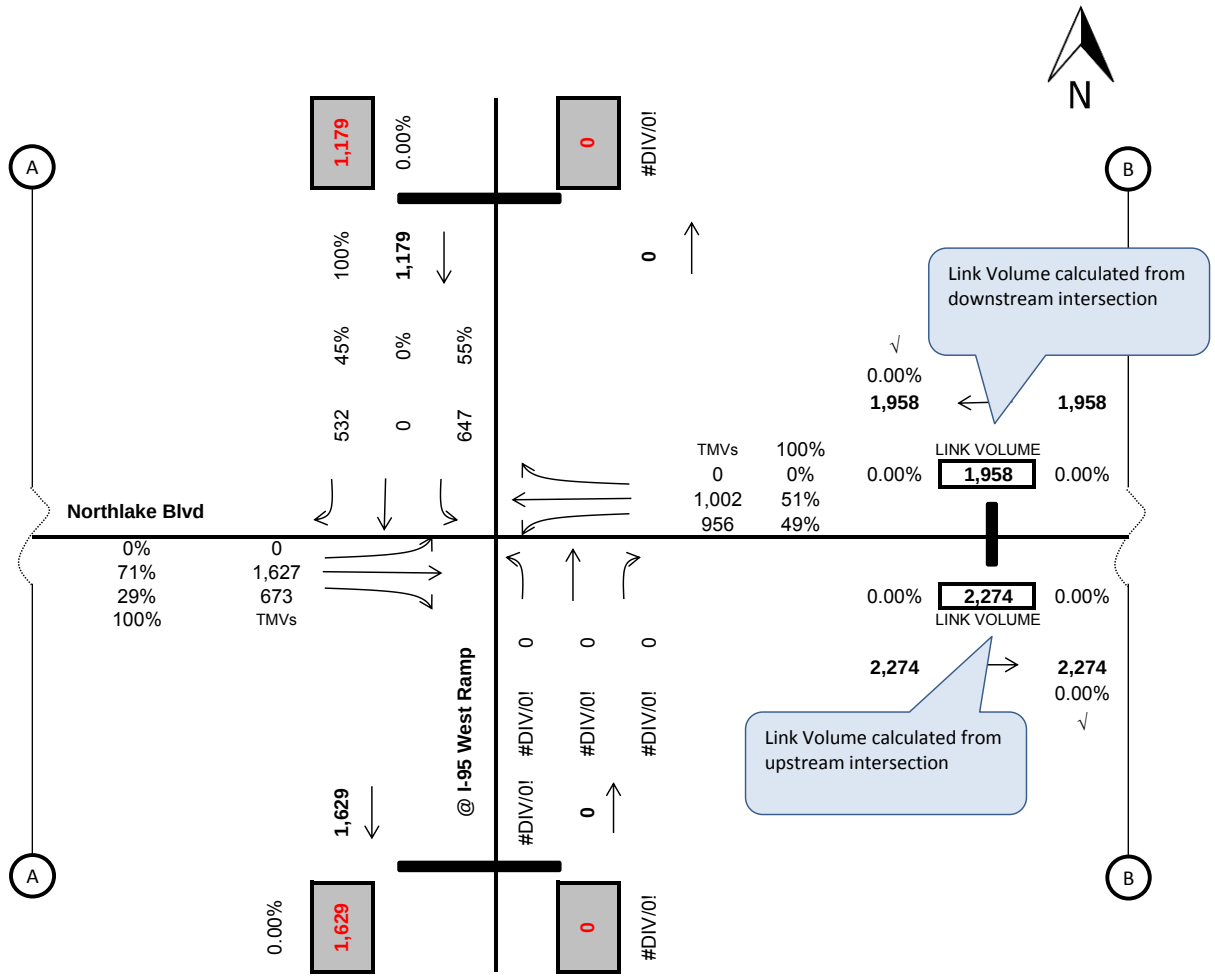
66 → — Turning Movement Volumes (Balanced)

A … A — Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Northlake Boulevard** **Turning Movement Volume Development** **2030 Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **1 of 5** *Date:* 9/24/15

@ I-95 West Ramp



Turning Movement Volumes
@ I-95 West Ramp

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**1,958**			**0**			**2,284**			**1,179**		
TM Pk Hr Counts	803	882	0	0	0	0	0	2032	820	1040	0	856
% Turns	48%	52%	0%	0%	0%	0%	0%	71%	29%	55%	0%	45%
Calc. Pk Hr Volumes	933	1025	0	0	0	0	0	1627	657	647	0	532
Adjustments	23	-23							16			
Bal Pk Hr Volumes	**956**	**1002**	**0**	**0**	**0**	**0**	**0**	**1627**	**673**	**647**	**0**	**532**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

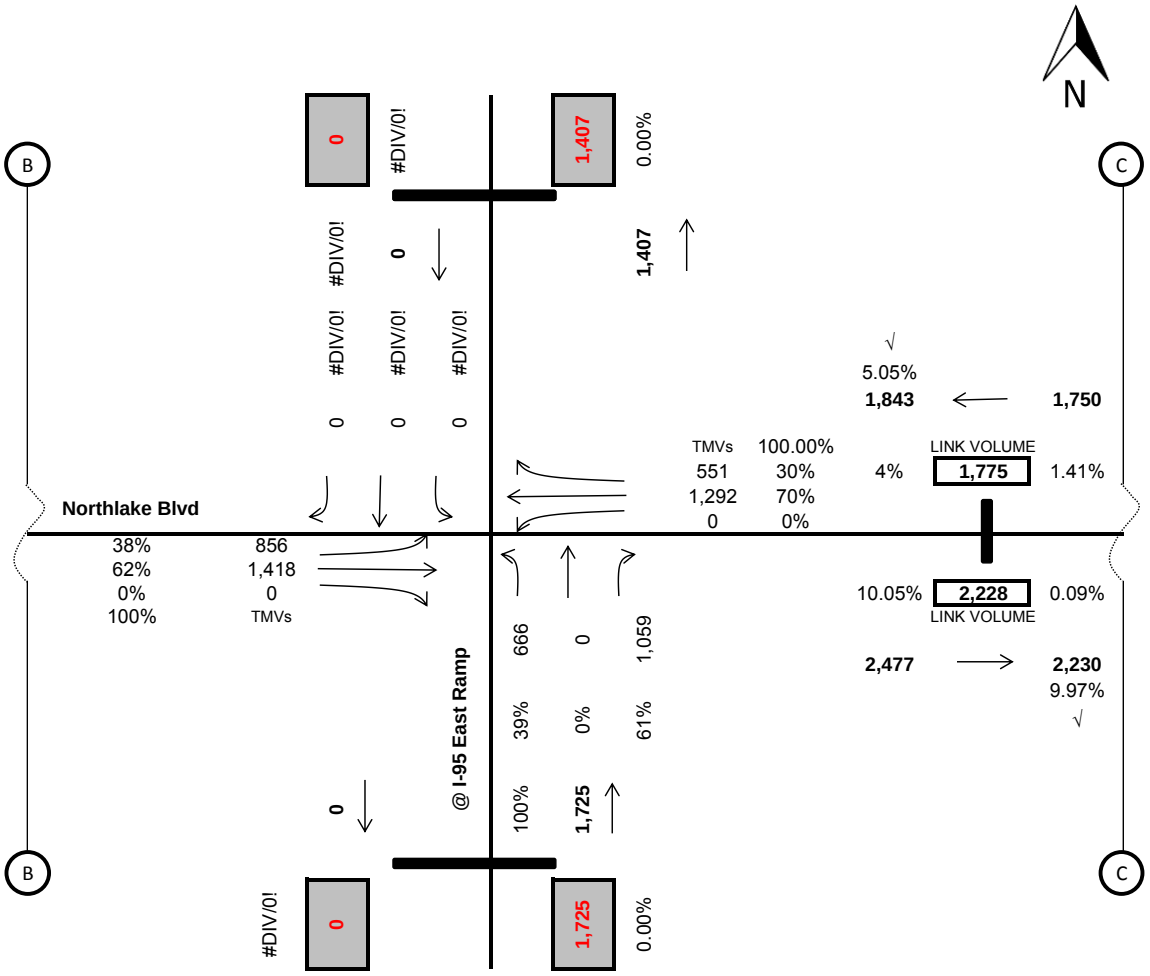
66 → — Turning Movement Volumes (Balanced)

A … A — Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Northlake Boulevard** **Turning Movement Volume Development** **2030 Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **2 of 5** *Date:* 9/24/15

@ I-95 East Ramp



Turning Movement Volumes
@ I-95 East Ramp

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,775**			**1,725**			**2,274**			**0**	
TM Pk Hr Counts	0	1170	476	515	0	903	1078	1993	0	0	0	0
% Turns	0%	71%	29%	36%	0%	64%	35%	65%	0%	0%	0%	0%
Calc. Pk Hr Volumes	0	1262	513	626	0	1099	798	1476	0	0	0	0
Adjustments		30	38	40		-40	58	-58				
Bal Pk Hr Volumes	**0**	**1292**	**551**	**666**	**0**	**1059**	**856**	**1418**	**0**	**0**	**0**	**0**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

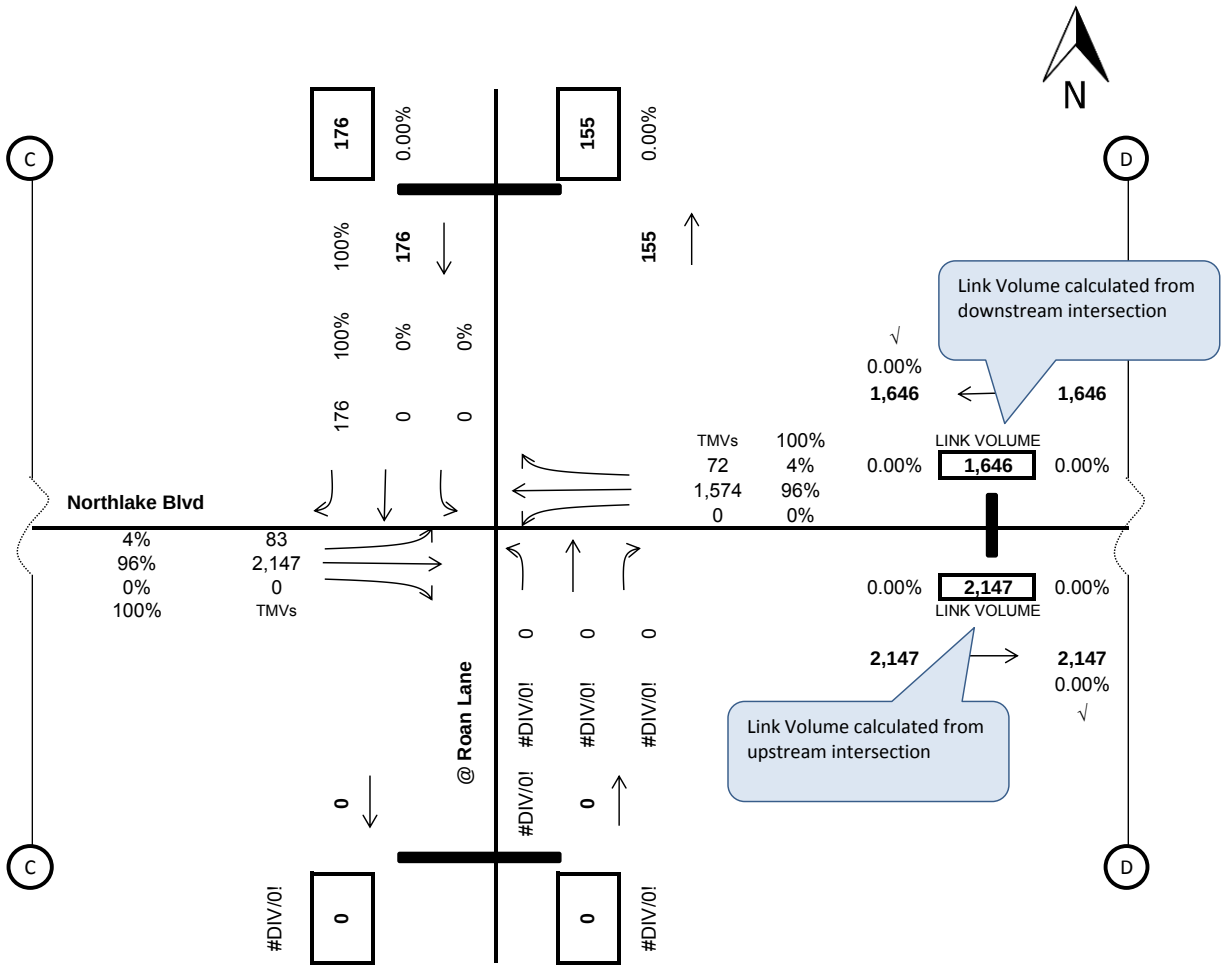
66 → Turning Movement Volumes (Balanced)

A — Match Line — A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Northlake Boulevard** **Turning Movement Volume Development** **2030 Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **3 of 5** *Date:* 9/24/15

@ Roan Lane



Turning Movement Volumes
@ Roan Lane

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,646**			**0**			**2,228**			**176**	
TM Pk Hr Counts	0	1737	80	0	0	0	118	3032	0	0	0	176
% Turns	0%	96%	4%	0%	0%	0%	4%	96%	0%	0%	0%	100%
Calc. Pk Hr Volumes	0	1574	72	0	0	0	83	2145	0	0	0	176
Adjustments								2				
Bal Pk Hr Volumes	**0**	**1574**	**72**	**0**	**0**	**0**	**83**	**2147**	**0**	**0**	**0**	**176**

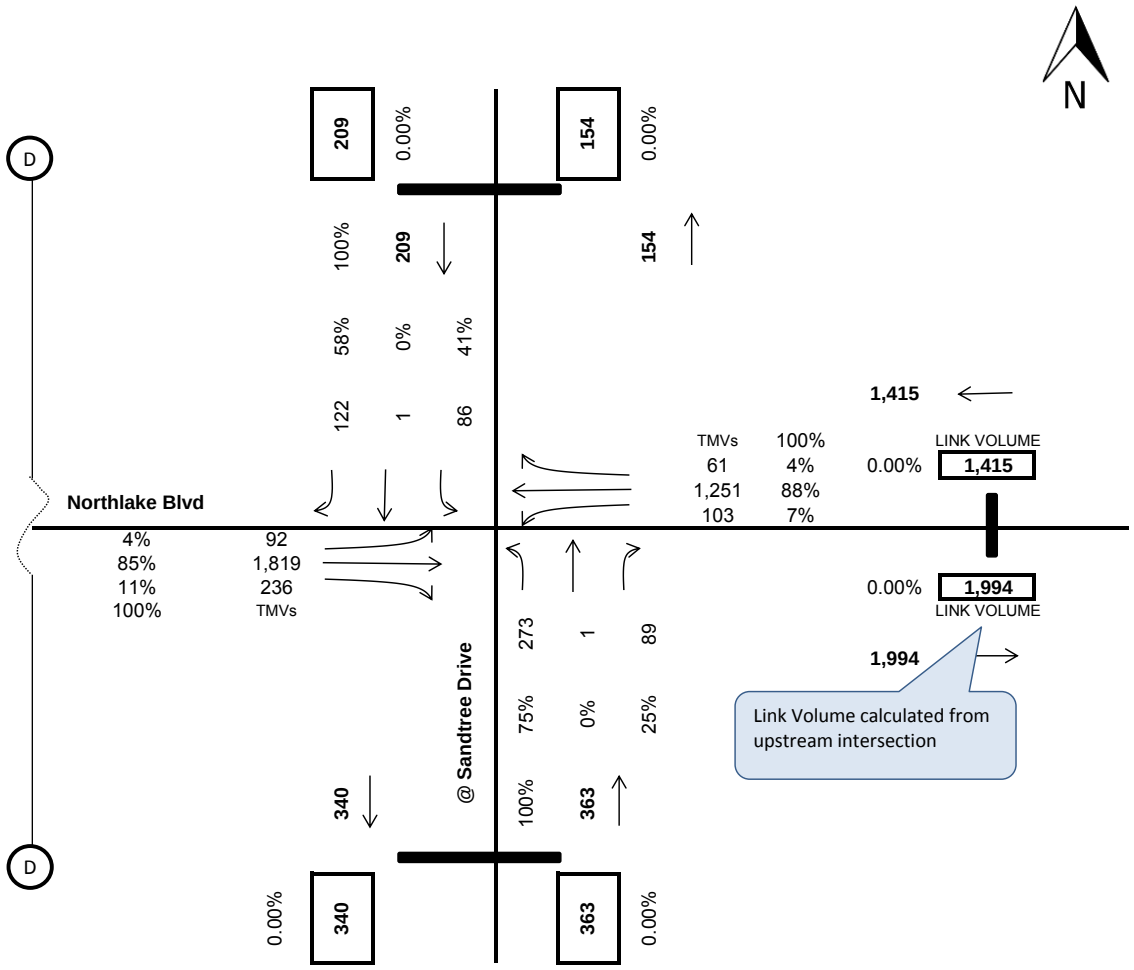
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66 →	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Northlake Boulevard Turning Movement Volume Development 2030 Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **4 of 5** *Date:* 9/24/15

@ Sandtree Drive



Turning Movement Volumes
@ Sandtree Drive

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**1,415**			**363**			**2,147**			**209**		
TM Pk Hr Counts	103	1251	61	273	1	89	124	2454	318	86	1	122
% Turns	7%	88%	4%	75%	0%	25%	4%	85%	11%	41%	0%	58%
Calc. Pk Hr Volumes	103	1251	61	273	1	89	92	1819	236	86	1	122
Adjustments												
Bal Pk Hr Volumes	**103**	**1251**	**61**	**273**	**1**	**89**	**92**	**1819**	**236**	**86**	**1**	**122**

LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A / A	Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

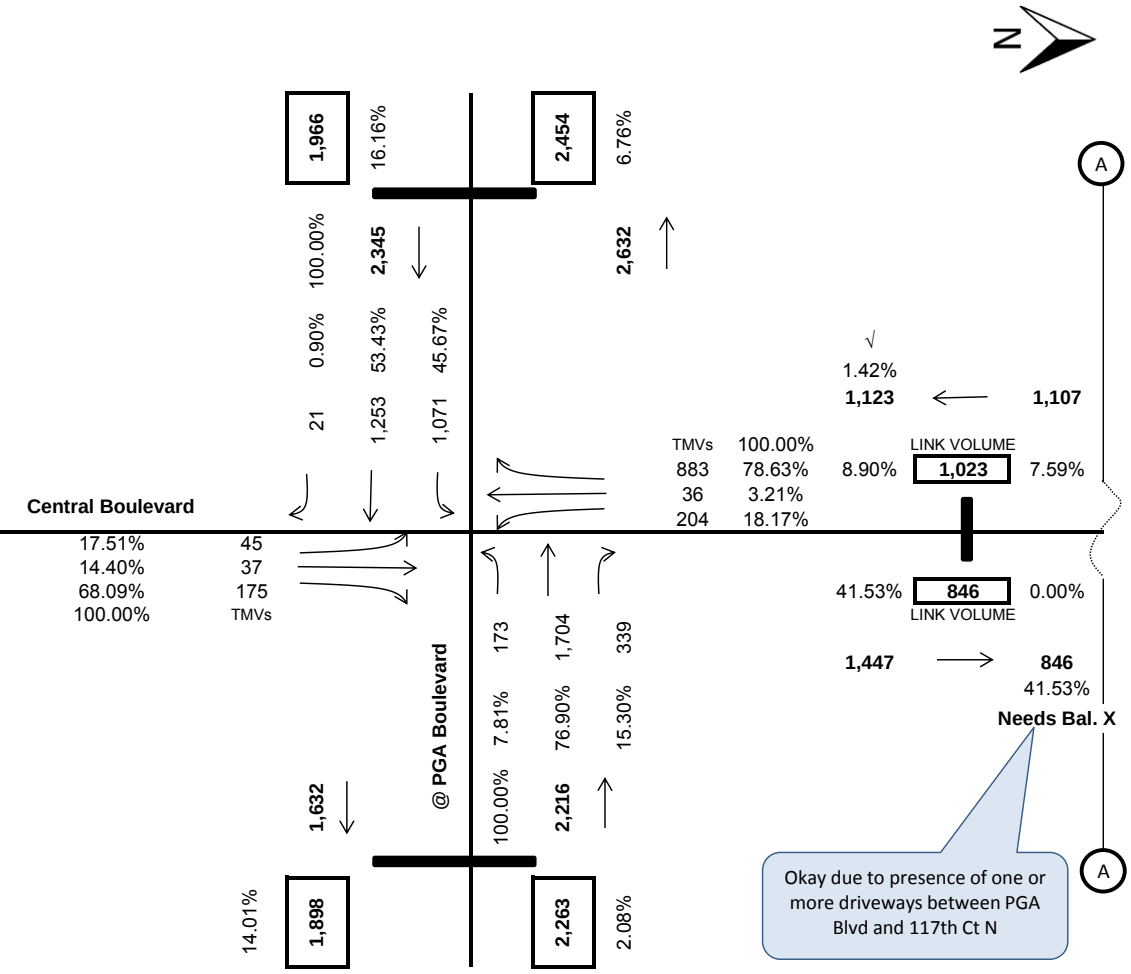
Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Northlake Boulevard Turning Movement Volume Development 2030 Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **5 of 5** *Date:* 9/24/15

APPENDIX AG

BALANCED TURNING MOVEMENT DEVELOPMENT SHEETS

2030 BUILD PM PEAK HOUR

@ PGA Boulevard



Turning Movement Volumes
@ PGA Boulevard

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes												
TM Pk Hr Counts												
% Turns												
Calc. Pk Hr Volumes												
Adjustments												
Bal Pk Hr Volumes	**204**	**36**	**883**	**173**	**1704**	**339**	**45**	**37**	**175**	**1071**	**1253**	**21**

LEGEND

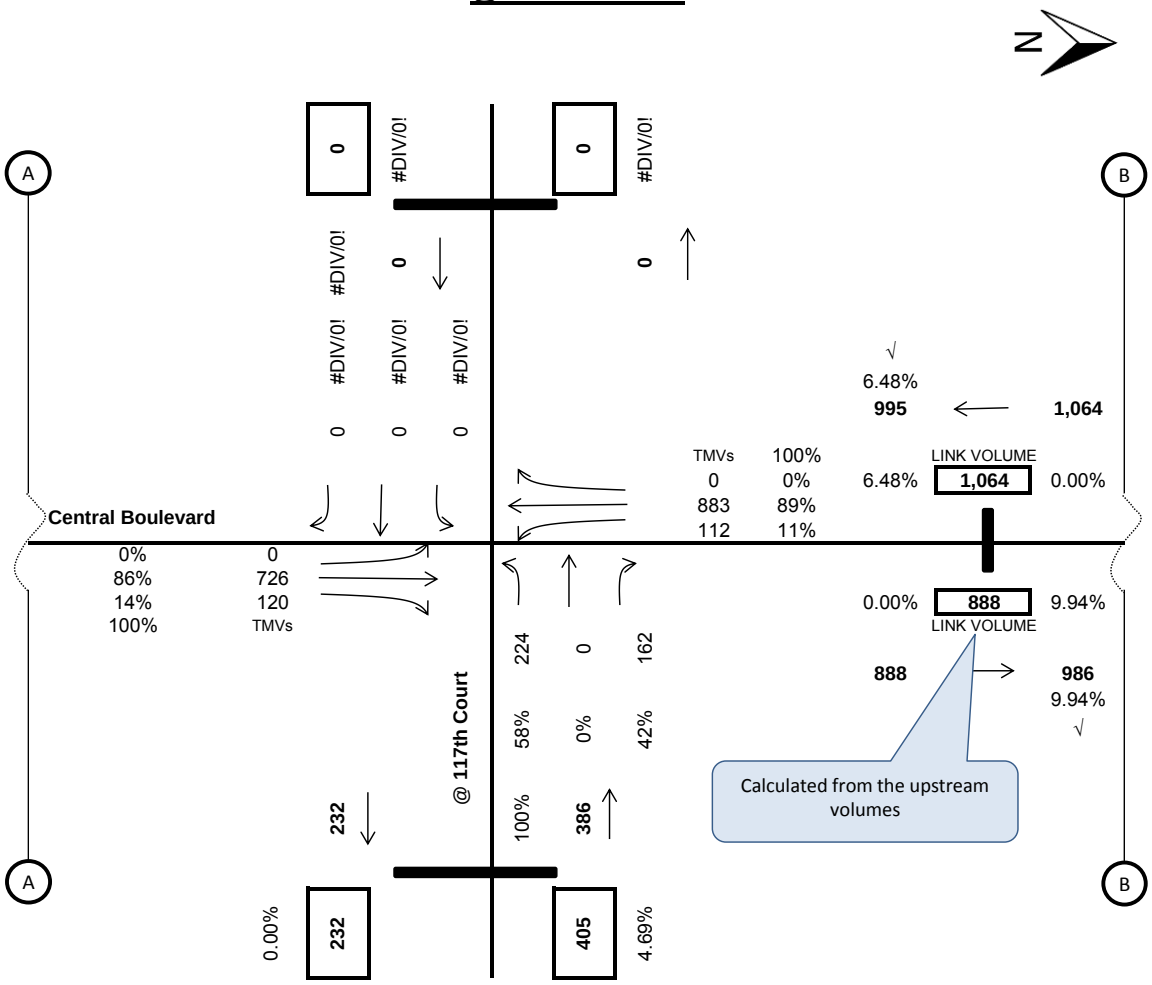
1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

For consistency, balanced peak hour volumes from major street arterial (aka PGA Boulevard) were used. See PGA Boulevard Arterial for details

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Central Boulevard Turning Movement Volume Development 2030 Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **1 of 6** *Date:* 9/24/15

@ 117th Court



Turning Movement Volumes
@ 117th Court

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**1,064**			**405**			**846**			**0**		
TM Pk Hr Counts	176	1375	0	243	0	162	0	1536	255	0	0	0
% Turns	11%	89%	0%	60%	0%	40%	0%	86%	14%	0%	0%	0%
Calc. Pk Hr Volumes	121	943	0	243	0	162	0	726	120	0	0	0
Adjustments	-9	-60		-19								
Bal Pk Hr Volumes	**112**	**883**	**0**	**224**	**0**	**162**	**0**	**726**	**120**	**0**	**0**	**0**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

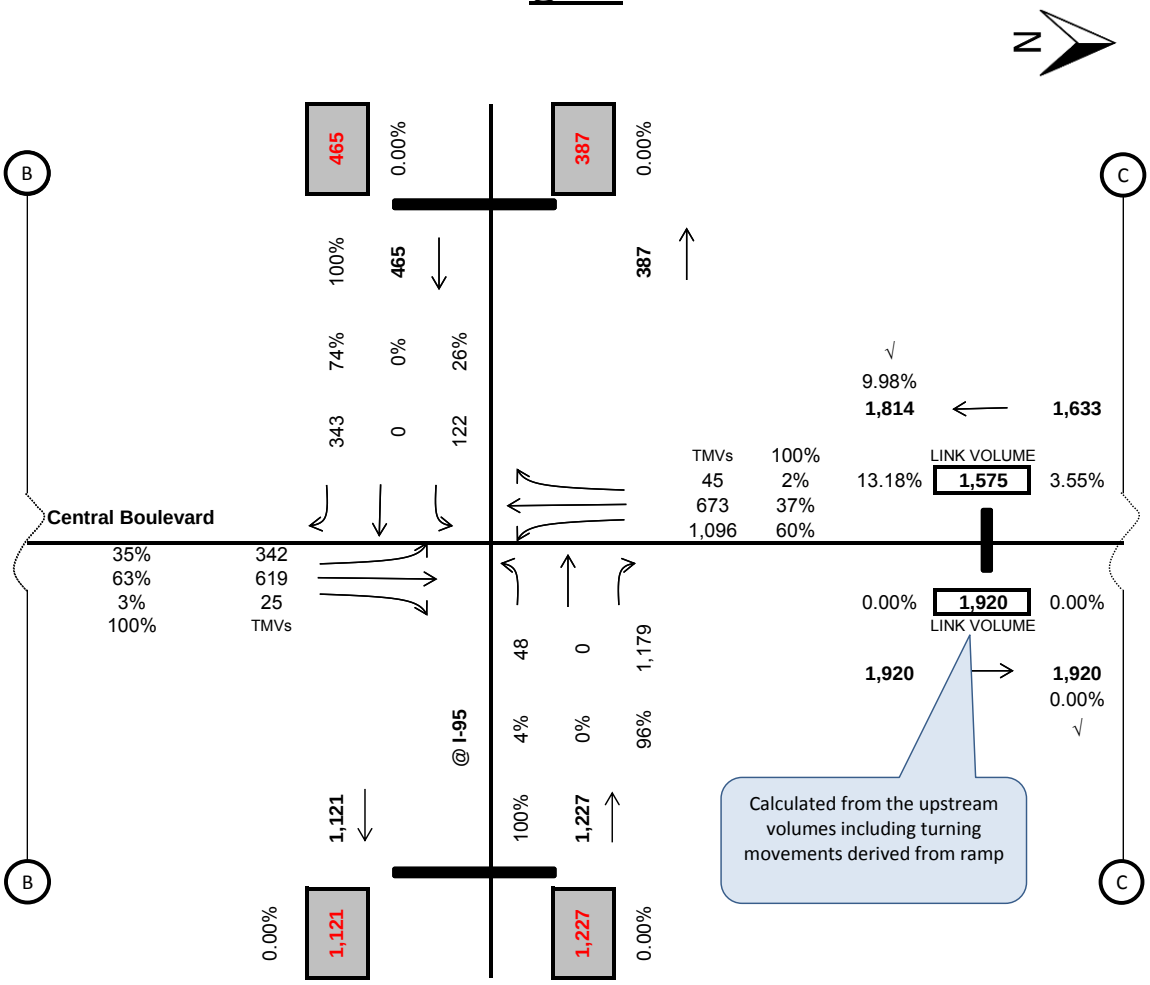
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Central Boulevard Turning Movement Volume Development 2030 Build PM Peak Hour**	*Exhibit No:* **TBD**
		Page No: **2 of 6**
		Date: 9/24/15

@ I-95



Turning Movement Volumes
@ I-95

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**1,575**			**1,227**			**888**			**465**		
TM Pk Hr Counts	1511	1165	51	68	0	1665	480	1384	44	165	0	466
% Turns	55%	43%	2%	4%	0%	96%	25%	73%	2%	26%	0%	74%
Calc. Pk Hr Volumes	873	673	29	48	0	1179	223	644	20	122	0	343
Adjustments	223		16		0		119	-25	5		0	
Bal Pk Hr Volumes	**1096**	**673**	**45**	**48**	**0**	**1179**	**342**	**619**	**25**	**122**	**0**	**343**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

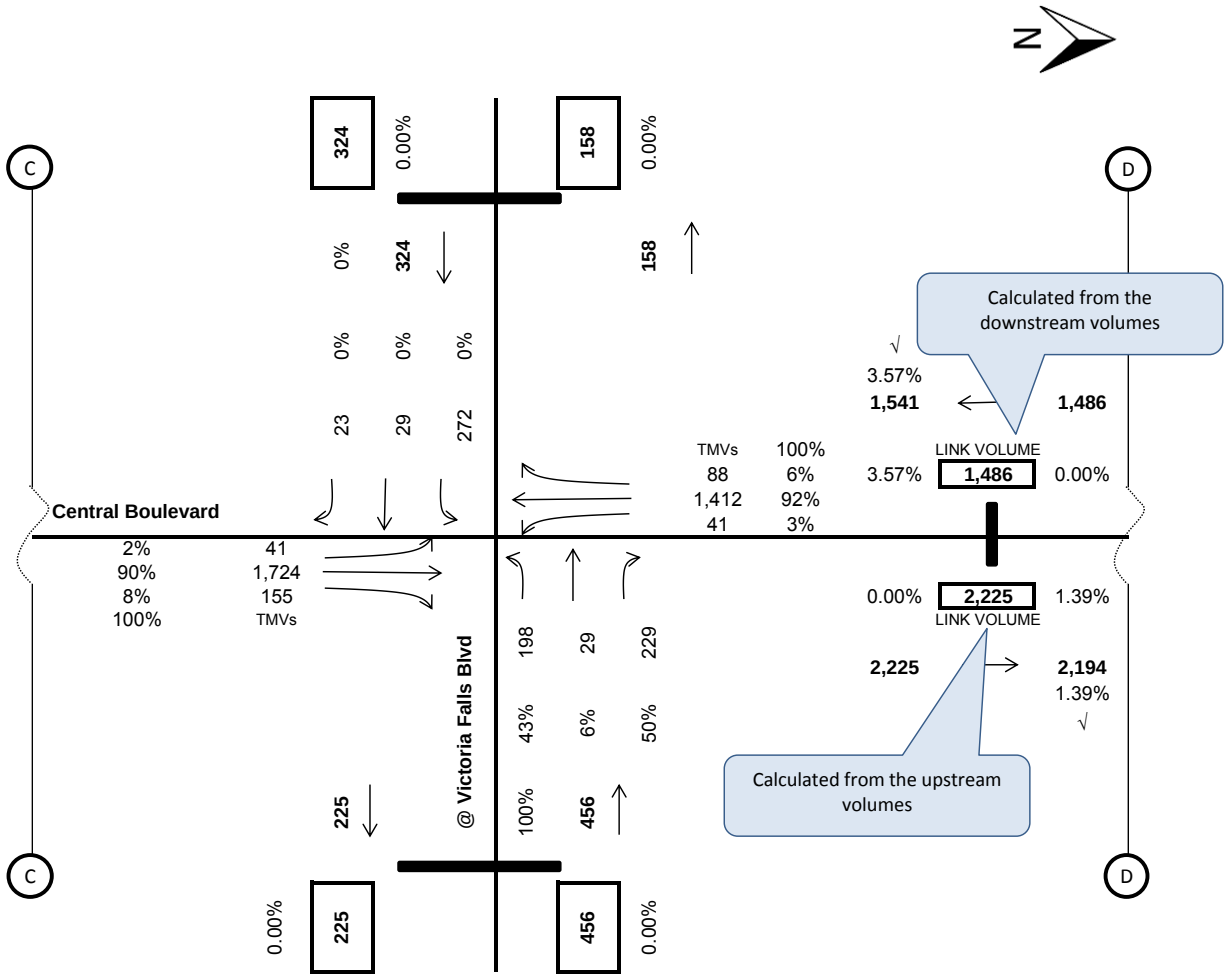
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Central Boulevard Turning Movement Volume Development 2030 Build PM Peak Hour**	*Exhibit No:* **TBD**
		Page No: **3 of 6**
		Date: 9/24/15

@ Victoria Falls Blvd



Turning Movement Volumes
@ Victoria Falls Blvd

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,486**			**456**			**1,920**			**324**	
TM Pk Hr Counts	74	2467	159	198	29	229	67	2798	251	272	30	22
% Turns	3%	91%	6%	43%	6%	50%	2%	90%	8%	84%	9%	7%
Calc. Pk Hr Volumes	41	1358	88	198	29	229	41	1724	155	272	29	23
Adjustments		54										
Bal Pk Hr Volumes	**41**	**1412**	**88**	**198**	**29**	**229**	**41**	**1724**	**155**	**272**	**29**	**23**

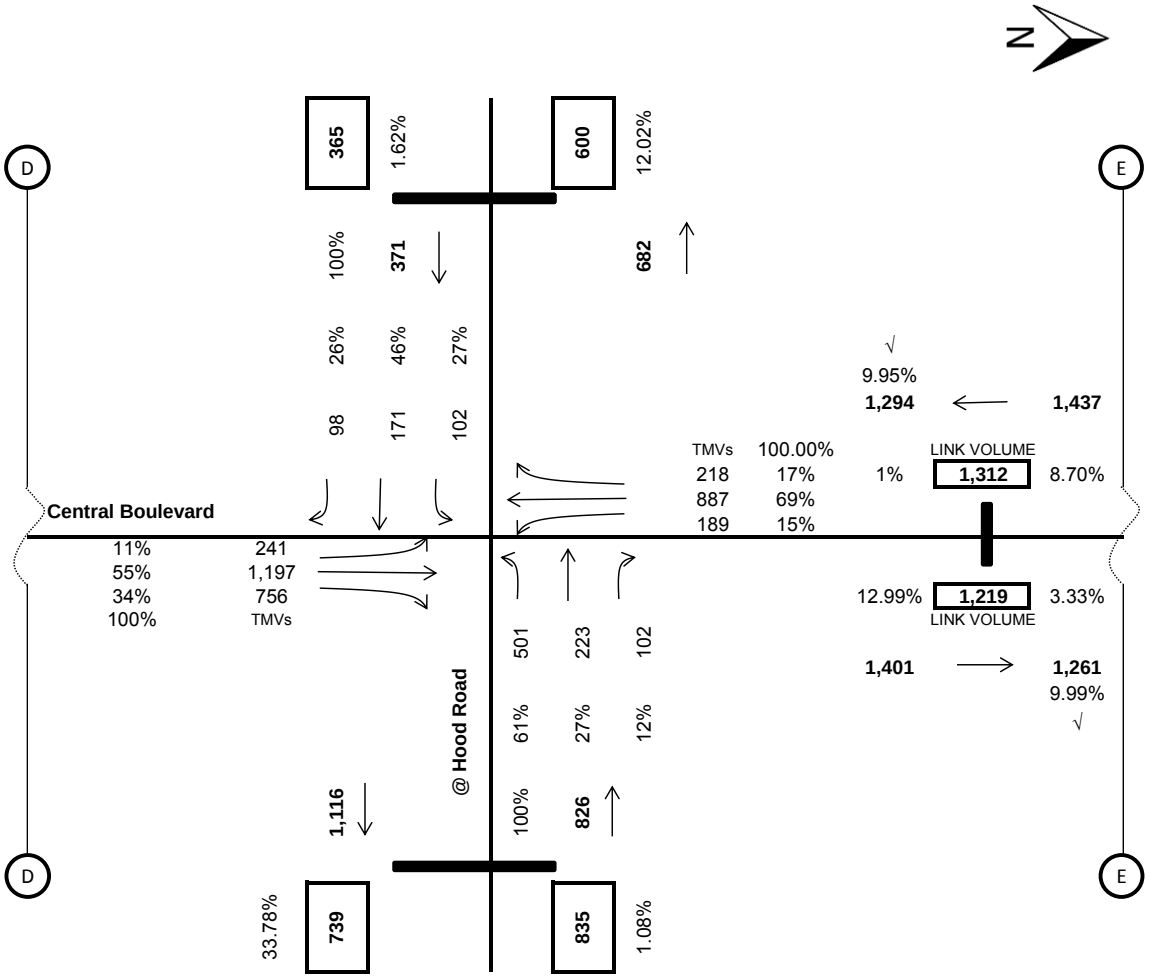
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A / A	Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Central Boulevard Turning Movement Volume Development 2030 Build PM Peak Hour**	*Exhibit No:* **TBD**
		Page No: **4 of 6**
		Date: 9/24/15

@ Hood Road



Turning Movement Volumes
@ Hood Road

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**1,312**			**835**			**2,225**			**365**		
TM Pk Hr Counts	261	1173	302	1164	541	236	342	1634	1051	183	369	203
% Turns	15%	68%	17%	60%	28%	12%	11%	54%	35%	24%	49%	27%
Calc. Pk Hr Volumes	197	887	228	501	233	102	251	1201	773	88	178	98
Adjustments	-8		-10		-10		-10	-4	-17	14	-7	
Bal Pk Hr Volumes	**189**	**887**	**218**	**501**	**223**	**102**	**241**	**1197**	**756**	**102**	**171**	**98**

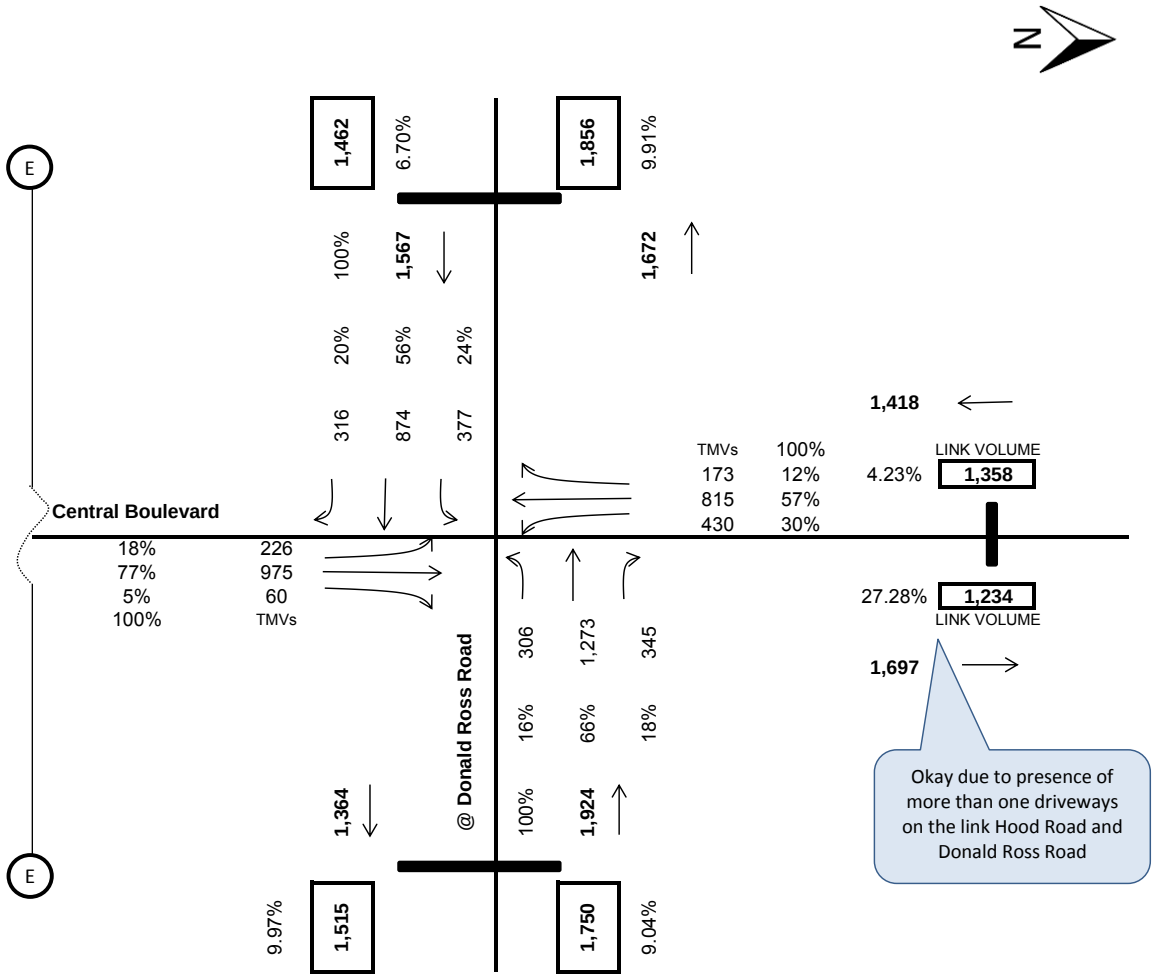
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Central Boulevard** **Turning Movement Volume Development** **2030 Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **5 of 6** *Date:* 9/24/15

@ Donald Ross Road



Turning Movement Volumes
@ Donald Ross Road

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**1,358**			**1,750**			**1,219**			**1,462**		
TM Pk Hr Counts	599	1355	237	319	1074	342	347	1766	94	486	970	427
% Turns	27%	62%	11%	18%	62%	20%	16%	80%	4%	26%	52%	23%
Calc. Pk Hr Volumes	371	840	147	322	1083	345	192	975	52	377	753	332
Adjustments	59	-25	26	-16	190		34		8		121	-16
Bal Pk Hr Volumes	**430**	**815**	**173**	**306**	**1273**	**345**	**226**	**975**	**60**	**377**	**874**	**316**

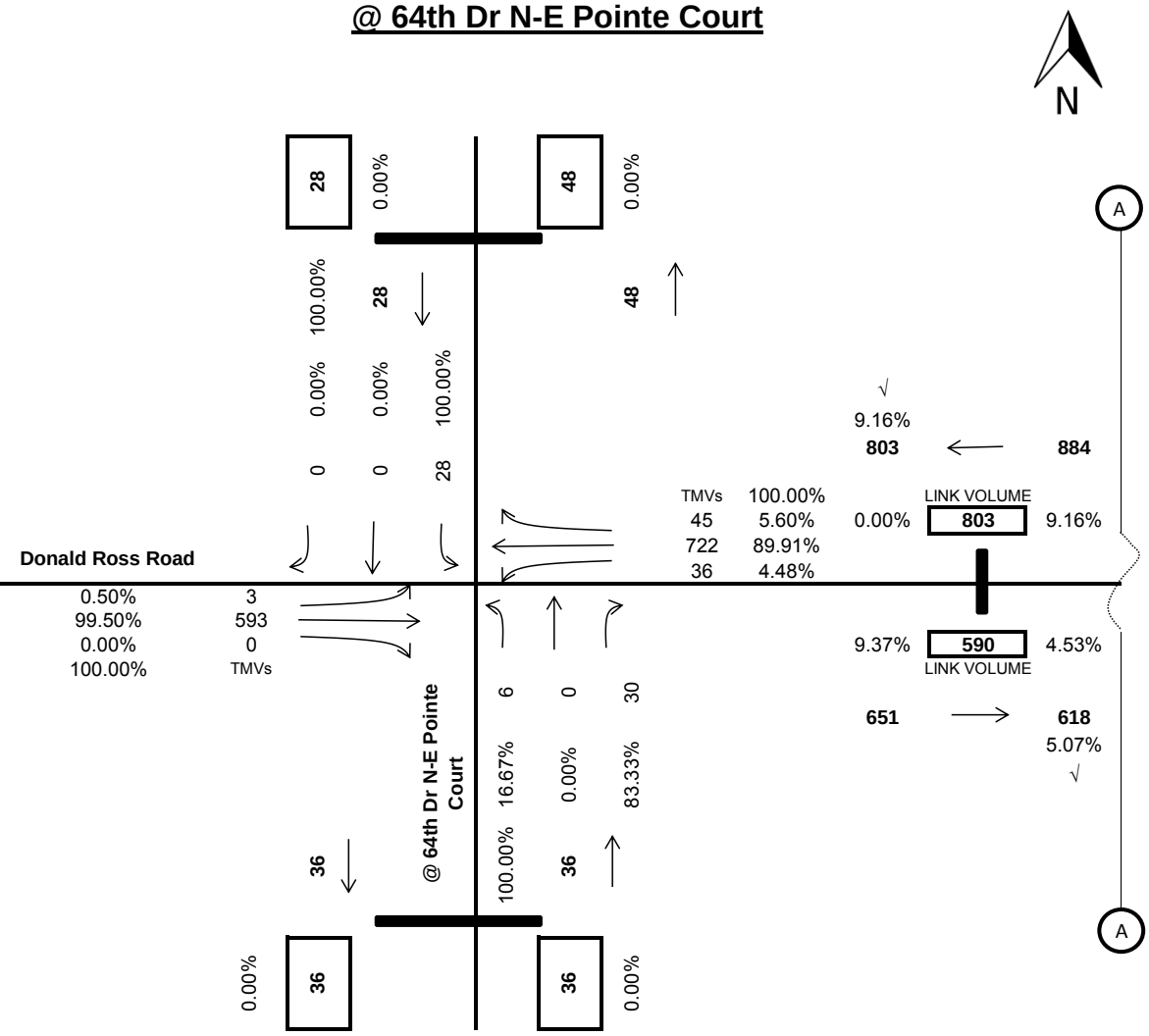
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Central Boulevard** **Turning Movement Volume Development** **2030 Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **6 of 6** *Date:* 9/24/15

@ 64th Dr N-E Pointe Court



Turning Movement Volumes
@ 64th Dr N-E Pointe Court

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**803**			**36**			**596**			**28**	
TM Pk Hr Counts	39	776	48	6	0	30	3	593	0	28	0	0
% Turns	5%	90%	6%	17%	0%	83%	1%	99%	0%	100%	0%	0%
Calc. Pk Hr Volumes	36	722	45	6	0	30	3	593	0	28	0	0
Adjustments												
Bal Pk Hr Volumes	**36**	**722**	**45**	**6**	**0**	**30**	**3**	**593**	**0**	**28**	**0**	**0**

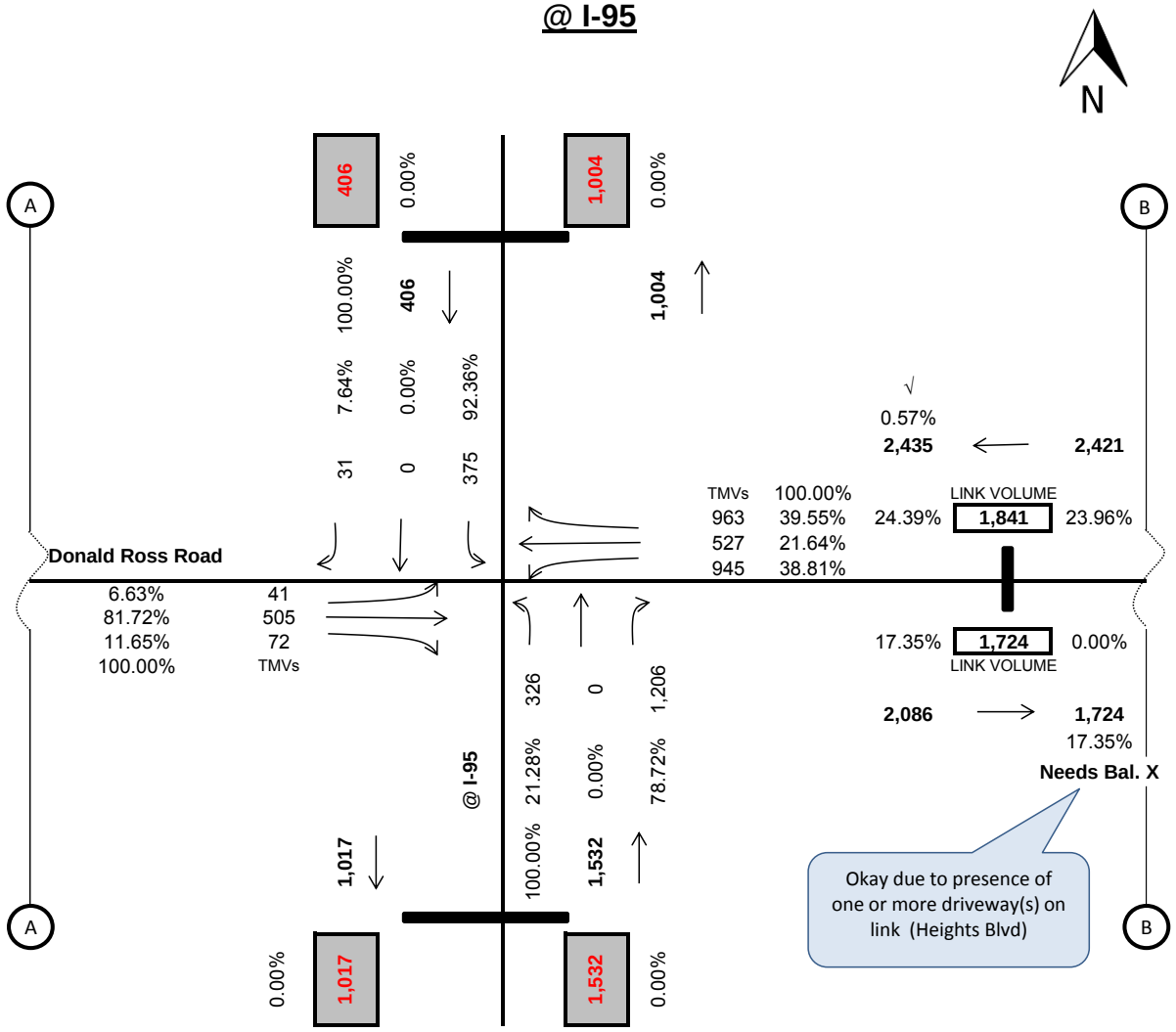
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66 →	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 419265-1-22-01	*Exhibit Name:* **Donald Ross Road** **Turning Movement Volume Development** **2030 Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **1 of 5** *Date:* 9/24/15

@ I-95



Turning Movement Volumes
@ I-95

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,841**			**1,532**			**590**			**406**	
TM Pk Hr Counts	1224	745	634	345	0	1277	39	1021	134	631	0	52
% Turns	47%	29%	24%	21%	0%	79%	3%	86%	11%	92%	0%	8%
Calc. Pk Hr Volumes	866	527	448	326	0	1206	19	505	66	375	0	31
Adjustments	79		515		0		22		6			
Bal Pk Hr Volumes	**945**	**527**	**963**	**326**	**0**	**1206**	**41**	**505**	**72**	**375**	**0**	**31**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

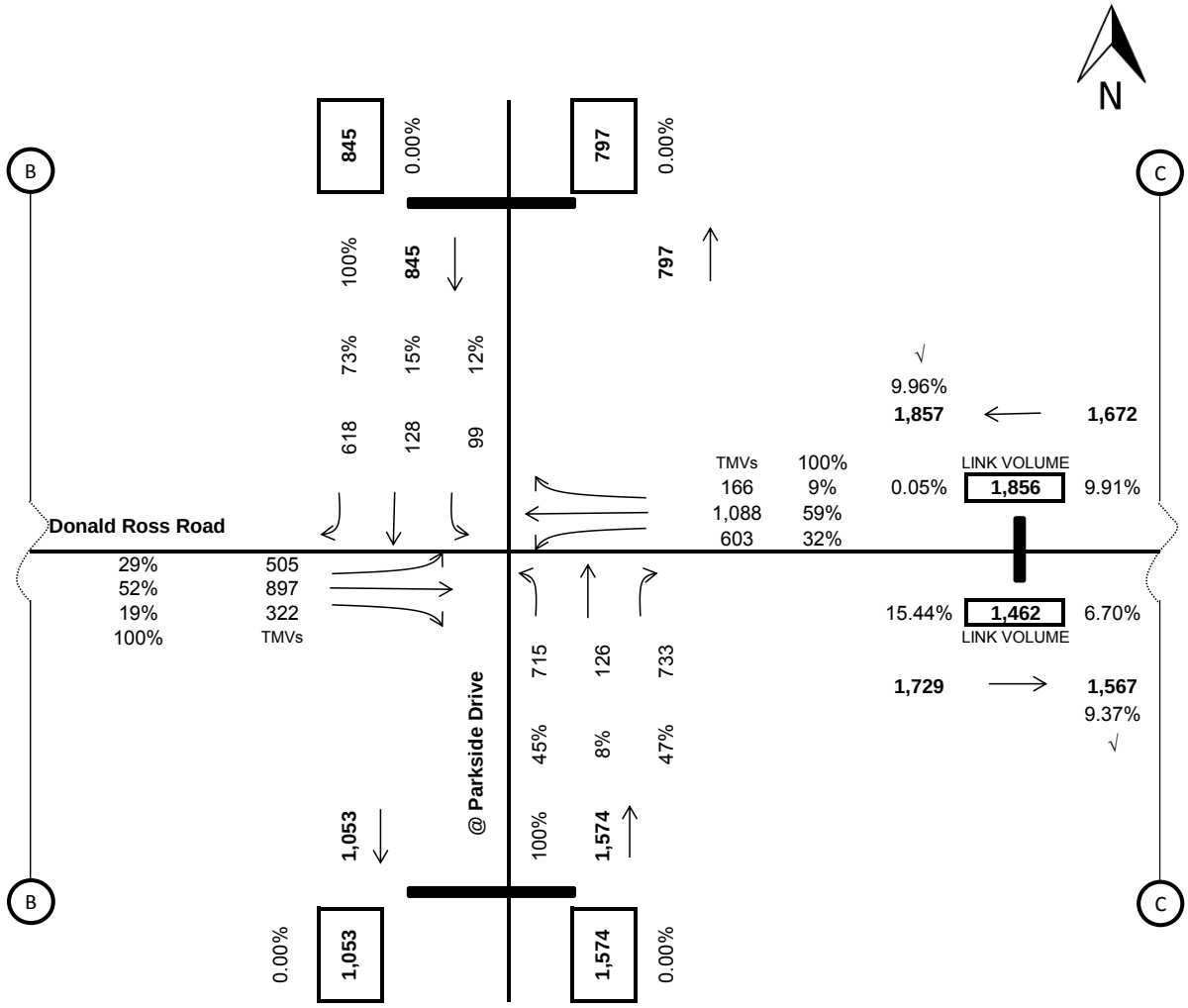
66 → — Turning Movement Volumes (Balanced)

A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

@ Parkside Drive



Turning Movement Volumes
@ Parkside Drive

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,856**			**1,574**			**1,724**			**845**	
TM Pk Hr Counts	585	1056	161	715	126	733	636	1129	406	99	128	618
% Turns	32%	59%	9%	45%	8%	47%	29%	52%	19%	12%	15%	73%
Calc. Pk Hr Volumes	603	1088	166	715	126	733	505	897	322	99	128	618
Adjustments												
Bal Pk Hr Volumes	**603**	**1088**	**166**	**715**	**126**	**733**	**505**	**897**	**322**	**99**	**128**	**618**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

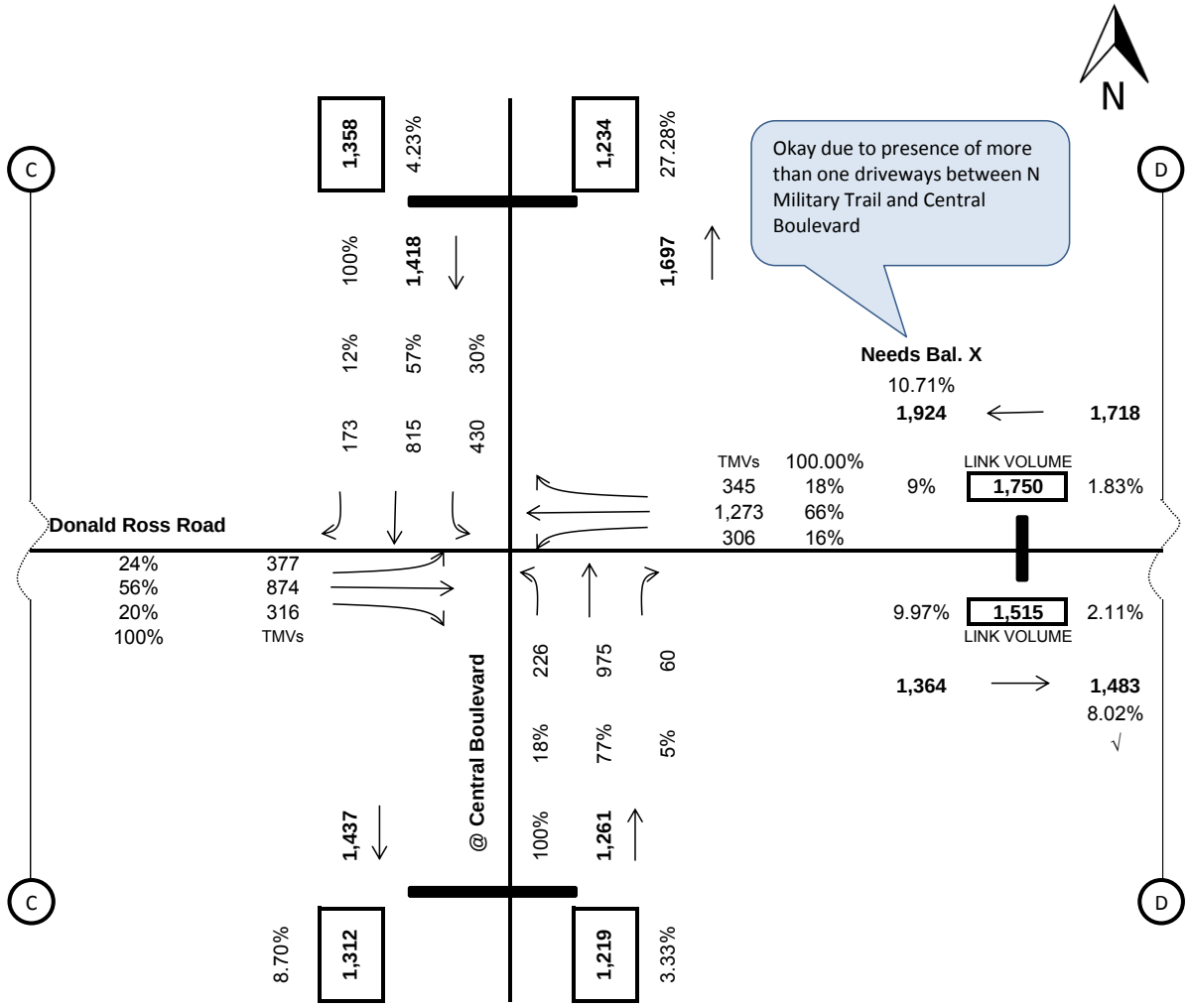
66 → — Turning Movement Volumes (Balanced)

A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

@ Central Boulevard



Turning Movement Volumes
@ Central Boulevard

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes												
TM Pk Hr Counts												
% Turns												
Calc. Pk Hr Volumes												
Adjustments												
Bal Pk Hr Volumes	**306**	**1273**	**345**	**226**	**975**	**60**	**377**	**874**	**316**	**430**	**815**	**173**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 → Turning Movement Volumes (Balanced)

A — Match Line

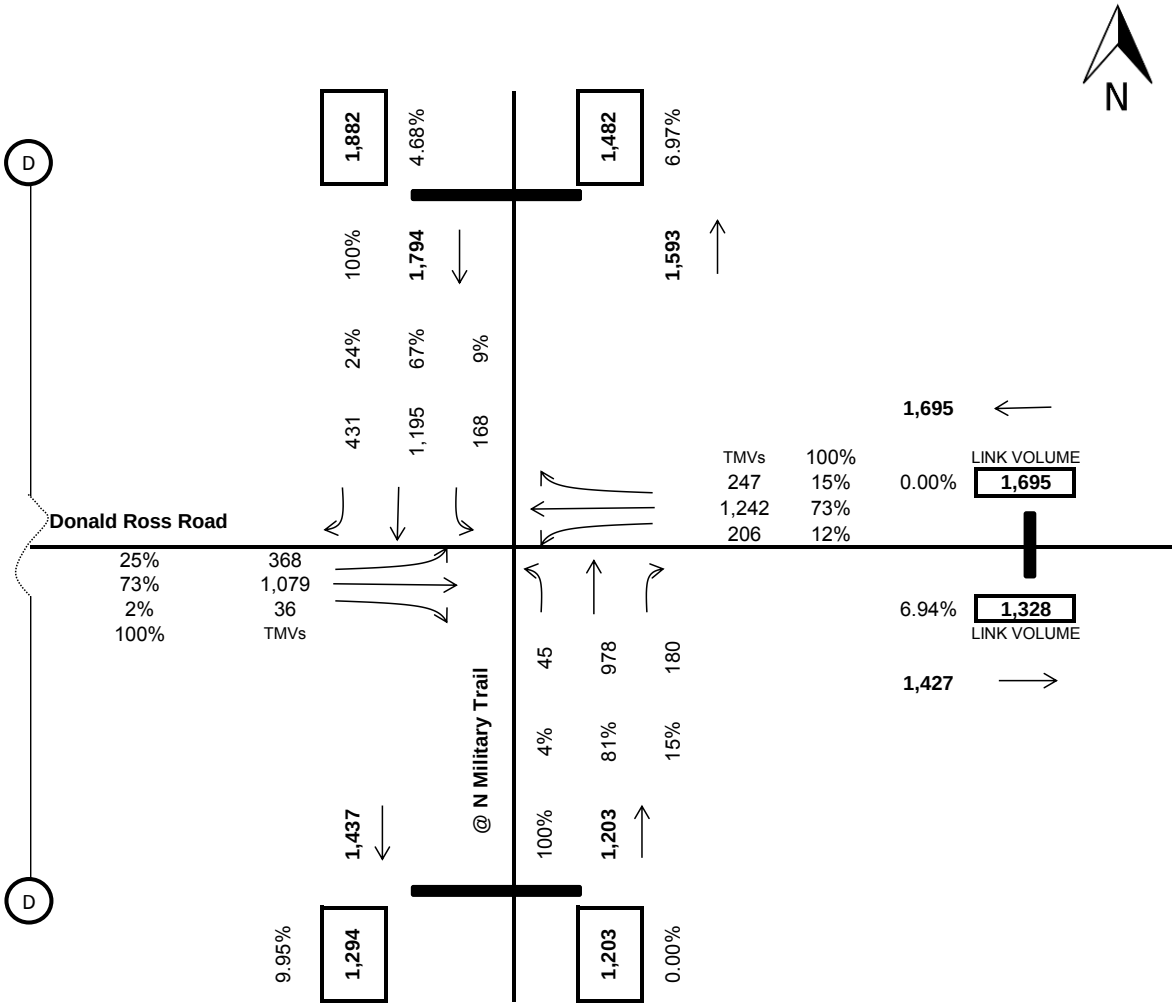
A

For consistency, balanced peak hour volumes from major street arterial (aka Central Boulevard) were used. See Central Boulevard Arterial for details

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 419265-1-22-01	Exhibit Name: **Donald Ross Road Turning Movement Volume Development 2030 Build PM Peak Hour**	Exhibit No: **TBD** Page No: **4 of 5** Date: 9/24/15

@ N Military Trail



Turning Movement Volumes
@ N Military Trail

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes												
TM Pk Hr Counts												
% Turns												
Calc. Pk Hr Volumes												
Adjustments												
Bal Pk Hr Volumes	**206**	**1242**	**247**	**45**	**978**	**180**	**368**	**1079**	**36**	**168**	**1195**	**431**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

A — Match Line

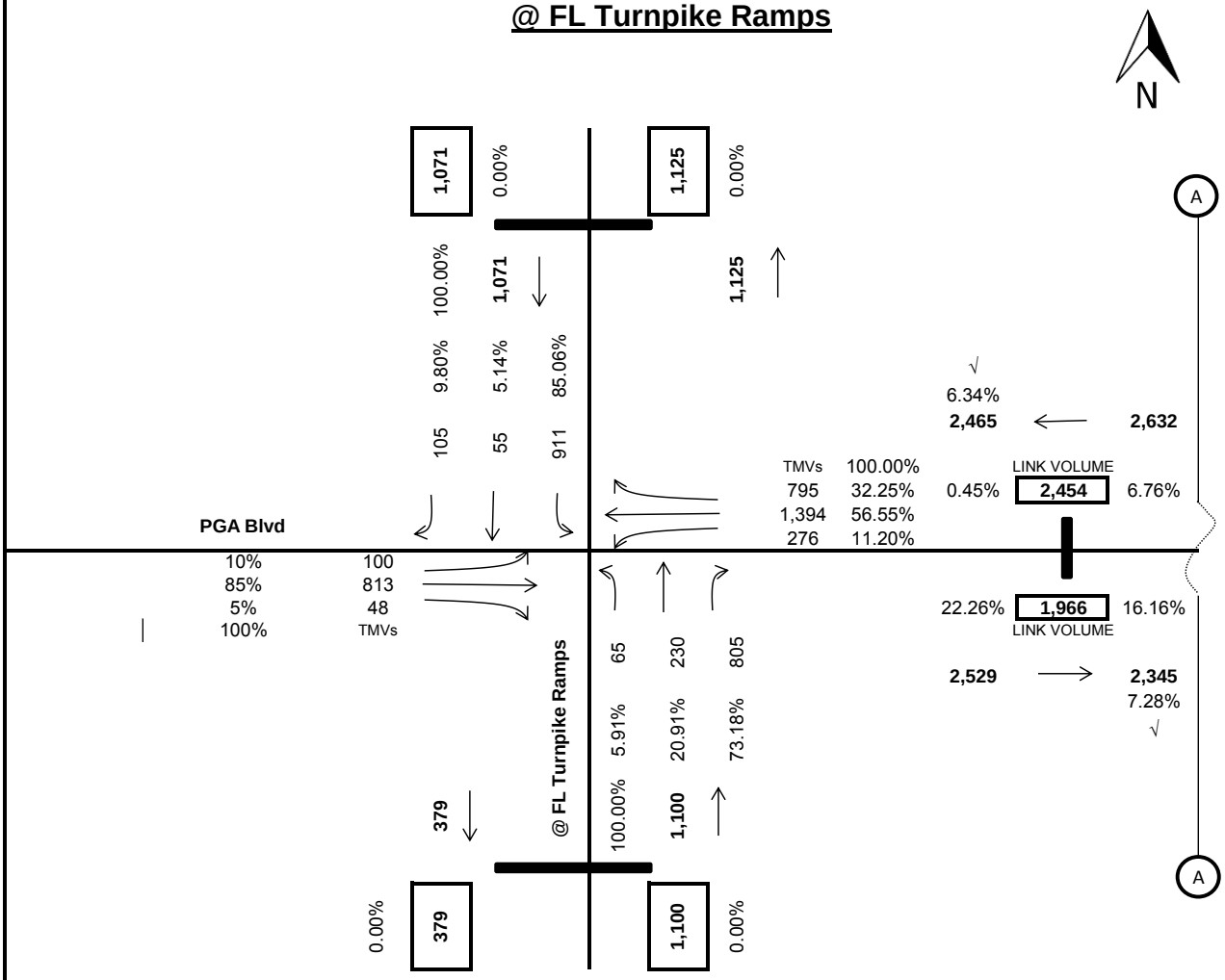
A

For consistency, balanced peak hour volumes from major street arterial (aka N Military Trail) were used. See N Military Trail Arterial for details

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name:	Exhibit Name:		
SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FPID No. 413266-1-22-01	**Donald Ross Road** **Turning Movement Volume Development** **2030 Build PM Peak Hour**	*Exhibit No:*	**TBD**
		Page No:	**5 of 5**
		Date:	9/24/15

@ FL Turnpike Ramps



Turning Movement Volumes
@ FL Turnpike Ramps

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**2,454**			**1,100**			**960**			**1,071**		
TM Pk Hr Counts	389	2041	1164	65	230	805	203	1658	97	911	55	105
% Turns	11%	57%	32%	6%	21%	73%	10%	85%	5%	85%	5%	10%
Calc. Pk Hr Volumes	266	1394	795	65	230	805	100	813	48	911	55	105
Adjustments	10											
Bal Pk Hr Volumes	**276**	**1394**	**795**	**65**	**230**	**805**	**100**	**813**	**48**	**911**	**55**	**105**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

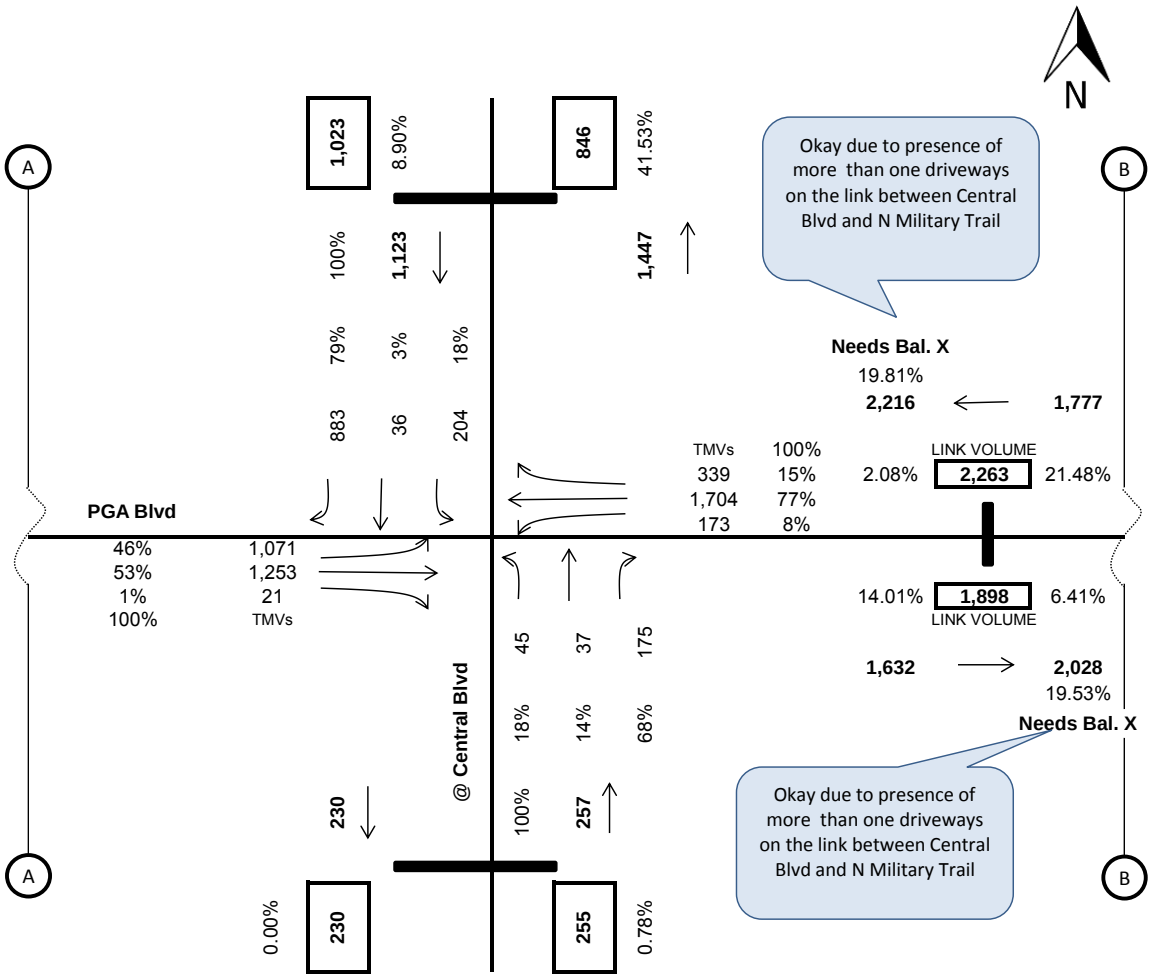
66 — Turning Movement Volumes (Balanced)

A / A — Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard** **Turning Movement Volume Development** **2030 Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **1 of 8** *Date:* 9/24/15

@ Central Blvd



Turning Movement Volumes
@ Central Blvd

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**2,263**			**255**			**1,966**			**1,023**		
TM Pk Hr Counts	195	1925	437	45	56	154	1460	1192	29	299	52	1315
% Turns	8%	75%	17%	18%	22%	60%	54%	44%	1%	18%	3%	79%
Calc. Pk Hr Volumes	173	1704	387	45	56	154	1071	874	21	184	32	807
Adjustments			-48		-19	21		379		20	4	76
Bal Pk Hr Volumes	**173**	**1704**	**339**	**45**	**37**	**175**	**1071**	**1253**	**21**	**204**	**36**	**883**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

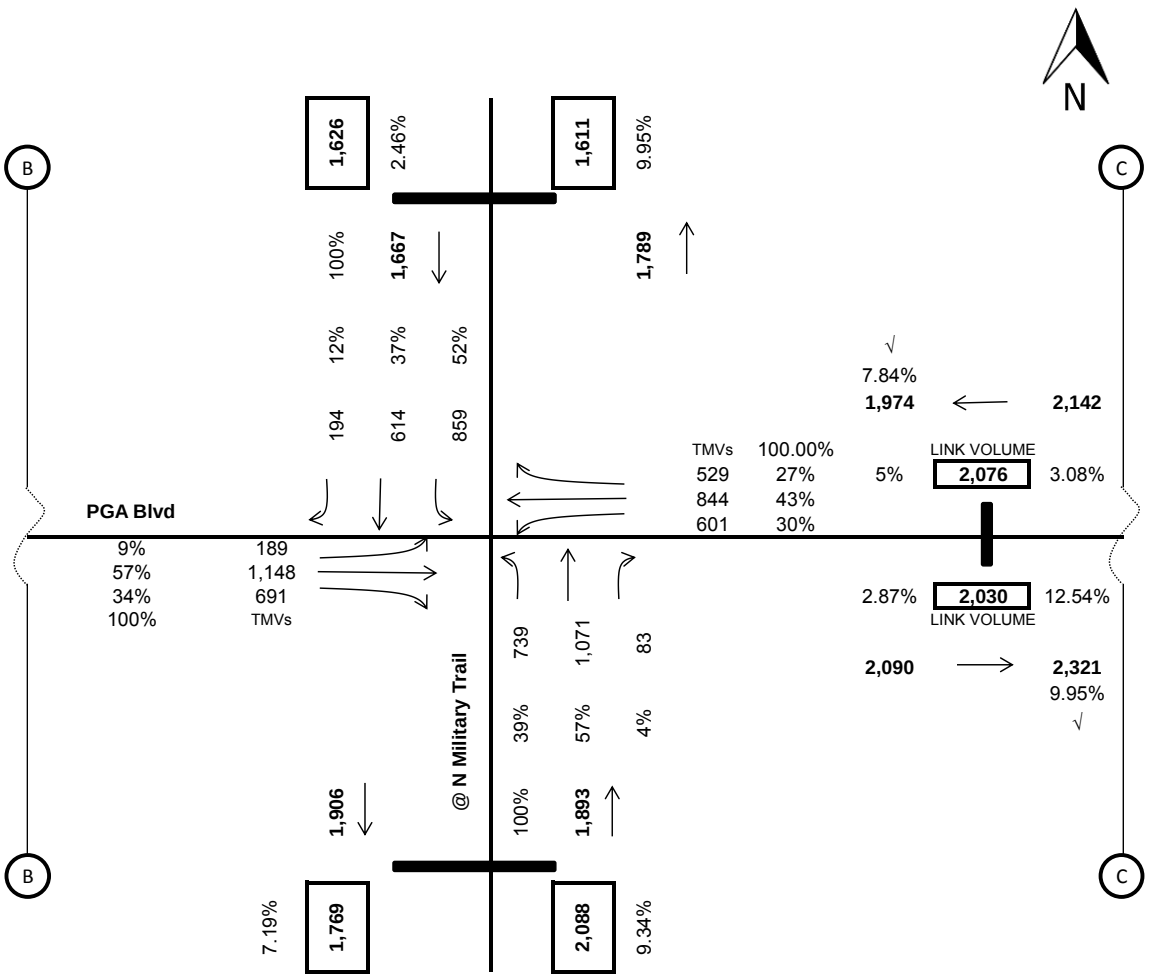
66 → Turning Movement Volumes (Balanced)

A … A — Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name:	Exhibit Name:		
SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	**PGA Boulevard** **Turning Movement Volume Development** **2030 Build PM Peak Hour**	*Exhibit No:*	**TBD**
		Page No:	**2 of 8**
		Date:	9/24/15

@ N Military Trail



Turning Movement Volumes
@ N Military Trail

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**2,076**			**2,088**			**1,898**			**1,626**		
TM Pk Hr Counts	859	1207	902	1123	1931	117	217	874	624	1329	998	316
% Turns	29%	41%	30%	35%	61%	4%	13%	51%	36%	50%	38%	12%
Calc. Pk Hr Volumes	601	844	631	739	1272	77	240	967	691	818	614	194
Adjustments			-102		-201	6	-51	181		41		
Bal Pk Hr Volumes	**601**	**844**	**529**	**739**	**1071**	**83**	**189**	**1148**	**691**	**859**	**614**	**194**

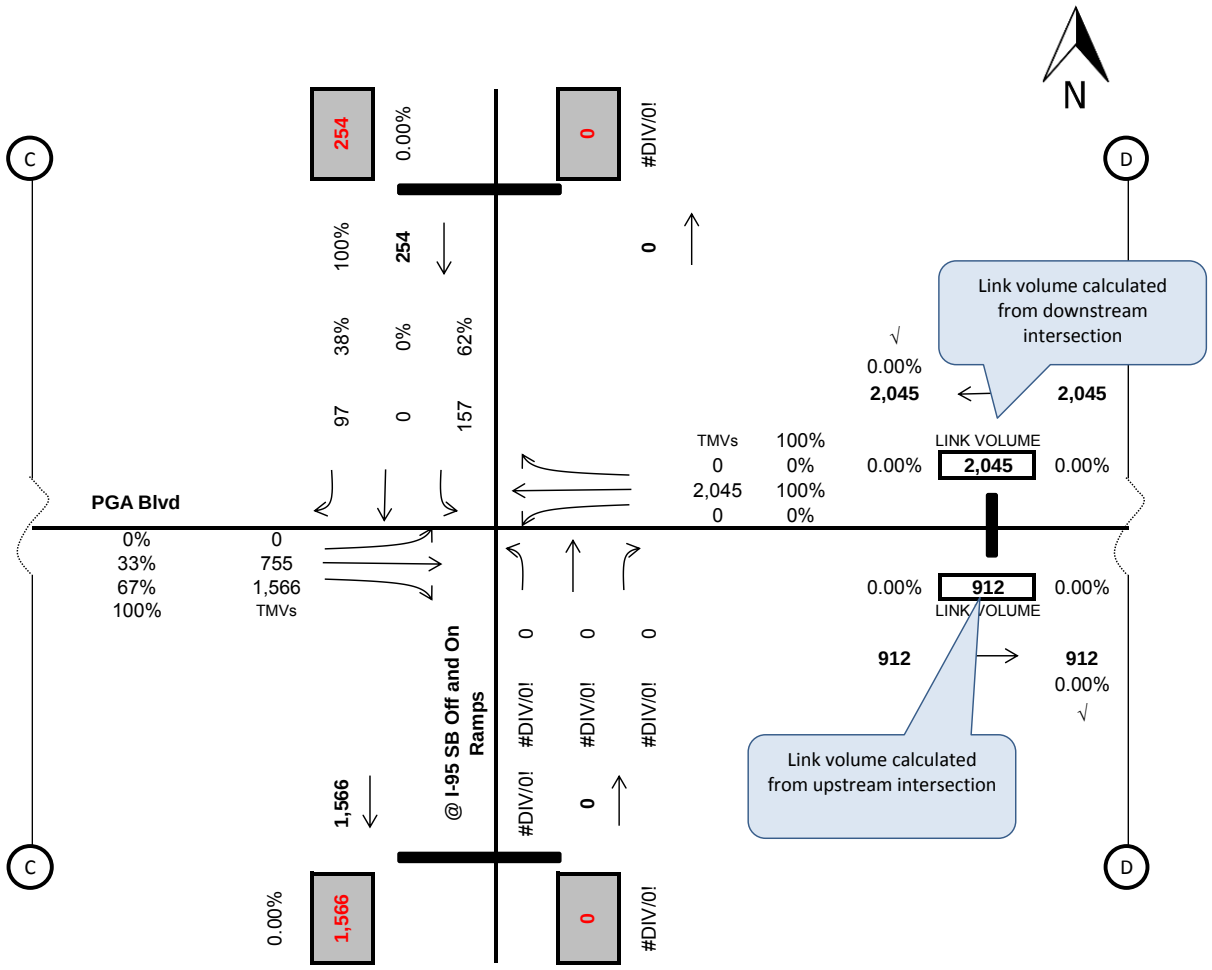
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard** **Turning Movement Volume Development** **2030 Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **3 of 8** *Date:* 9/24/15

@ I-95 SB Off and On Ramps



Turning Movement Volumes
@ I-95 SB Off and On Ramps

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**2,045**			**0**			**2,030**			**254**	
TM Pk Hr Counts	0	2827	0	0	0	0	0	666	1578	174	0	108
% Turns	0%	100%	0%	0%	0%	0%	0%	30%	70%	62%	0%	38%
Calc. Pk Hr Volumes	0	2045	0	0	0	0	0	602	1428	157	0	97
Adjustments								153	138			
Bal Pk Hr Volumes	**0**	**2045**	**0**	**0**	**0**	**0**	**0**	**755**	**1566**	**157**	**0**	**97**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 → Turning Movement Volumes (Balanced)

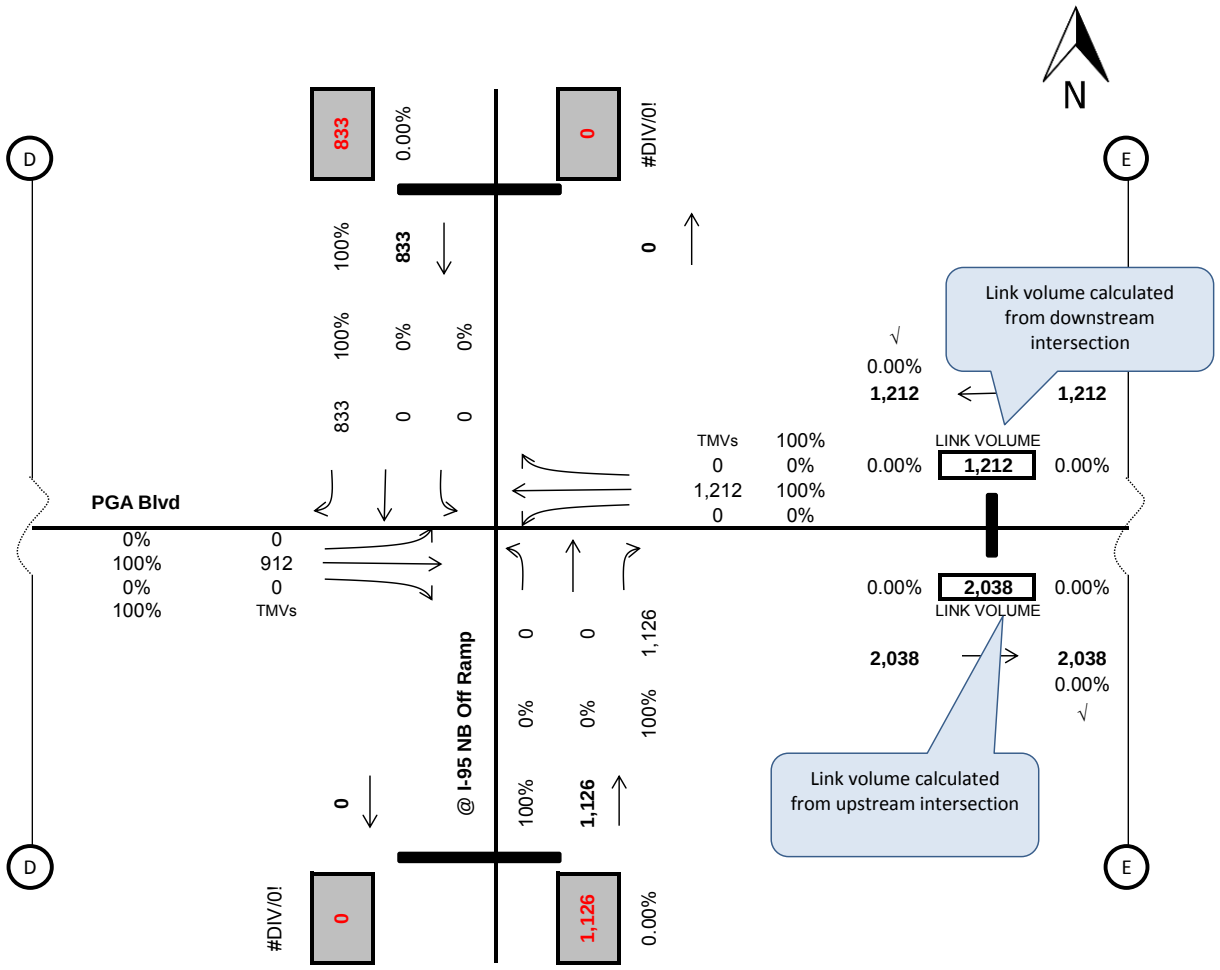
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard** **Turning Movement Volume Development** **2030 Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **4 of 8** *Date:* 9/24/15

@ I-95 NB Off Ramp



Turning Movement Volumes
@ I-95 NB Off Ramp

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,212**			**1,126**			**912**			**833**	
TM Pk Hr Counts	0	2827	0	0	0	1933	0	840	0	0	0	1443
% Turns	0%	100%	0%	0%	0%	100%	0%	100%	0%	0%	0%	100%
Calc. Pk Hr Volumes	0	1212	0	0	0	1126	0	912	0	0	0	833
Adjustments												
Bal Pk Hr Volumes	**0**	**1212**	**0**	**0**	**0**	**1126**	**0**	**912**	**0**	**0**	**0**	**833**

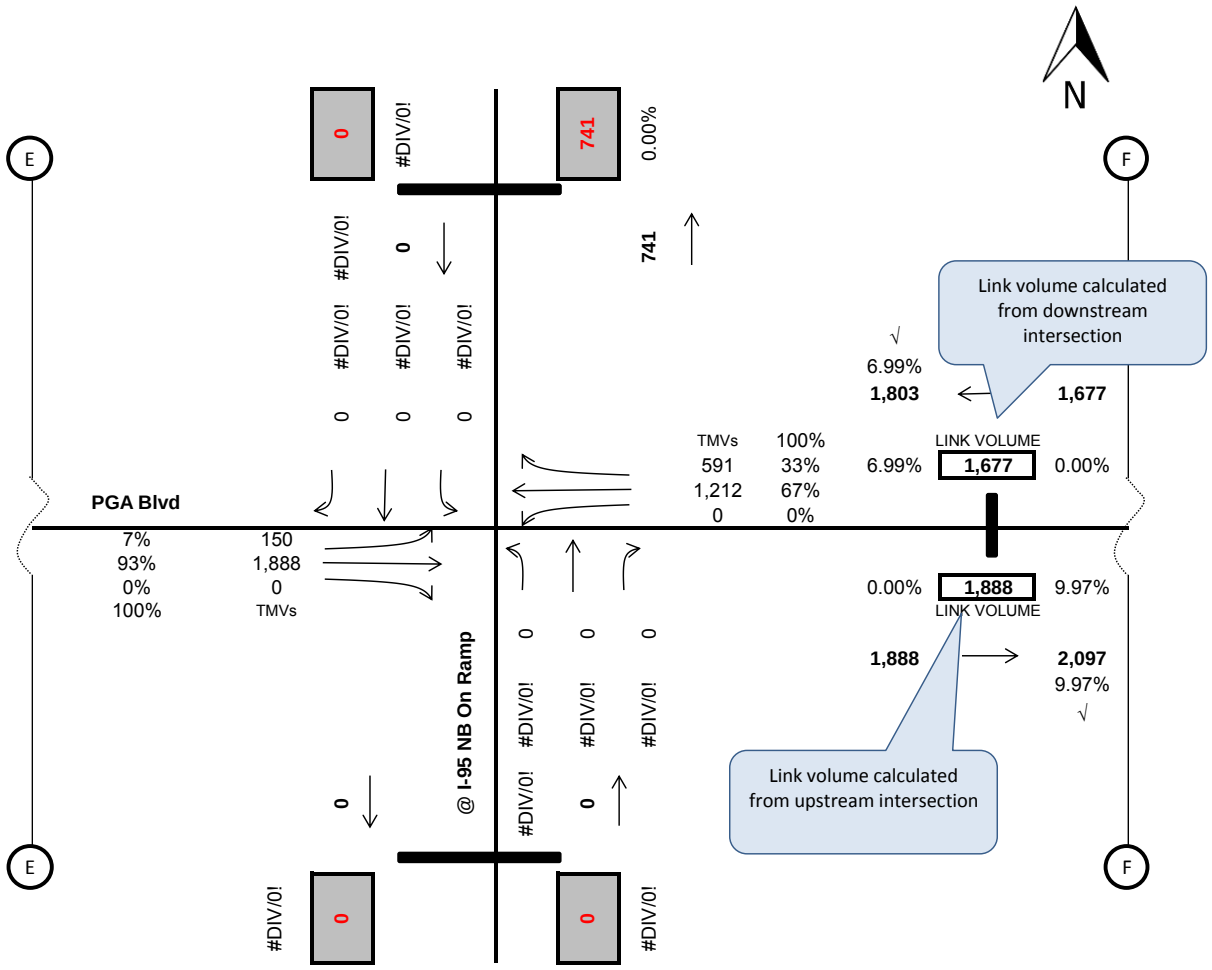
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A … A	Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard** **Turning Movement Volume Development** **2030 Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **5 of 8** *Date:* 9/24/15

@ I-95 NB On Ramp



Turning Movement Volumes
@ I-95 NB On Ramp

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,677**			**0**			**2,038**			**0**	
TM Pk Hr Counts	0	1385	532	0	0	0	160	2611	0	0	0	0
% Turns	0%	72%	28%	0%	0%	0%	6%	94%	0%	0%	0%	0%
Calc. Pk Hr Volumes	0	1212	465	0	0	0	118	1920	0	0	0	0
Adjustments			126				32	-32				
Bal Pk Hr Volumes	**0**	**1212**	**591**	**0**	**0**	**0**	**150**	**1888**	**0**	**0**	**0**	**0**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

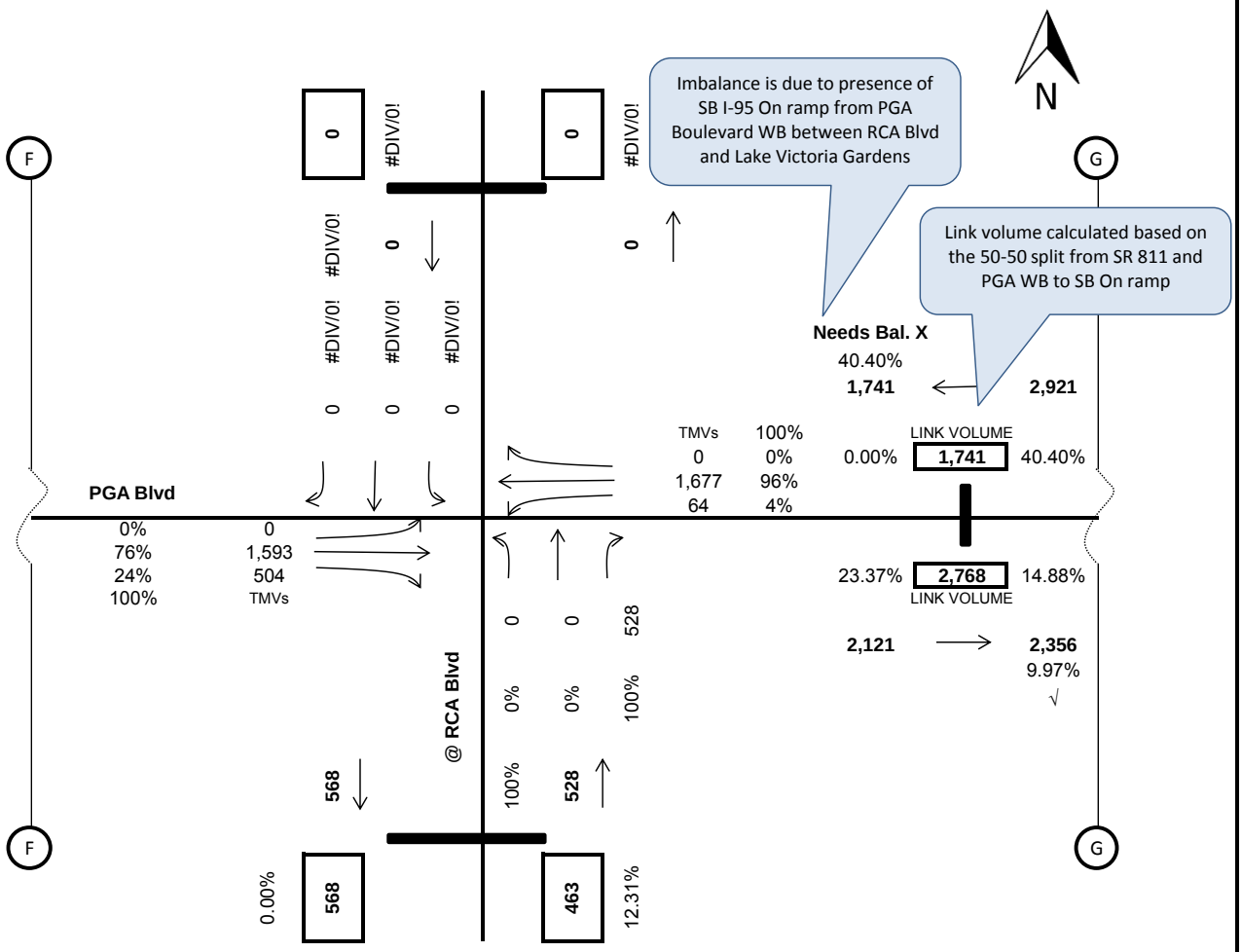
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard** **Turning Movement Volume Development** **2030 Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **6 of 8** *Date:* 9/24/15

@ RCA Blvd



Turning Movement Volumes
@ RCA Blvd

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,741**			**463**			**1,888**			**0**	
TM Pk Hr Counts	73	1917	0	0	0	463	0	1613	998	0	0	0
% Turns	4%	96%	0%	0%	0%	100%	0%	62%	38%	0%	0%	0%
Calc. Pk Hr Volumes	64	1677	0	0	0	463	0	1166	722	0	0	0
Adjustments						65		427	-218			
Bal Pk Hr Volumes	**64**	**1677**	**0**	**0**	**0**	**528**	**0**	**1593**	**504**	**0**	**0**	**0**

Adjustments were made to achieve balance between upstream and downstream intersection volumes as well as reasonable split between

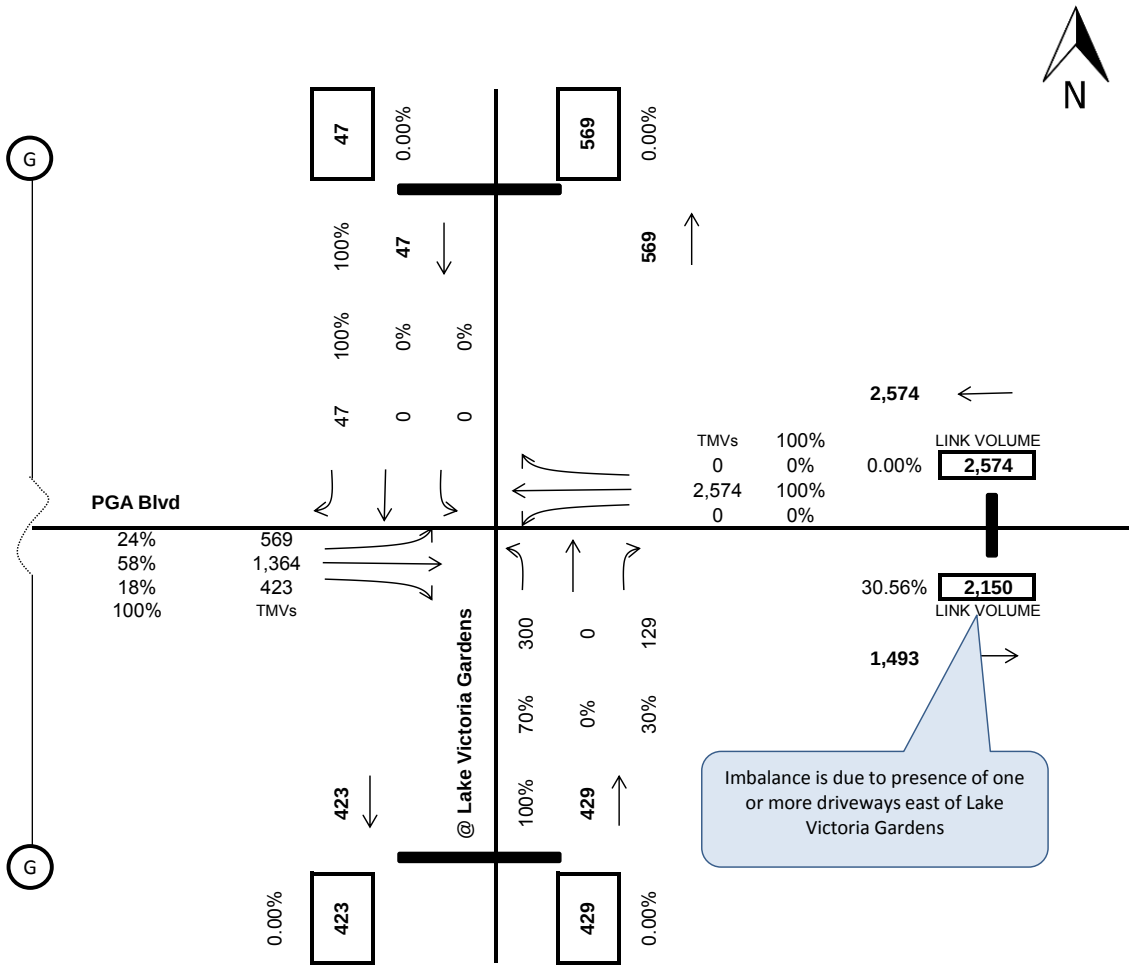
LEGEND

- 1,500 — Control Volumes (Peak Hour)*
- 1,300 — Link Volumes (Peak Hour)
- 66 → — Turning Movement Volumes (Balanced)
- A … A — Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name:	Exhibit Name:		
SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	**PGA Boulevard** **Turning Movement Volume Development** **2030 Build PM Peak Hour**	Exhibit No:	**TBD**
		Page No:	**7 of 8**
		Date:	9/24/15

@ Lake Victoria Gardens



Turning Movement Volumes
@ Lake Victoria Gardens

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**2,574**			**429**			**2,768**			**47**	
TM Pk Hr Counts	0	2772	0	300	0	129	507	1287	373	0	0	47
% Turns	0%	100%	0%	70%	0%	30%	23%	59%	17%	0%	0%	100%
Calc. Pk Hr Volumes	0	2574	0	300	0	129	648	1644	476	0	0	47
Adjustments							-79	-280	-53			
Bal Pk Hr Volumes	**0**	**2574**	**0**	**300**	**0**	**129**	**569**	**1364**	**423**	**0**	**0**	**47**

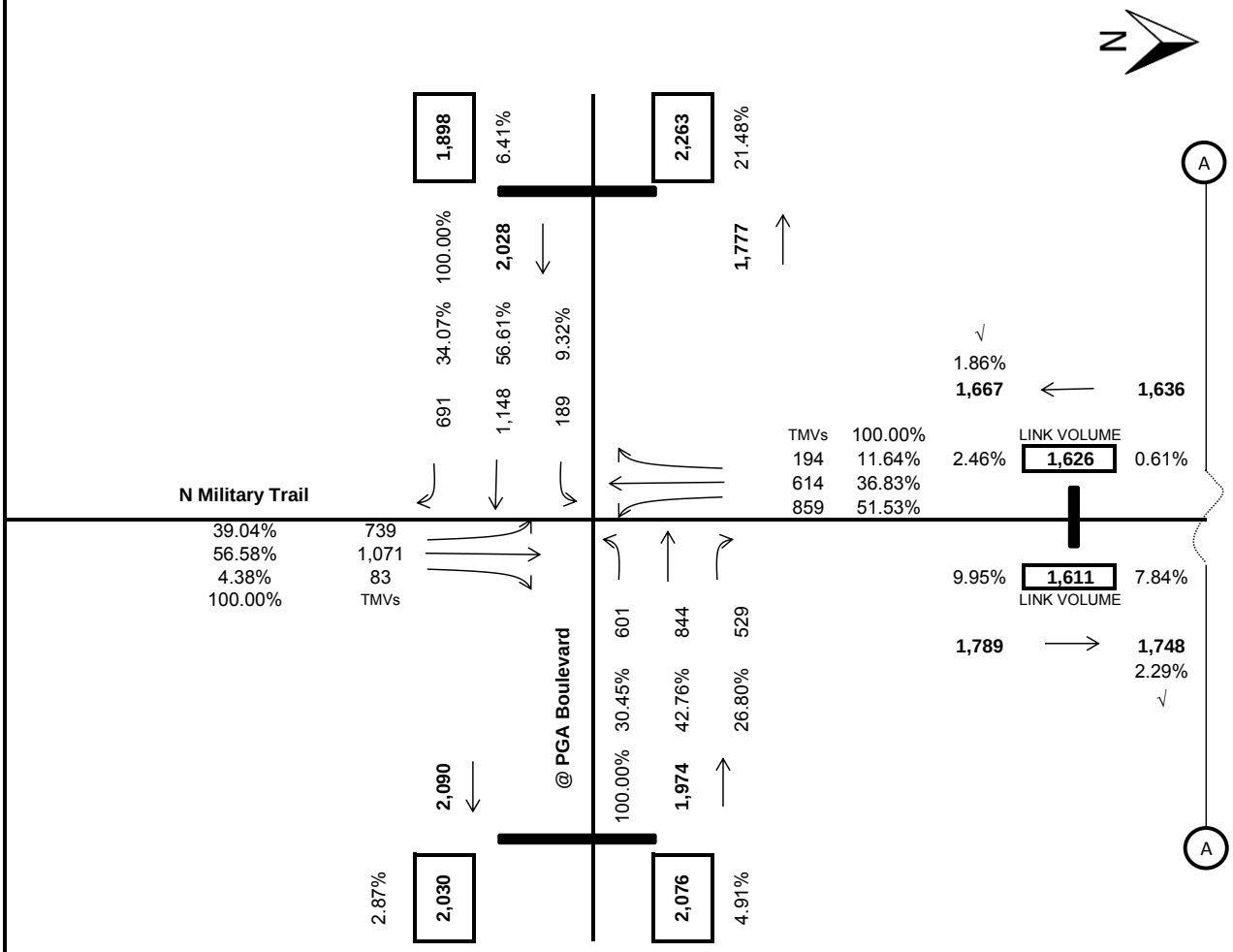
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard** **Turning Movement Volume Development** **2030 Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **8 of 8** *Date:* 9/24/15

@ PGA Boulevard



Turning Movement Volumes
@ PGA Boulevard

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes												
TM Pk Hr Counts												
% Turns												
Calc. Pk Hr Volumes												
Adjustments												
Bal Pk Hr Volumes	**859**	**614**	**194**	**601**	**844**	**529**	**739**	**1071**	**83**	**189**	**1148**	**691**

LEGEND

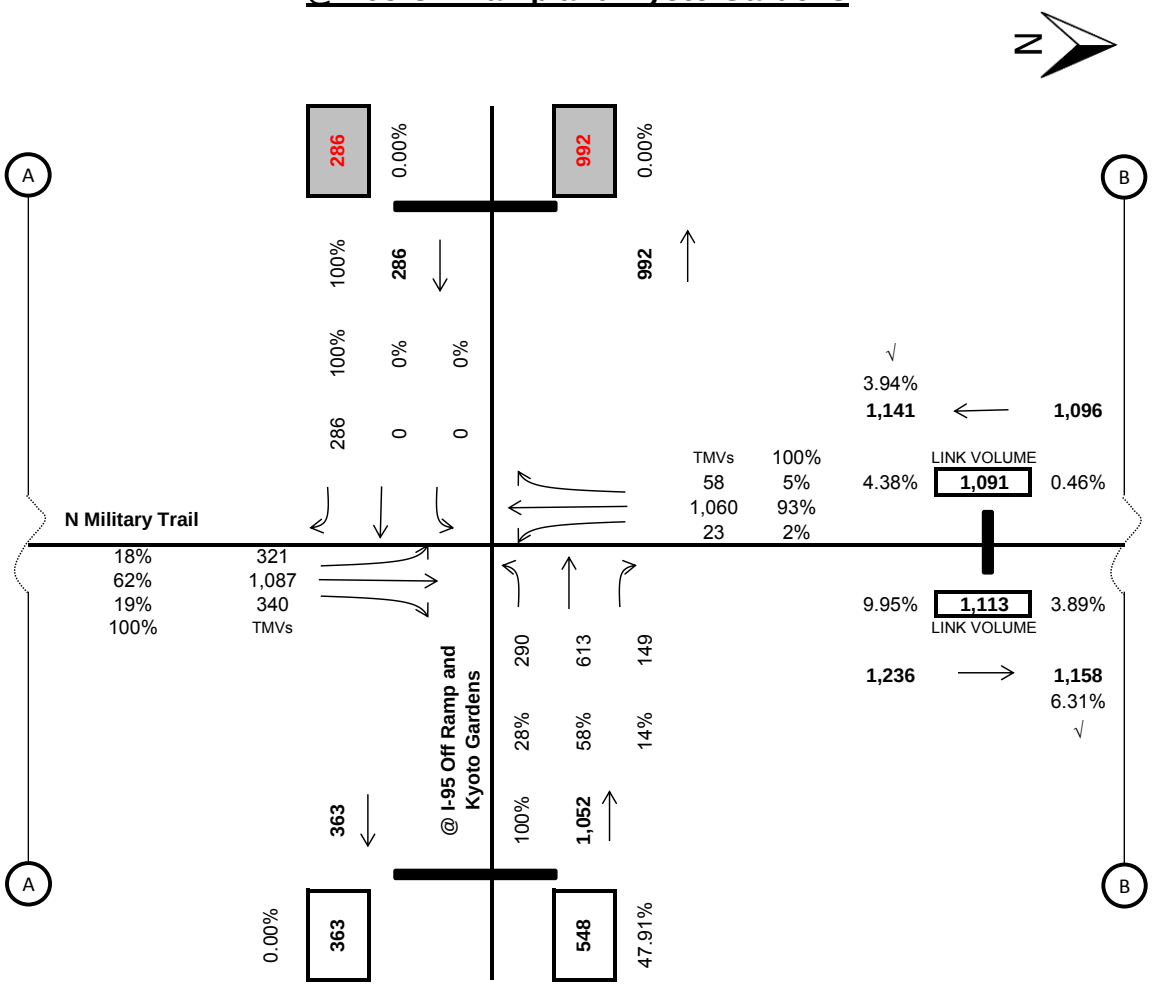
1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A / A	Match Line

For consistency, balanced peak hour volumes from major street arterial (aka PGA Boulevard) were used. See PGA Boulevard Arterial for details

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **N Military Trail** **Turning Movement Volume Development** **2030 Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **1 of 4** *Date:* 9/24/15

@ I-95 Off Ramp and Kyoto Gardens



Turning Movement Volumes
@ I-95 Off Ramp and Kyoto

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**1,091**			**548**			**1,611**			**286**		
TM Pk Hr Counts	45	2066	15	290	84	174	84	2337	648	0	0	95
% Turns	2%	97%	1%	53%	15%	32%	3%	76%	21%	0%	0%	100%
Calc. Pk Hr Volumes	23	1060	8	290	84	174	44	1227	340	0	0	286
Adjustments			50		529	-25	277	-140				
Bal Pk Hr Volumes	**23**	**1060**	**58**	**290**	**613**	**149**	**321**	**1087**	**340**	**0**	**0**	**286**

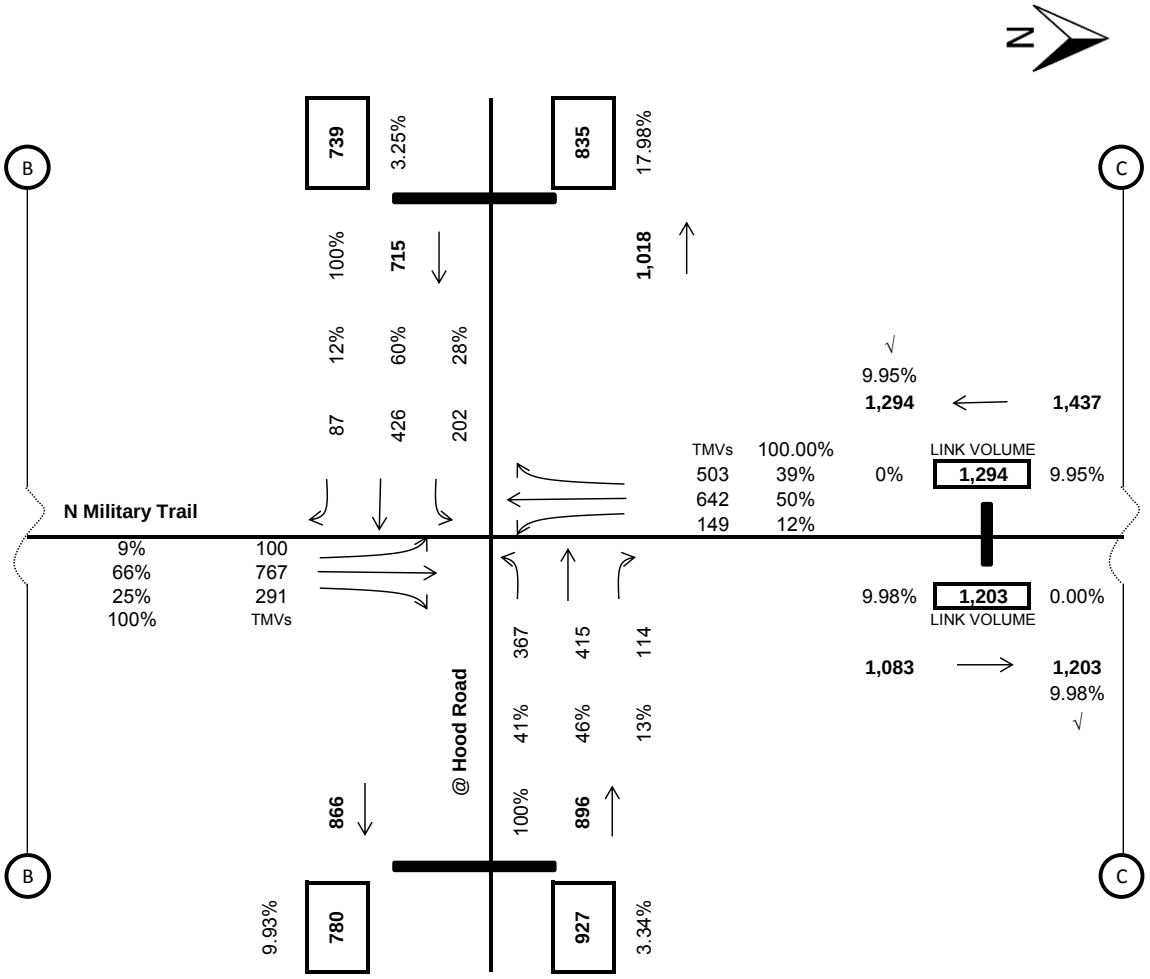
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66 →	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **N Military Trail** **Turning Movement Volume Development** **2030 Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **2 of 4** *Date:* 9/24/15

@ Hood Road



Turning Movement Volumes
@ Hood Road

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,294**			**927**			**1,113**			**739**	
TM Pk Hr Counts	236	1016	795	747	931	210	213	1483	683	428	1055	198
% Turns	12%	50%	39%	40%	49%	11%	9%	62%	29%	25%	63%	12%
Calc. Pk Hr Volumes	149	642	503	367	457	103	100	694	320	188	464	87
Adjustments					-42	11		73	-29	14	-38	
Bal Pk Hr Volumes	**149**	**642**	**503**	**367**	**415**	**114**	**100**	**767**	**291**	**202**	**426**	**87**

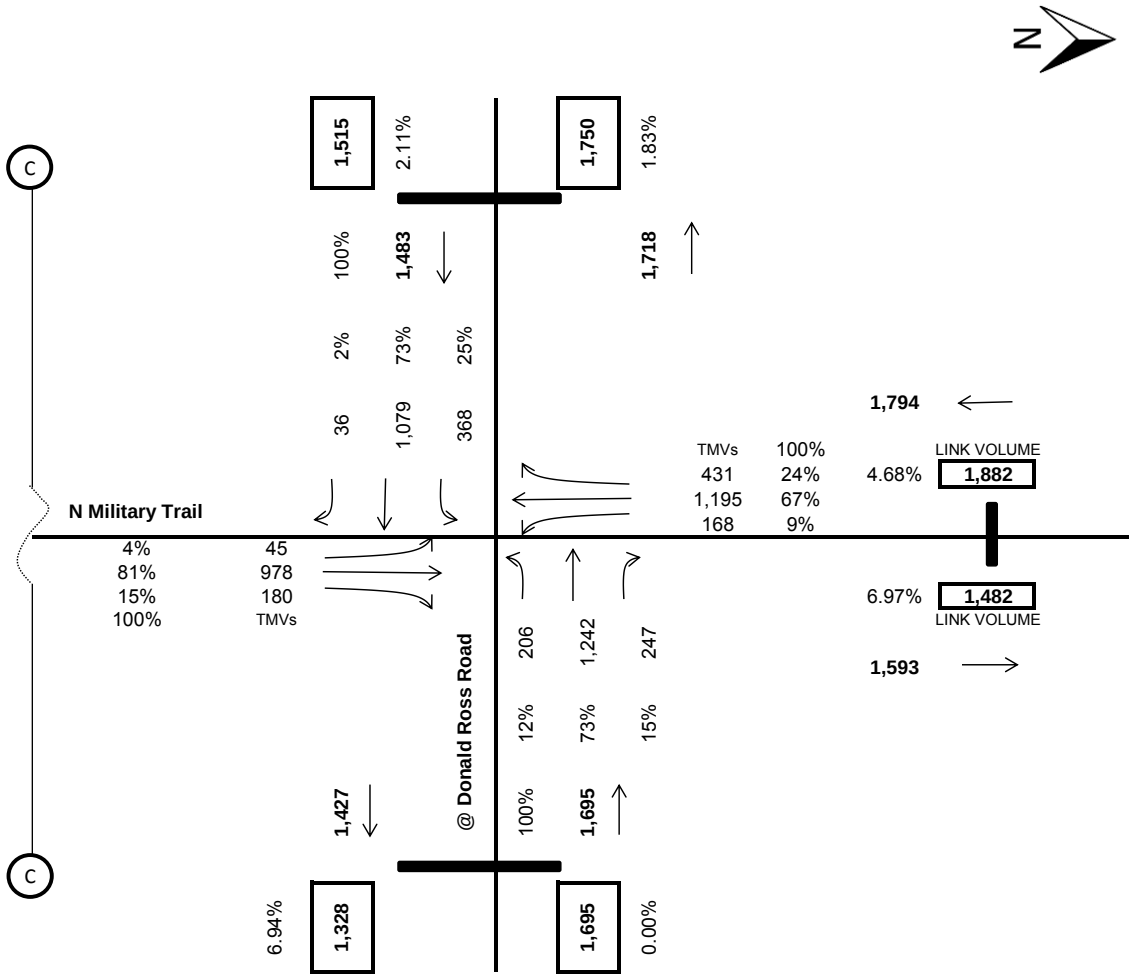
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66 →	Turning Movement Volumes (Balanced)
A … A	Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **N Military Trail** **Turning Movement Volume Development** **2030 Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **3 of 4** *Date:* 9/24/15

@ Donald Ross Road



Turning Movement Volumes
@ Donald Ross Road

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**1,882**			**1,695**			**1,203**			**1,515**		
TM Pk Hr Counts	173	1518	503	228	1217	270	44	1605	175	418	1134	40
% Turns	8%	69%	23%	13%	71%	16%	2%	88%	10%	26%	71%	3%
Calc. Pk Hr Volumes	148	1302	431	225	1203	267	29	1059	115	398	1079	38
Adjustments	20	-107		-19	39	-20	16	-81	65	-30		-2
Bal Pk Hr Volumes	**168**	**1195**	**431**	**206**	**1242**	**247**	**45**	**978**	**180**	**368**	**1079**	**36**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

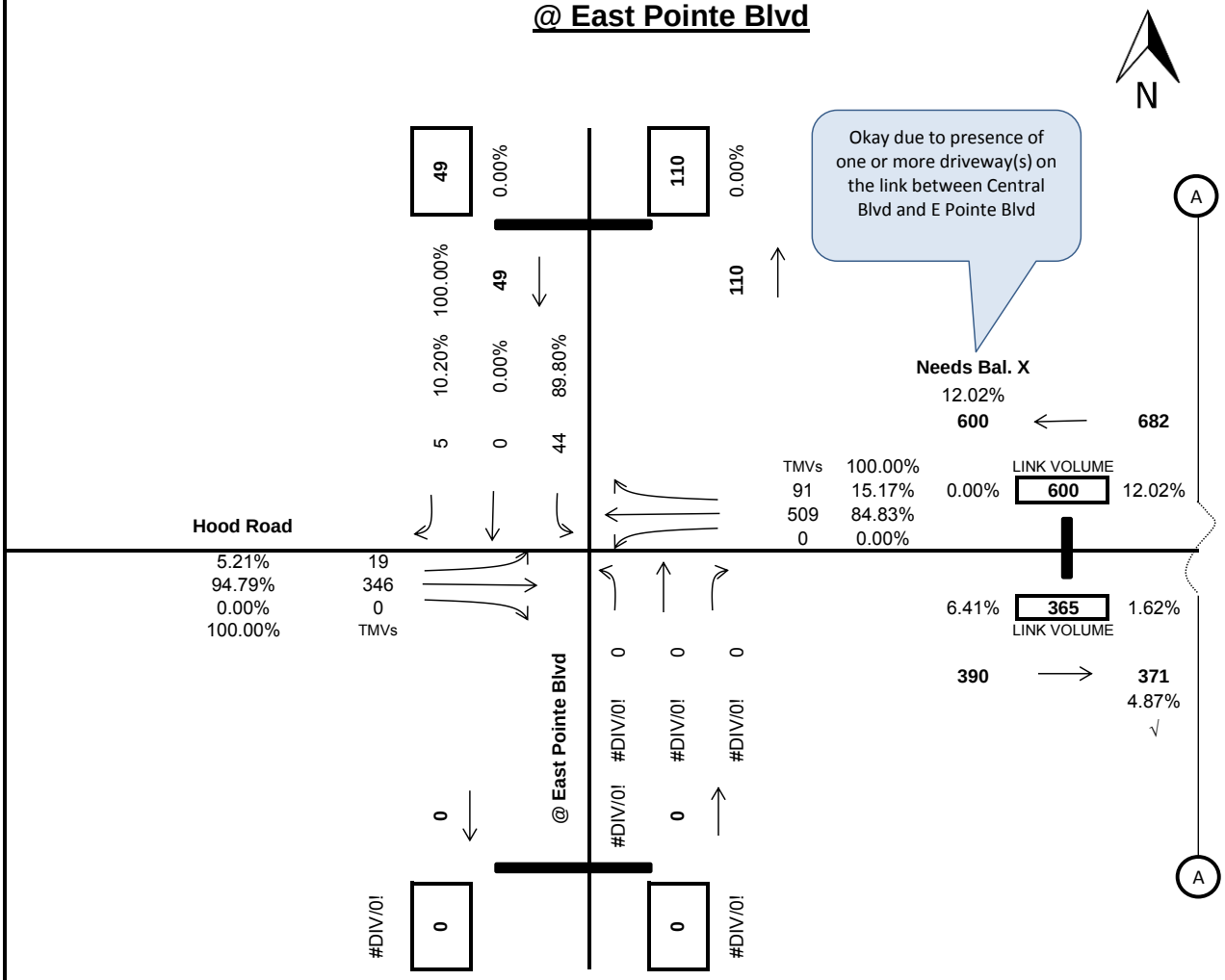
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **N Military Trail** **Turning Movement Volume Development** **2030 Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **4 of 4** *Date:* 9/24/15

@ East Pointe Blvd



Turning Movement Volumes
@ East Pointe Blvd

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**600**			**0**			**365**			**49**	
TM Pk Hr Counts	0	287	51	0	0	0	13	243	0	44	0	5
% Turns	0%	85%	15%	0%	0%	0%	5%	95%	0%	90%	0%	10%
Calc. Pk Hr Volumes	0	509	91	0	0	0	19	346	0	44	0	5
Adjustments												
Bal Pk Hr Volumes	**0**	**509**	**91**	**0**	**0**	**0**	**19**	**346**	**0**	**44**	**0**	**5**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

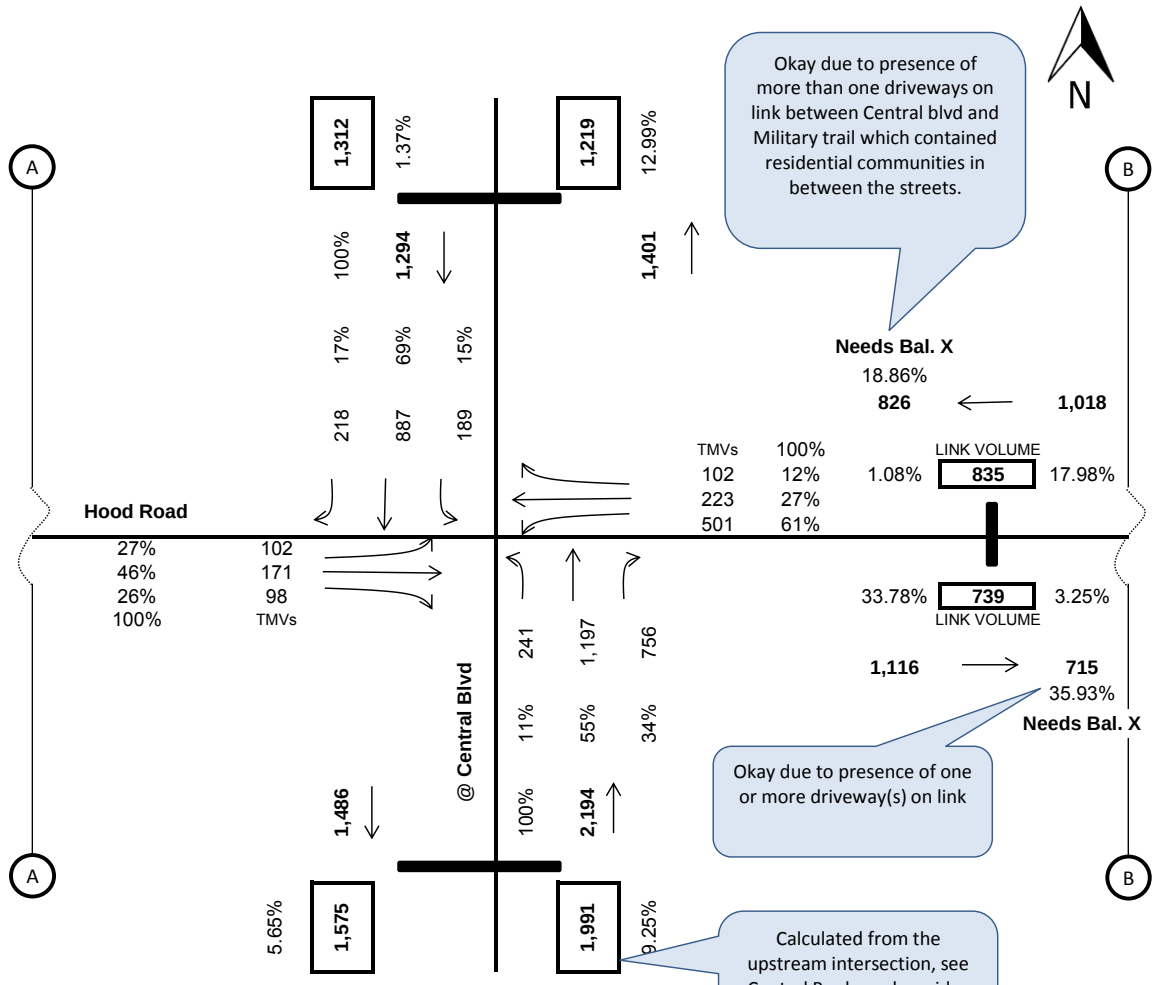
66 → Turning Movement Volumes (Balanced)

A … A — Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Hood Road** **Turning Movement Volume Development** **2030 Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **1 of 3** *Date:* 9/24/15

@ Central Blvd



Turning Movement Volumes
@ Central Blvd

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes												
TM Pk Hr Counts												
% Turns												
Calc. Pk Hr Volumes												
Adjustments												
Bal Pk Hr Volumes	**501**	**223**	**102**	**241**	**1197**	**756**	**102**	**171**	**98**	**189**	**887**	**218**

LEGEND

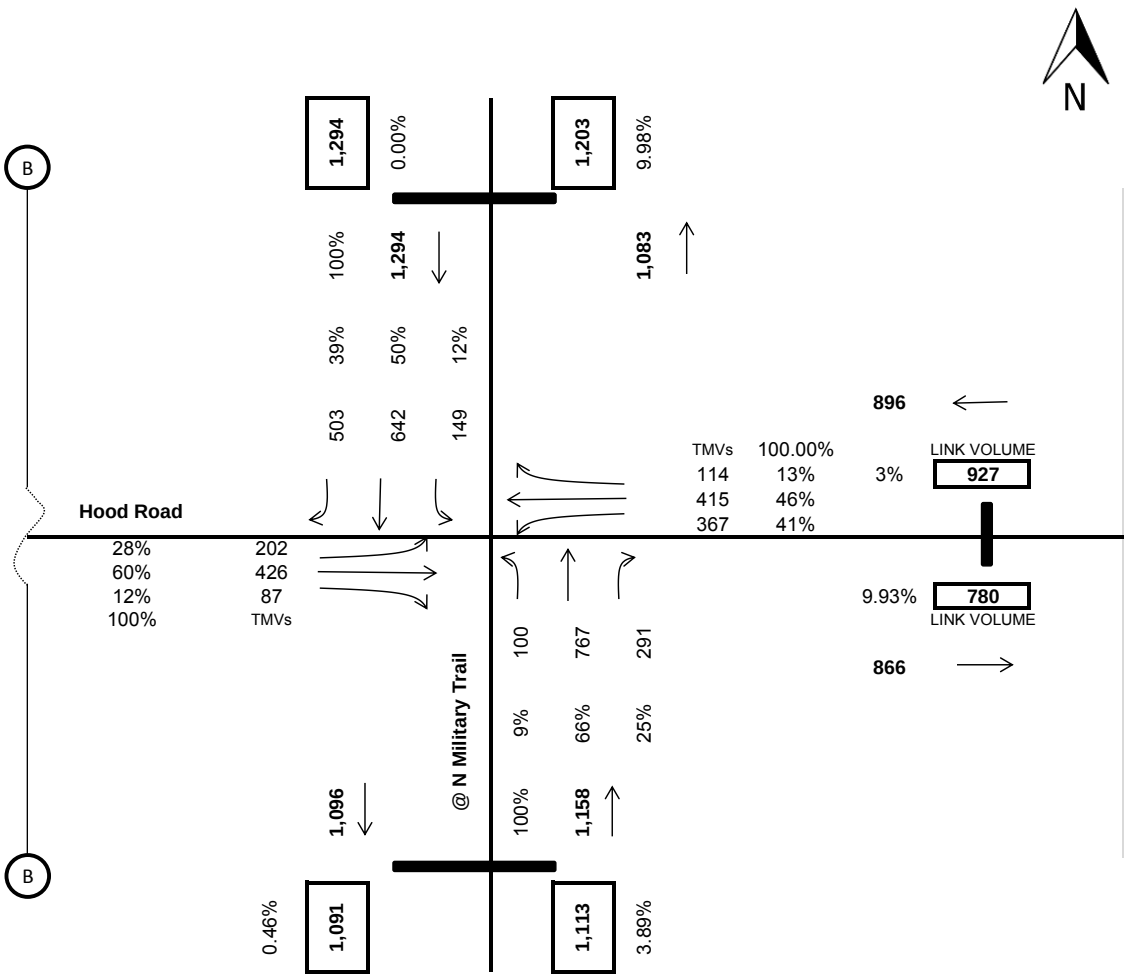
1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

For consistency, balanced peak hour volumes from major street arterial (aka Central Boulevard) were used. See Central Boulevard Arterial for details

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard, Project Development & Environmental Study, FM No. 413265-1-22-01	*Exhibit Name:* **Hood Road, Turning Movement Volume Development, 2030 Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **2 of 3** *Date:* 9/24/15

@ N Military Trail



Turning Movement Volumes
@ N Military Trail

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes												
TM Pk Hr Counts												
% Turns												
Calc. Pk Hr Volumes												
Adjustments												
Bal Pk Hr Volumes	**367**	**415**	**114**	**100**	**767**	**291**	**202**	**426**	**87**	**149**	**642**	**503**

LEGEND

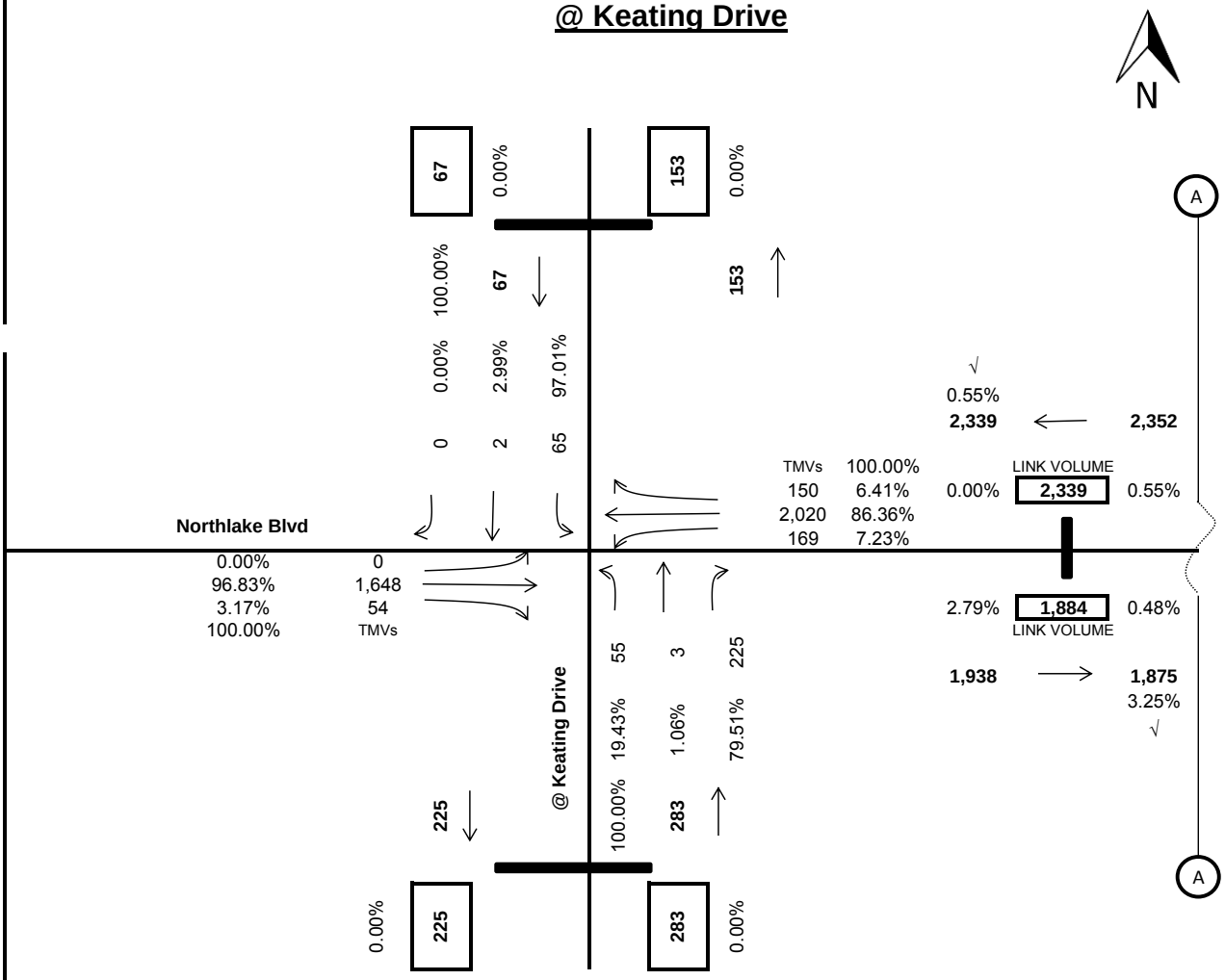
1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

For consistency, balanced peak hour volumes from major street arterial (aka N Military Trail) were used. See N Military Trail Arterial for details

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Hood Road** **Turning Movement Volume Development** **2030 Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **3 of 3** *Date:* 9/24/15

@ Keating Drive



Turning Movement Volumes
@ Keating Drive

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**2,339**			**283**			**1,702**			**67**		
TM Pk Hr Counts	191	2279	169	55	3	225	0	1648	54	65	2	0
% Turns	7%	86%	6%	19%	1%	80%	0%	97%	3%	97%	3%	0%
Calc. Pk Hr Volumes	169	2020	150	55	3	225	0	1648	54	65	2	0
Adjustments												
Bal Pk Hr Volumes	**169**	**2020**	**150**	**55**	**3**	**225**	**0**	**1648**	**54**	**65**	**2**	**0**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

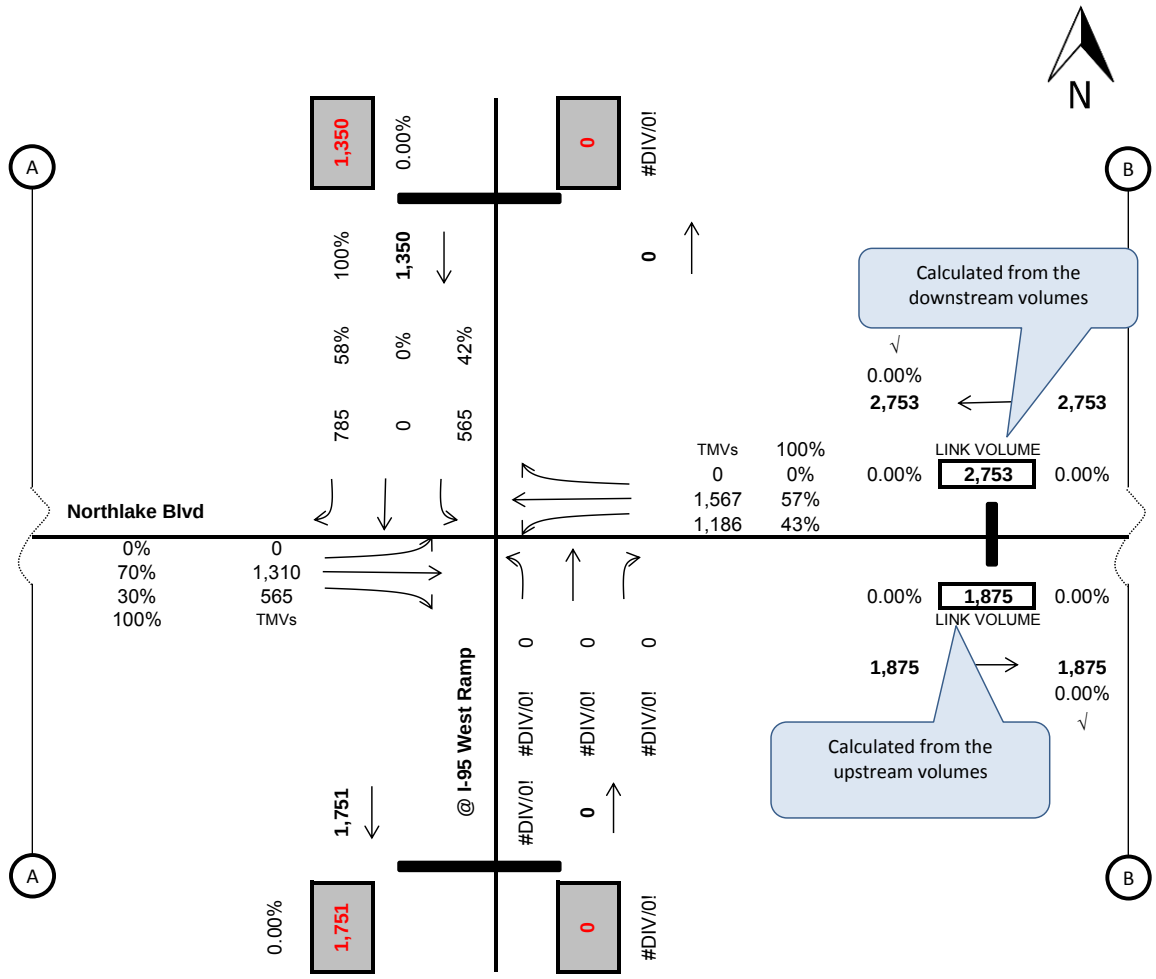
66 → — Turning Movement Volumes (Balanced)

A … A — Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Northlake Boulevard Turning Movement Volume Development 2030 Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **1 of 5** *Date:* 9/24/15

@ I-95 West Ramp



Turning Movement Volumes
@ I-95 West Ramp

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**2,753**			**0**			**1,884**			**1,350**		
TM Pk Hr Counts	1195	1538	0	0	0	0	0	1349	591	792	0	1102
% Turns	44%	56%	0%	0%	0%	0%	0%	70%	30%	42%	0%	58%
Calc. Pk Hr Volumes	1204	1549	0	0	0	0	0	1310	574	565	0	785
Adjustments	-18	18							-9			
Bal Pk Hr Volumes	**1186**	**1567**	**0**	**0**	**0**	**0**	**0**	**1310**	**565**	**565**	**0**	**785**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

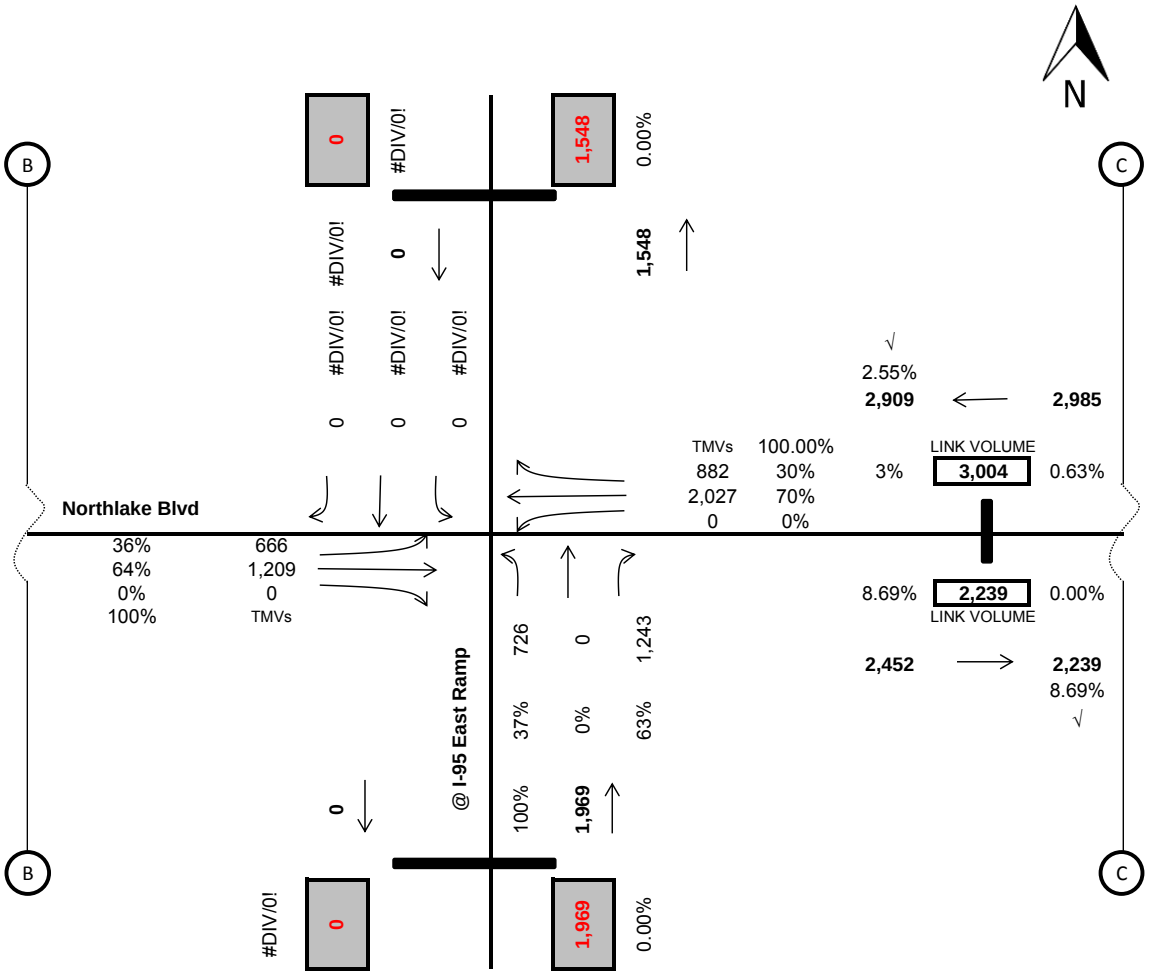
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Northlake Boulevard** **Turning Movement Volume Development** **2030 Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **2 of 5** *Date:* 9/24/15

@ I-95 East Ramp



Turning Movement Volumes
@ I-95 East Ramp

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**3,004**			**1,969**			**1,875**			**0**	
TM Pk Hr Counts	0	2002	965	731	0	1252	843	1299	0	0	0	0
% Turns	0%	67%	33%	37%	0%	63%	39%	61%	0%	0%	0%	0%
Calc. Pk Hr Volumes	0	2027	977	726	0	1243	738	1137	0	0	0	0
Adjustments			-95				-72	72				
Bal Pk Hr Volumes	**0**	**2027**	**882**	**726**	**0**	**1243**	**666**	**1209**	**0**	**0**	**0**	**0**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

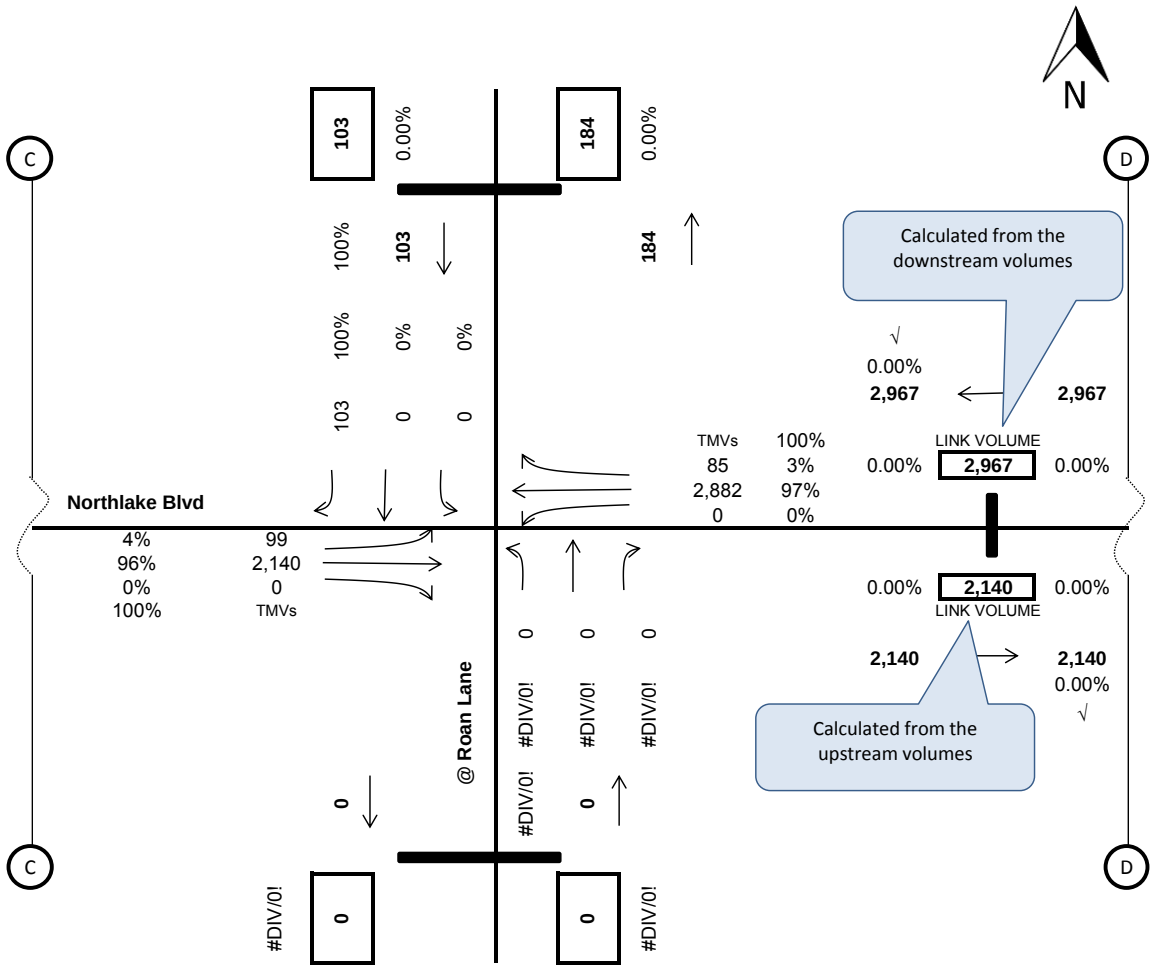
66 → Turning Movement Volumes (Balanced)

A … A — Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Northlake Boulevard** **Turning Movement Volume Development** **2030 Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **3 of 5** *Date:* 9/24/15

@ Roan Lane



Turning Movement Volumes
@ Roan Lane

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**2,967**			**0**			**2,239**			**103**	
TM Pk Hr Counts	0	3067	91	0	0	0	117	2533	0	0	0	103
% Turns	0%	97%	3%	0%	0%	0%	4%	96%	0%	0%	0%	100%
Calc. Pk Hr Volumes	0	2882	85	0	0	0	99	2140	0	0	0	103
Adjustments				0								
Bal Pk Hr Volumes	**0**	**2882**	**85**	**0**	**0**	**0**	**99**	**2140**	**0**	**0**	**0**	**103**

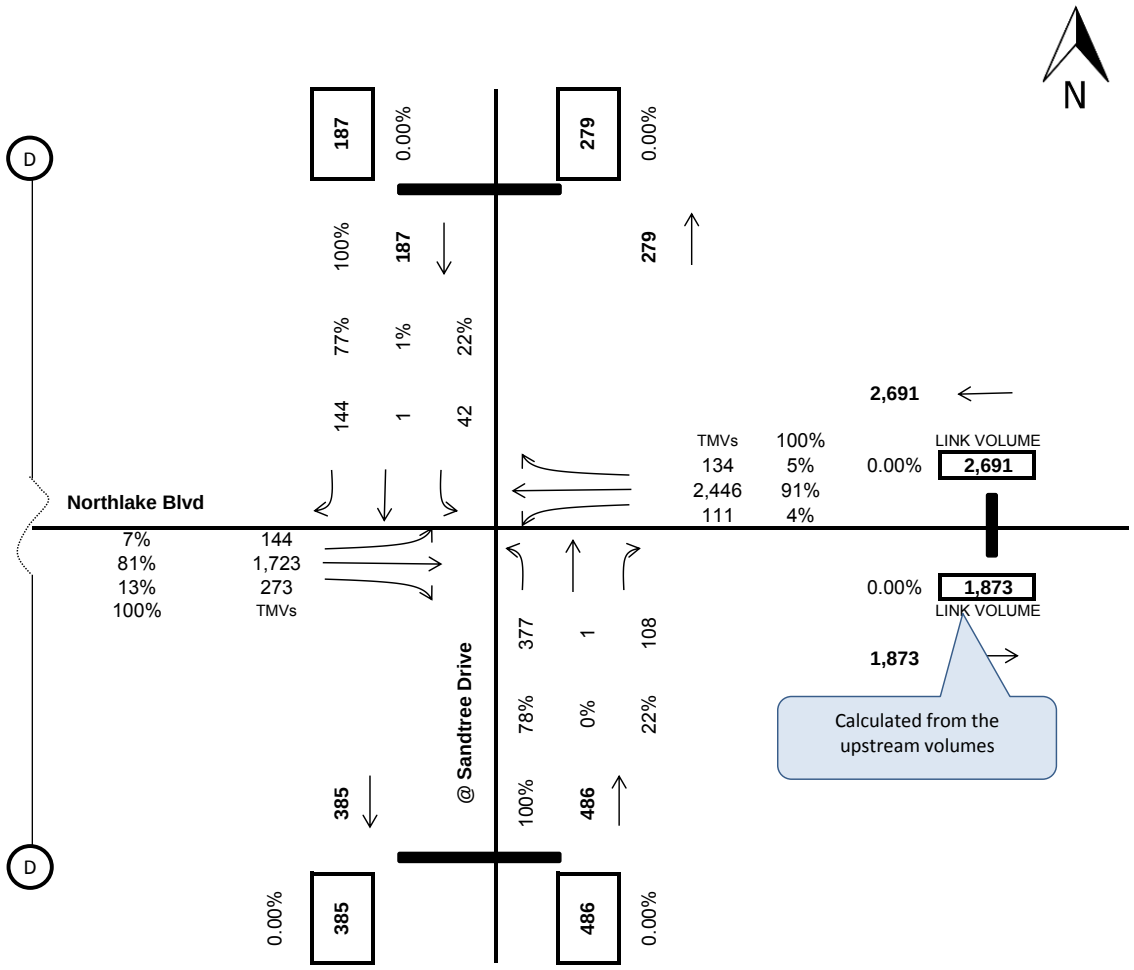
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Northlake Boulevard Turning Movement Volume Development 2030 Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **4 of 5** *Date:* 9/24/15

@ Sandtree Drive



Turning Movement Volumes
@ Sandtree Drive

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**2,691**			**486**			**2,140**			**187**	
TM Pk Hr Counts	111	2446	134	377	1	108	172	2054	325	42	1	144
% Turns	4%	91%	5%	78%	0%	22%	7%	81%	13%	22%	1%	77%
Calc. Pk Hr Volumes	111	2446	134	377	1	108	144	1723	273	42	1	144
Adjustments												
Bal Pk Hr Volumes	**111**	**2446**	**134**	**377**	**1**	**108**	**144**	**1723**	**273**	**42**	**1**	**144**

LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

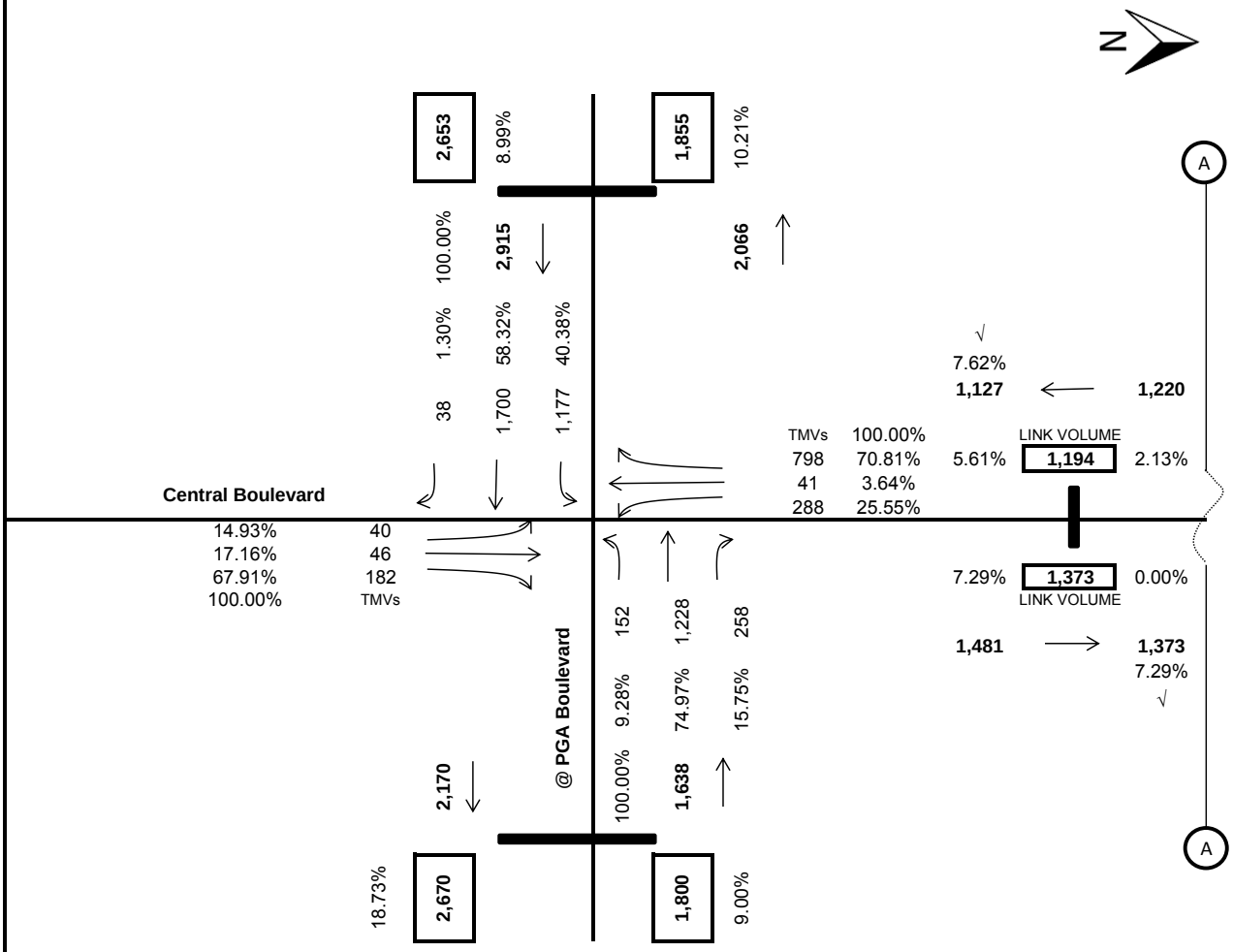
Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Northlake Boulevard Turning Movement Volume Development 2030 Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **5 of 5** *Date:* 9/24/15

APPENDIX AH

BALANCED TURNING MOVEMENT DEVELOPMENT SHEETS

2040 BUILD AM PEAK HOUR

@ PGA Boulevard



Turning Movement Volumes
@ PGA Boulevard

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes												
TM Pk Hr Counts												
% Turns												
Calc. Pk Hr Volumes												
Adjustments												
Bal Pk Hr Volumes	**288**	**41**	**798**	**152**	**1228**	**258**	**40**	**46**	**182**	**1177**	**1700**	**38**

LEGEND

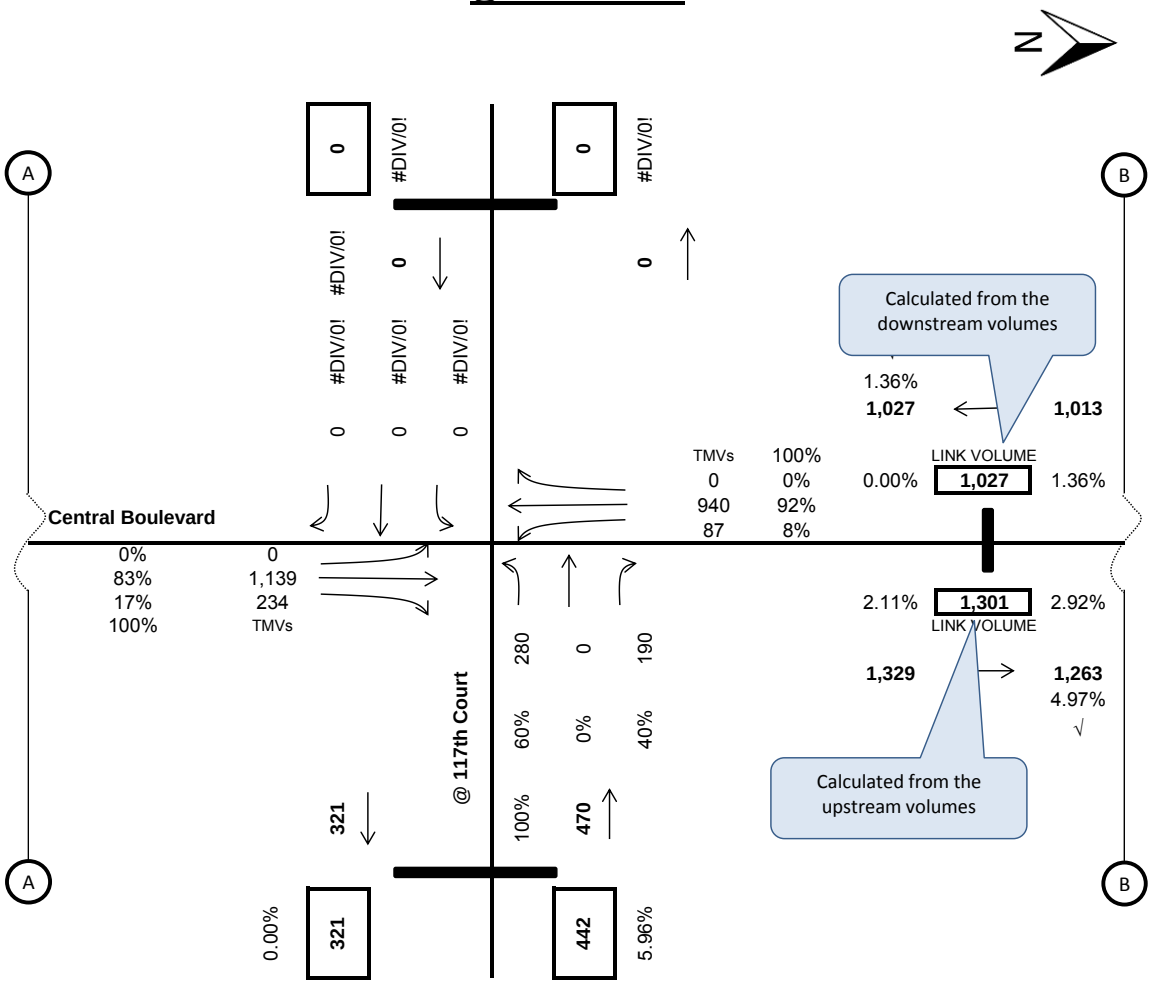
1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

For consistency, balanced peak hour volumes from major street arterial (aka PGA Boulevard) were used. See PGA Boulevard Arterial for details

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Central Boulevard** **Turning Movement Volume Development** **2040 Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **1 of 6** *Date:* 9/24/15

@ 117th Court



Turning Movement Volumes
@ 117th Court

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,027**			**442**			**1,373**			**0**	
TM Pk Hr Counts	135	1450	0	252	0	190	0	1331	273	0	0	0
% Turns	9%	91%	0%	57%	0%	43%	0%	83%	17%	0%	0%	0%
Calc. Pk Hr Volumes	87	940	0	252	0	190	0	1139	234	0	0	0
Adjustments				28								0
Bal Pk Hr Volumes	**87**	**940**	**0**	**280**	**0**	**190**	**0**	**1139**	**234**	**0**	**0**	**0**

1230
1230

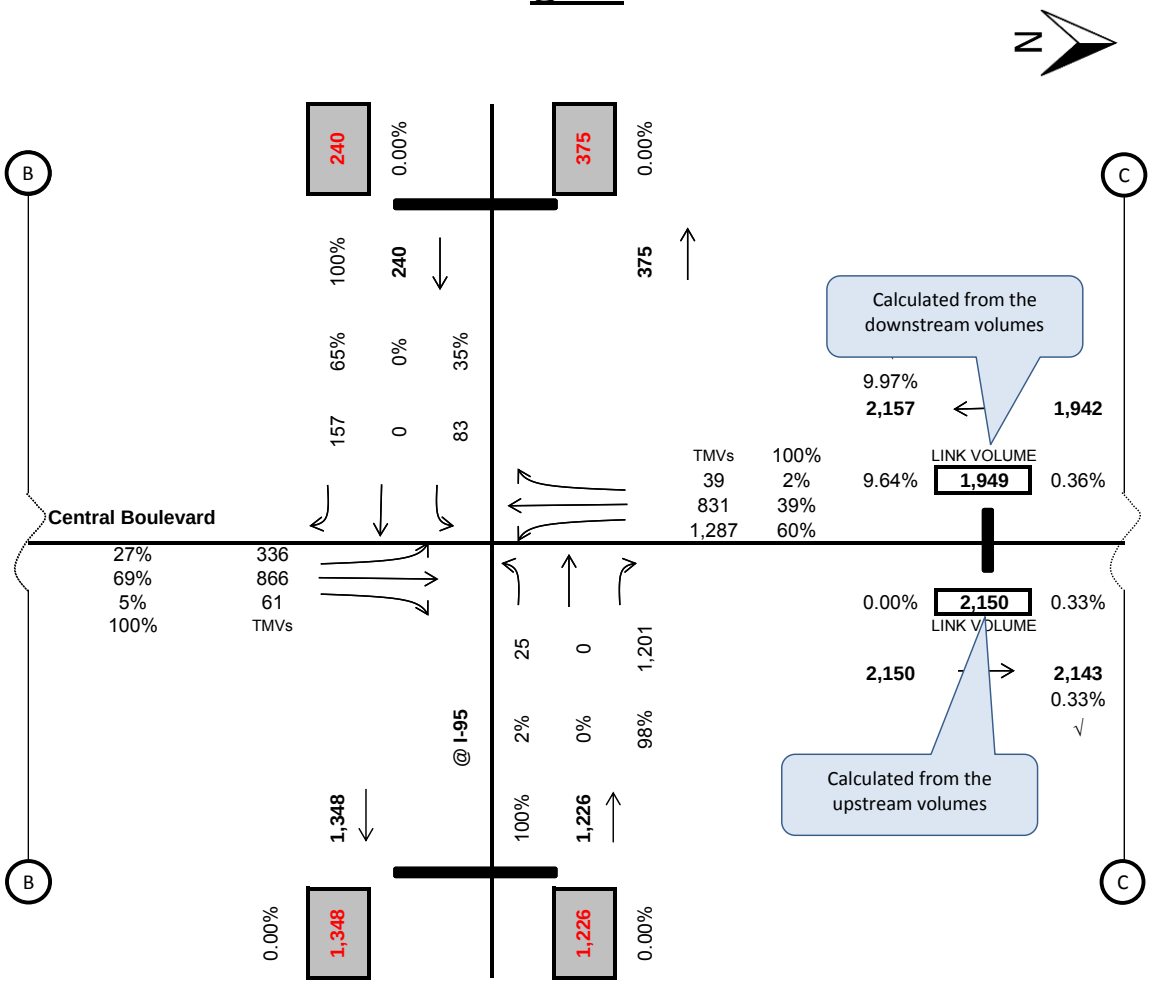
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A / A	Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Central Boulevard Turning Movement Volume Development 2040 Build AM Peak Hour**	*Exhibit No:* **TBD**
		Page No: **2 of 6**
		Date: 9/24/15

@ I-95



Turning Movement Volumes
@ I-95

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**1,949**			**1,226**			**1,301**			**240**		
TM Pk Hr Counts	1770	1368	72	34	0	1616	511	1152	68	130	0	245
% Turns	55%	43%	2%	2%	0%	98%	30%	67%	4%	35%	0%	65%
Calc. Pk Hr Volumes	1075	831	44	25	0	1201	384	866	51	83	0	157
Adjustments	212		-5	0	0	0	-48		10		0	
Bal Pk Hr Volumes	**1287**	**831**	**39**	**25**	**0**	**1201**	**336**	**866**	**61**	**83**	**0**	**157**

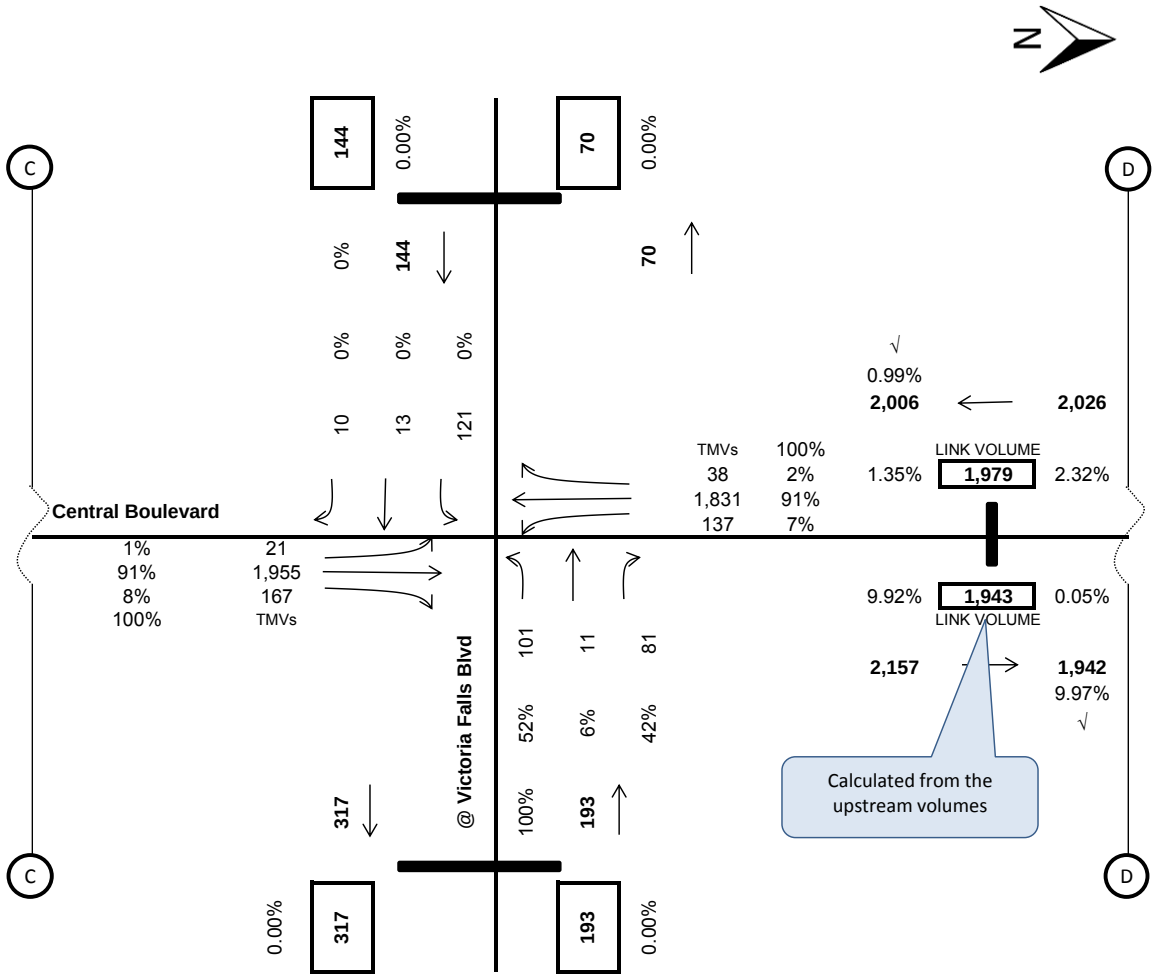
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A … A	Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard, Project Development & Environmental Study, FM No. 413265-1-22-01	*Exhibit Name:* **Central Boulevard Turning Movement Volume Development 2040 Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **3 of 6** *Date:* 9/24/15

@ Victoria Falls Blvd



Turning Movement Volumes
@ Victoria Falls Blvd

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,979**			**193**			**2,150**			**144**	
TM Pk Hr Counts	234	3069	65	107	12	86	27	2551	217	121	13	10
% Turns	7%	91%	2%	52%	6%	42%	1%	91%	8%	84%	9%	7%
Calc. Pk Hr Volumes	137	1803	38	101	11	81	21	1962	167	121	13	10
Adjustments		28						-7				
Bal Pk Hr Volumes	**137**	**1831**	**38**	**101**	**11**	**81**	**21**	**1955**	**167**	**121**	**13**	**10**

LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A … A	Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Central Boulevard Turning Movement Volume Development 2040 Build AM Peak Hour**	*Exhibit No:* **TBD**
		Page No: **4 of 6**
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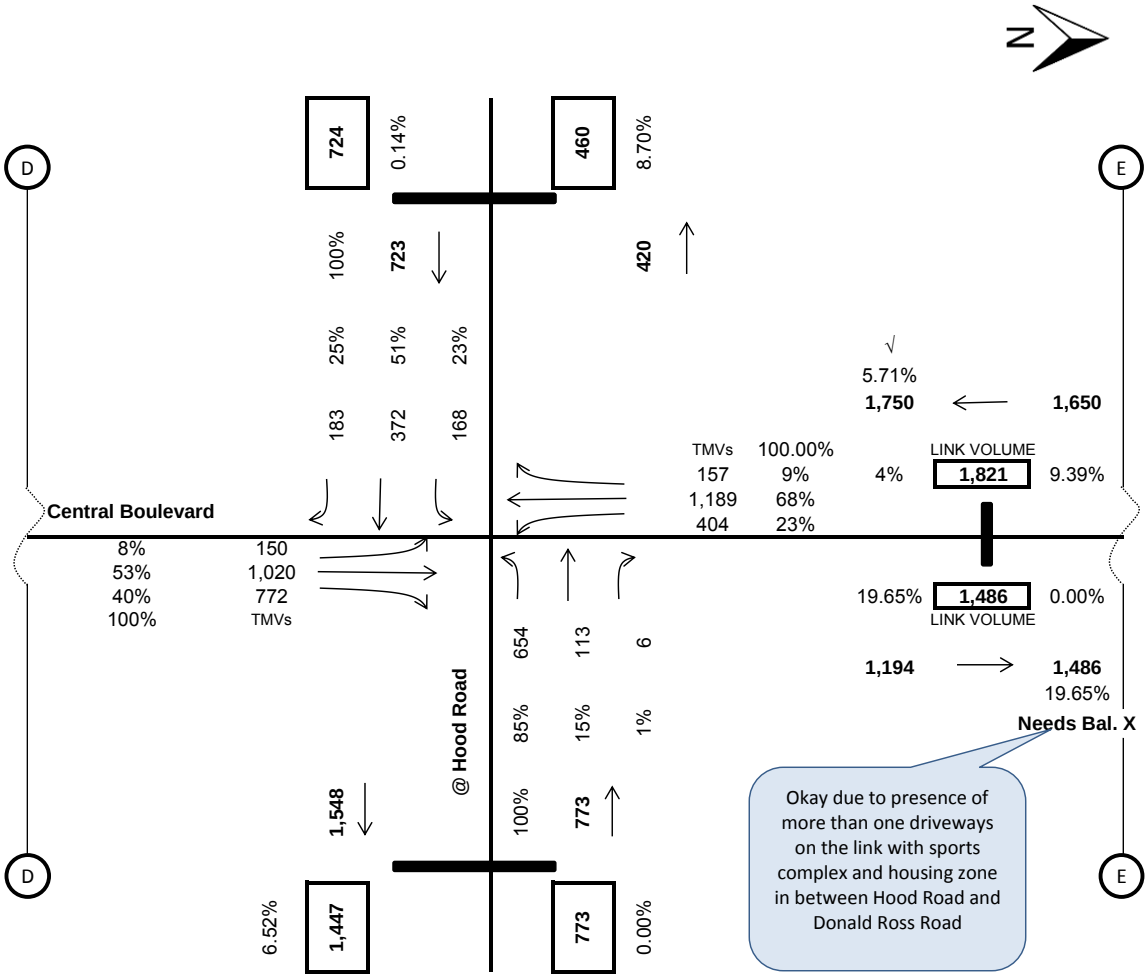
@ Hood Road



Turning Movement Volumes
@ Hood Road

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,821**			**773**			**1,943**			**724**	
TM Pk Hr Counts	508	1584	198	1385	240	12	204	1385	1048	307	680	335
% Turns	22%	69%	9%	85%	15%	1%	8%	53%	40%	23%	51%	25%
Calc. Pk Hr Volumes	404	1260	157	654	113	6	150	1020	772	168	372	183
Adjustments		-71										
Bal Pk Hr Volumes	**404**	**1189**	**157**	**654**	**113**	**6**	**150**	**1020**	**772**	**168**	**372**	**183**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

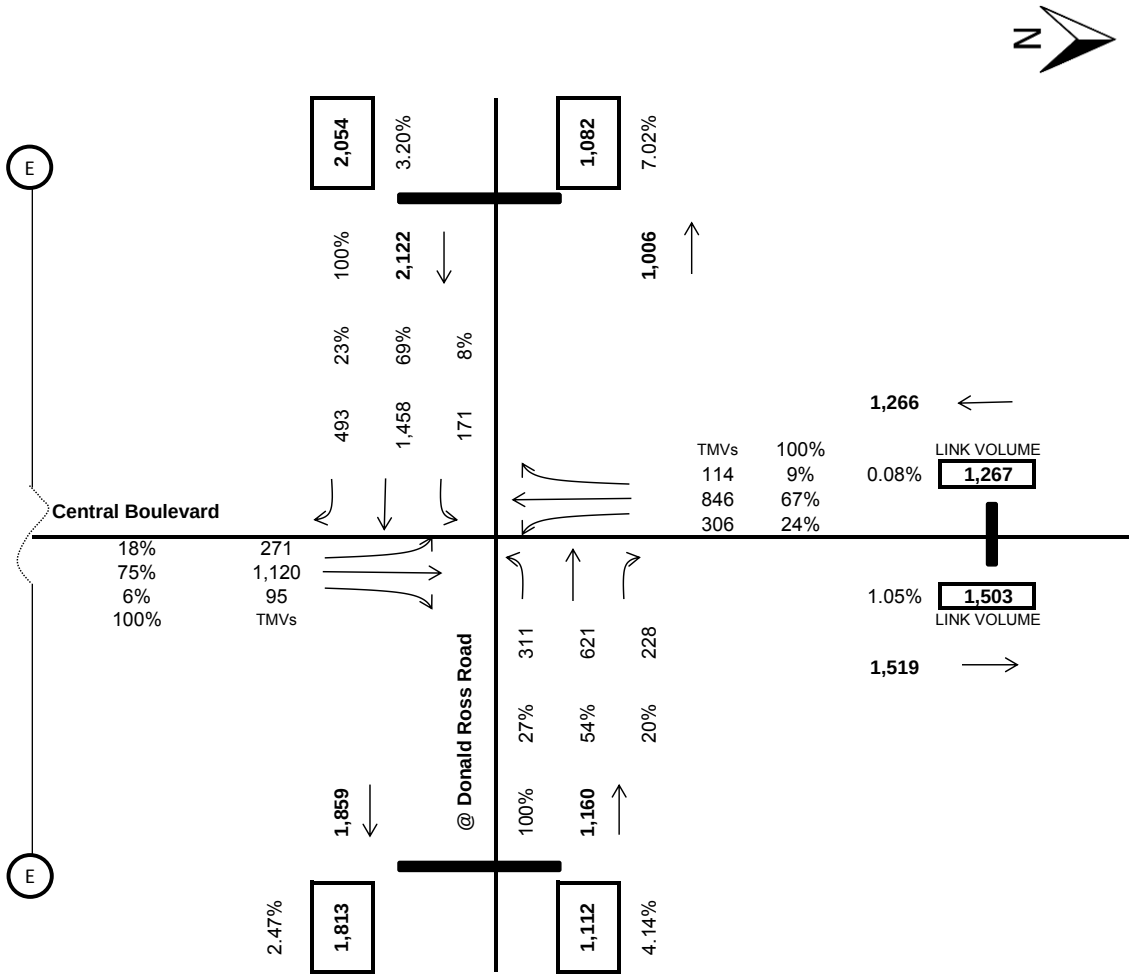
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Central Boulevard Turning Movement Volume Development 2040 Build AM Peak Hour**	*Exhibit No:* **TBD**
		Page No: **5 of 6**
		Date: 9/24/15

@ Donald Ross Road



Turning Movement Volumes
@ Donald Ross Road

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**1,267**			**1,112**			**1,486**			**2,054**		
TM Pk Hr Counts	667	1842	249	395	790	286	365	1510	128	128	1092	318
% Turns	24%	67%	9%	27%	54%	19%	18%	75%	6%	8%	71%	21%
Calc. Pk Hr Volumes	306	846	114	299	597	216	271	1120	95	171	1458	425
Adjustments				12	24	12						68
Bal Pk Hr Volumes	**306**	**846**	**114**	**311**	**621**	**228**	**271**	**1120**	**95**	**171**	**1458**	**493**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

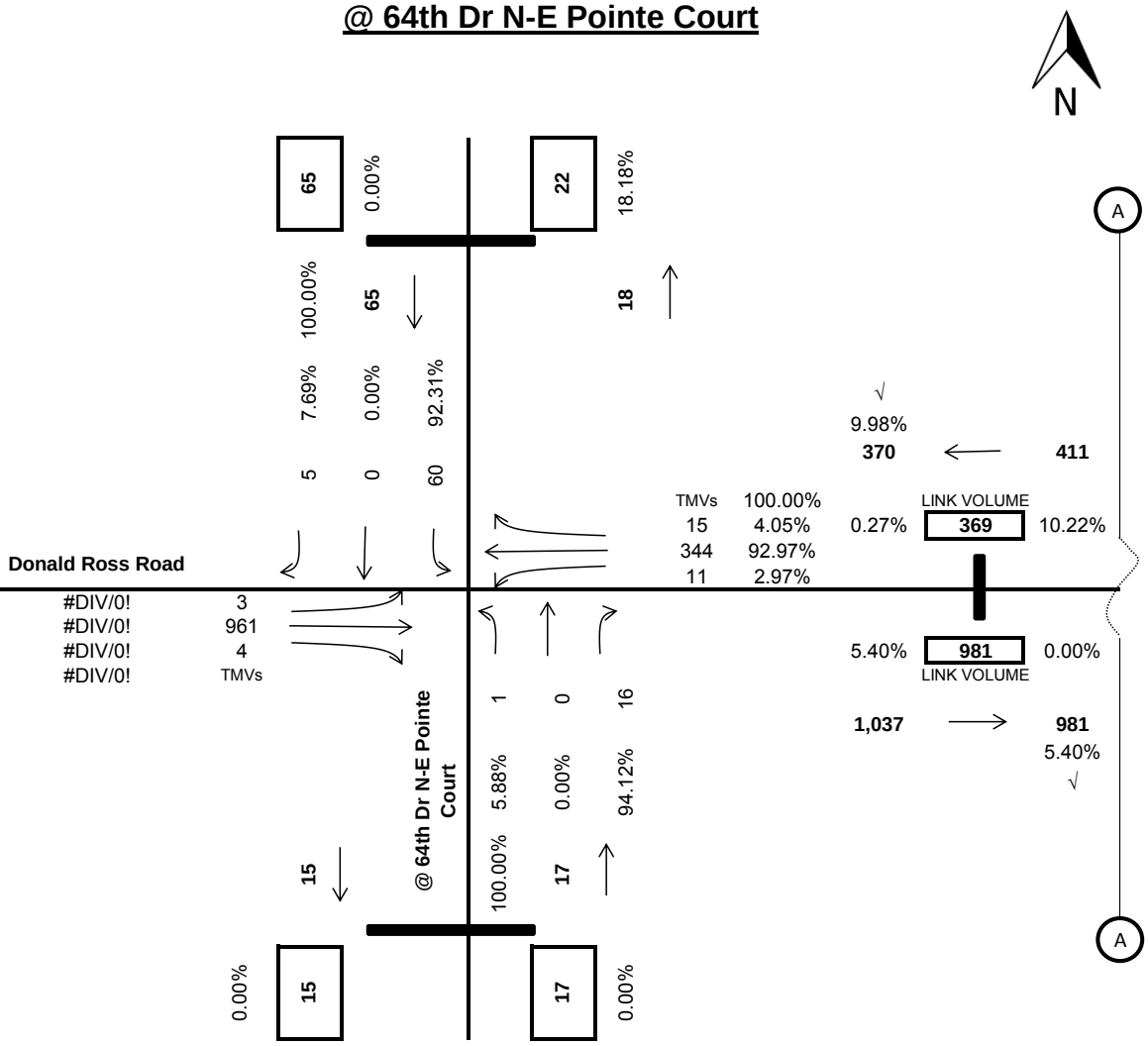
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Central Boulevard Turning Movement Volume Development 2040 Build AM Peak Hour**	*Exhibit No:* **TBD**
		Page No: **6 of 6**
		Date: 9/24/15

@ 64th Dr N-E Pointe Court



Turning Movement Volumes
@ 64th Dr N-E Pointe Court

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**369**			**17**			**968**			**65**	
TM Pk Hr Counts	14	445	19	1	0	16	3	961	4	60	0	5
% Turns	3%	93%	4%	6%	0%	94%	0%	99%	0%	92%	0%	8%
Calc. Pk Hr Volumes	11	344	15	1	0	16	3	961	4	60	0	5
Adjustments		0			0			0				
Bal Pk Hr Volumes	**11**	**344**	**15**	**1**	**0**	**16**	**3**	**961**	**4**	**60**	**0**	**5**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 → — Turning Movement Volumes (Balanced)

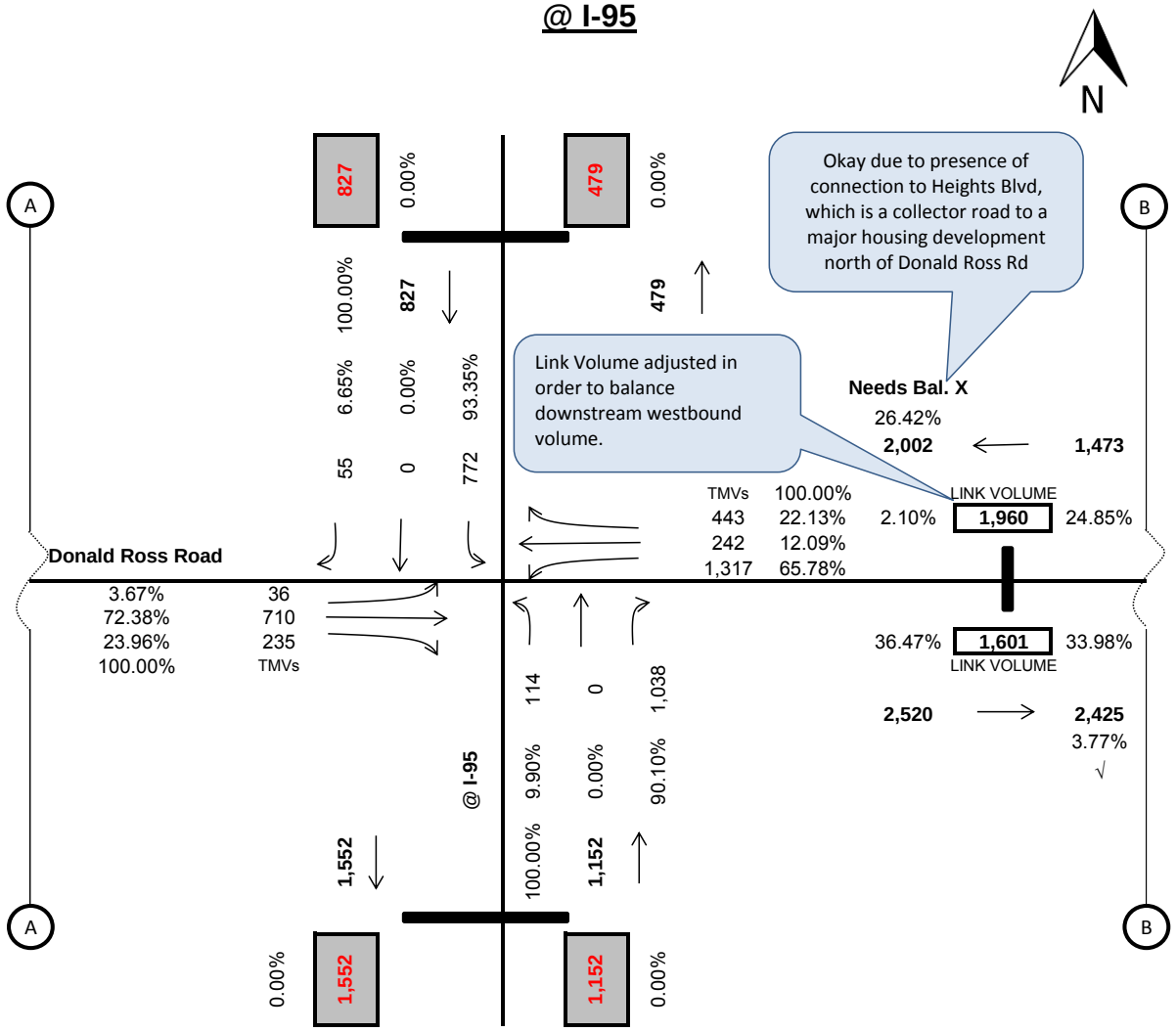
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 436422-1-22-01	*Exhibit Name:* **Donald Ross Road Turning Movement Volume Development 2040 Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **1 of 5** *Date:* 9/24/15

@ I-95



Turning Movement Volumes
@ I-95

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**1,960**			**1,152**			**981**			**827**		
TM Pk Hr Counts	1300	391	331	143	0	1308	43	1202	371	722	0	51
% Turns	64%	19%	16%	10%	0%	90%	3%	74%	23%	93%	0%	7%
Calc. Pk Hr Volumes	1260	379	321	114	0	1038	26	730	225	772	0	55
Adjustments	57	-137	122				10	-20	10			
Bal Pk Hr Volumes	**1317**	**242**	**443**	**114**	**0**	**1038**	**36**	**710**	**235**	**772**	**0**	**55**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 → — Turning Movement Volumes (Balanced)

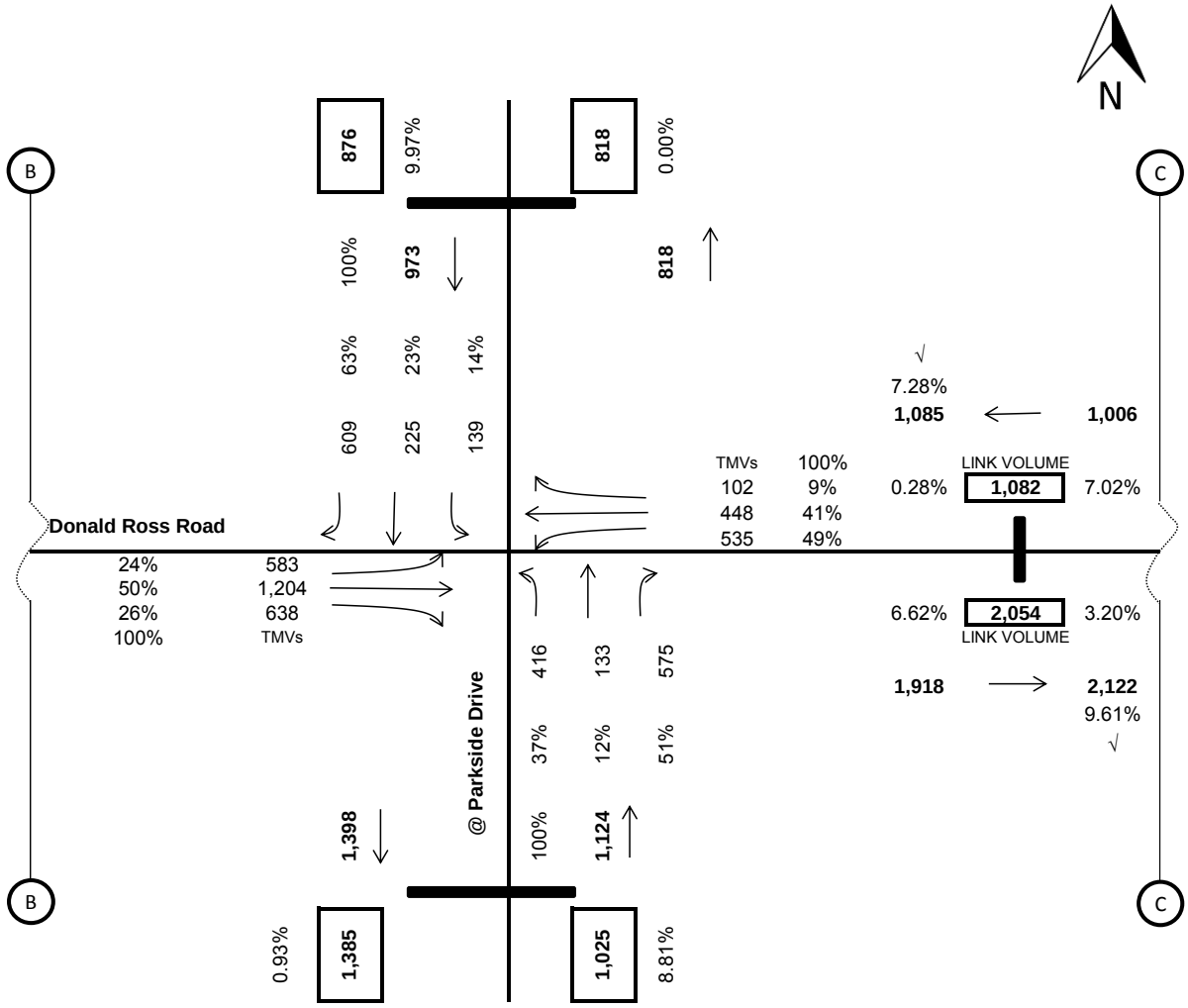
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM Number: 435-22-01	*Exhibit Name:* **Donald Ross Road** **Turning Movement Volume Development** **2040 Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **2 of 5** *Date:* 9/24/15

@ Parkside Drive



Turning Movement Volumes
@ Parkside Drive

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,082**			**1,025**			**1,601**			**876**	
TM Pk Hr Counts	639	663	136	416	133	476	713	1148	781	82	185	609
% Turns	44%	46%	9%	41%	13%	46%	27%	43%	30%	9%	21%	70%
Calc. Pk Hr Volumes	481	499	102	416	133	476	432	696	473	82	185	609
Adjustments	54	-51				99	151	508	165	57	40	
Bal Pk Hr Volumes	**535**	**448**	**102**	**416**	**133**	**575**	**583**	**1204**	**638**	**139**	**225**	**609**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

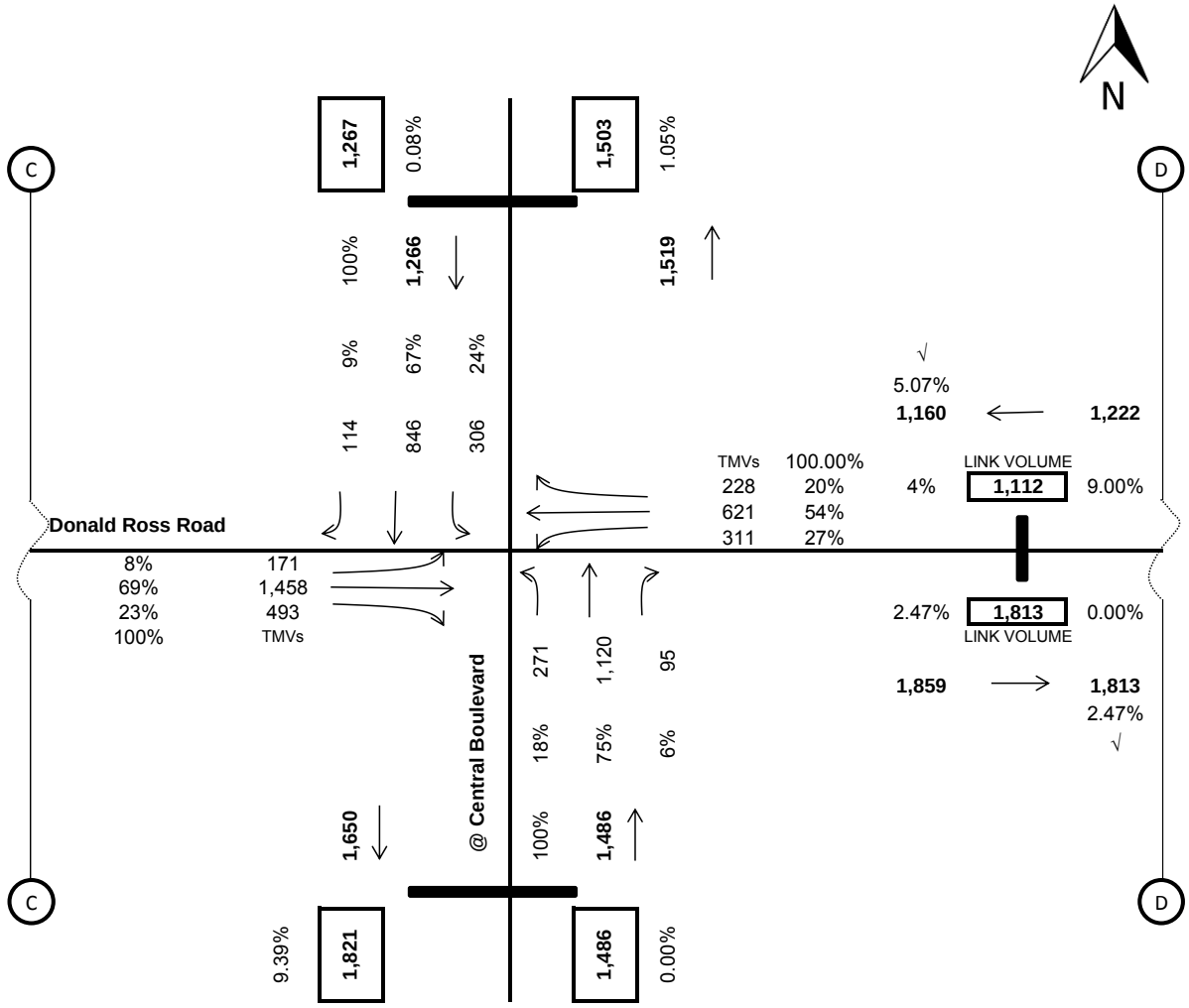
66 — Turning Movement Volumes (Balanced)

A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

@ Central Boulevard



Turning Movement Volumes
@ Central Boulevard

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes												
TM Pk Hr Counts												
% Turns												
Calc. Pk Hr Volumes												
Adjustments												
Bal Pk Hr Volumes	**311**	**621**	**228**	**271**	**1120**	**95**	**171**	**1458**	**493**	**306**	**846**	**114**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

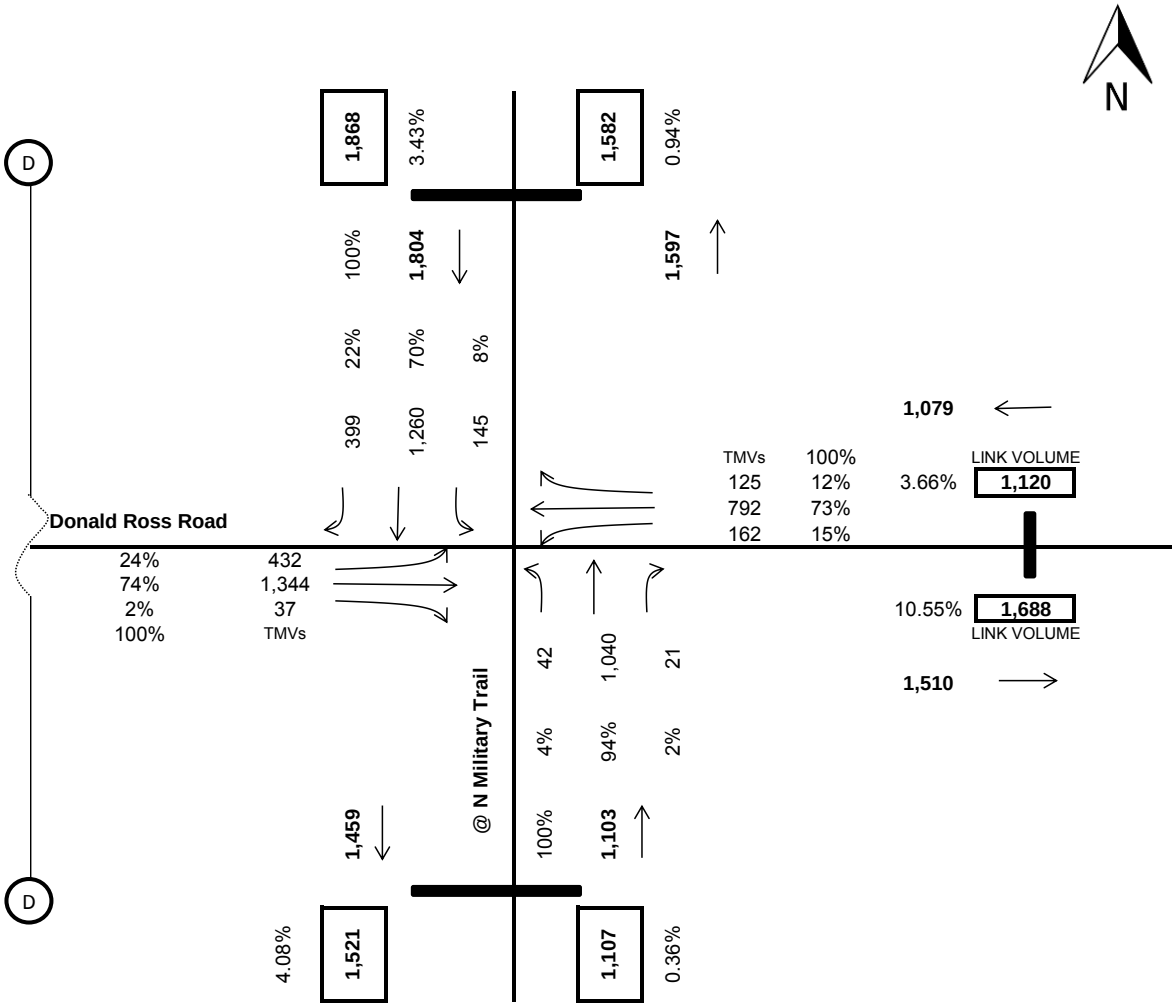
66 → Turning Movement Volumes (Balanced)

A … A — Match Line

For consistency, balanced peak hour volumes from major street arterial (aka Central Boulevard) were used. See Central Boulevard Arterial for details

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

@ N Military Trail



Turning Movement Volumes
@ N Military Trail

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes												
TM Pk Hr Counts												
% Turns												
Calc. Pk Hr Volumes												
Adjustments												
Bal Pk Hr Volumes	**162**	**792**	**125**	**42**	**1040**	**21**	**432**	**1344**	**37**	**145**	**1260**	**399**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

A — Match Line

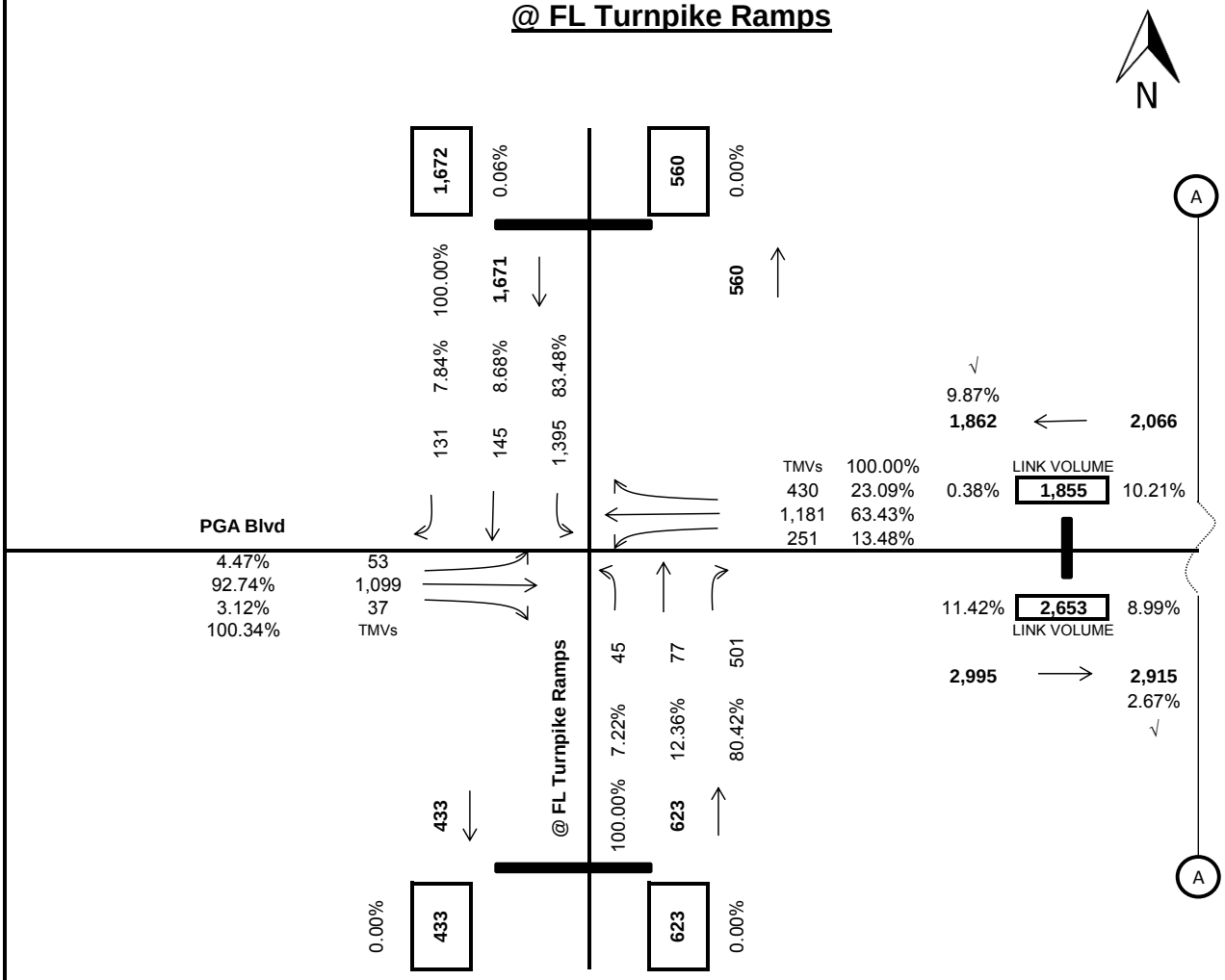
A

For consistency, balanced peak hour volumes from major street arterial (aka N Military Trail) were used. See N Military Trail Arterial for details

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name:	Exhibit Name:		
SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FPID No. 413676-1-22-01	**Donald Ross Road** **Turning Movement Volume Development** **2040 Build AM Peak Hour**	*Exhibit No:*	**TBD**
		Page No:	**5 of 5**
		Date:	9/24/15

@ FL Turnpike Ramps



Turning Movement Volumes
@ FL Turnpike Ramps

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**1,855**			**623**			**1,185**			**1,672**		
TM Pk Hr Counts	410	1989	725	45	77	501	86	1779	53	1528	159	144
% Turns	13%	64%	23%	7%	12%	80%	4%	93%	3%	83%	9%	8%
Calc. Pk Hr Volumes	243	1181	430	45	77	501	53	1099	33	1395	145	131
Adjustments	8								4			
Bal Pk Hr Volumes	**251**	**1181**	**430**	**45**	**77**	**501**	**53**	**1099**	**37**	**1395**	**145**	**131**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

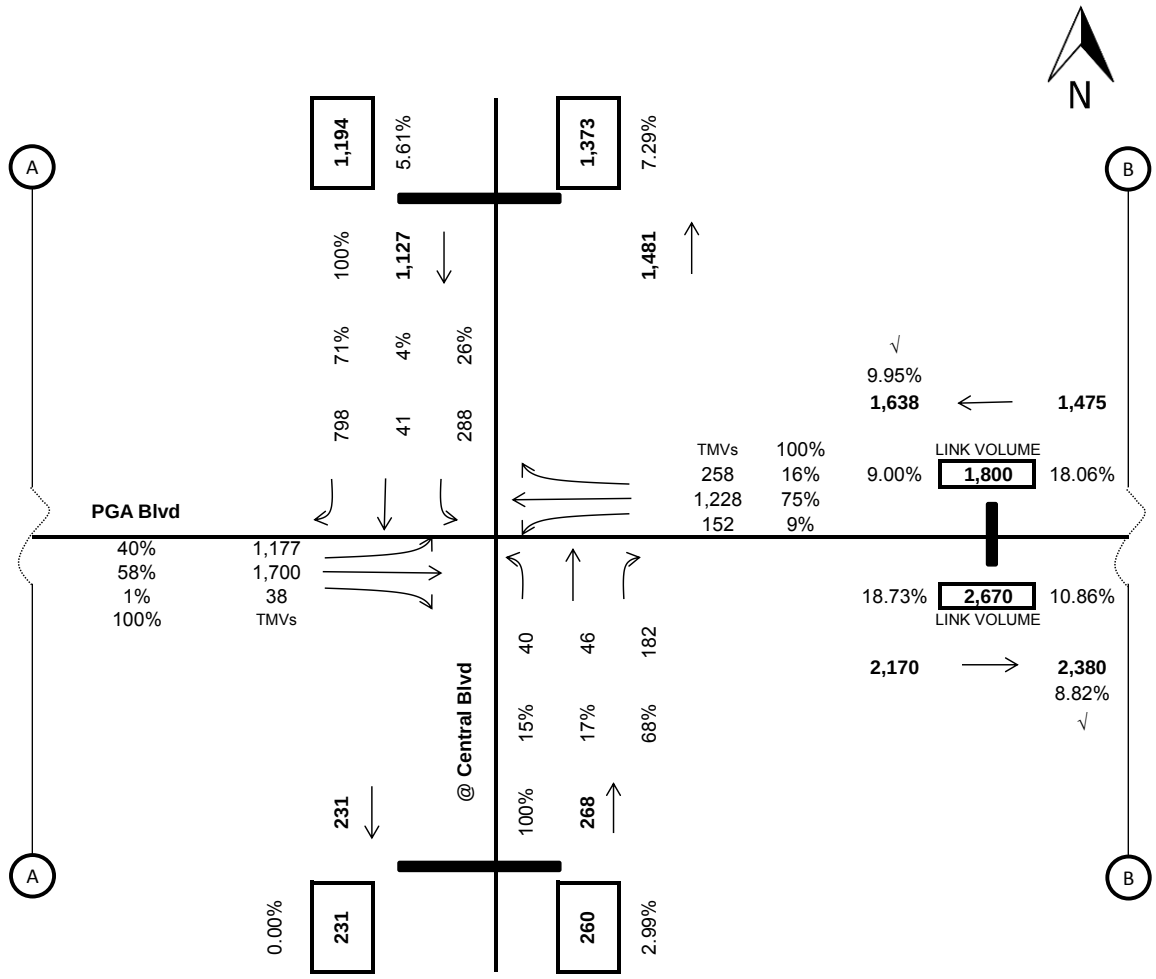
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard** **Turning Movement Volume Development** **2040 Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **1 of 8** *Date:* 9/24/15

@ Central Blvd



Turning Movement Volumes
@ Central Blvd

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,800**			**260**			**2,653**			**1,194**	
TM Pk Hr Counts	151	1376	256	40	46	174	1359	1961	45	373	64	1444
% Turns	8%	77%	14%	15%	18%	67%	40%	58%	1%	20%	3%	77%
Calc. Pk Hr Volumes	152	1389	258	40	46	174	1071	1546	35	237	41	917
Adjustments		-161				8	106	154	3	51		-119
Bal Pk Hr Volumes	**152**	**1228**	**258**	**40**	**46**	**182**	**1177**	**1700**	**38**	**288**	**41**	**798**

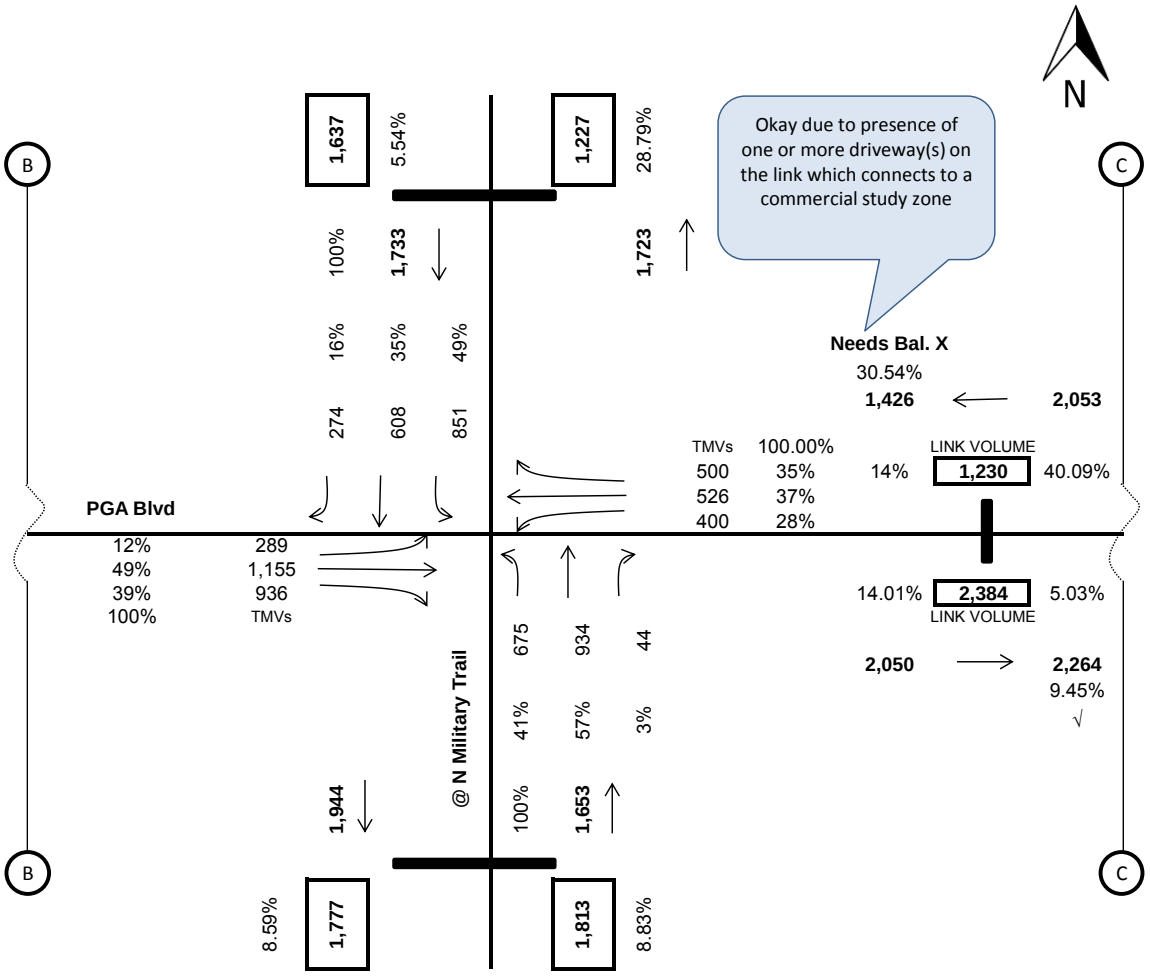
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard Turning Movement Volume Development 2040 Build AM Peak Hour**	*Exhibit No:* **TBD**
		Page No: **2 of 8**
		Date: 9/24/15

@ N Military Trail



Turning Movement Volumes
@ N Military Trail

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,230**			**1,813**			**2,670**			**1,637**	
TM Pk Hr Counts	770	633	962	951	1594	50	343	1289	1068	1587	1133	331
% Turns	33%	27%	41%	37%	61%	2%	13%	48%	40%	52%	37%	11%
Calc. Pk Hr Volumes	400	329	500	664	1114	35	339	1275	1056	851	608	178
Adjustments		197		11	-180	9	-50	-120	-120			96
Bal Pk Hr Volumes	**400**	**526**	**500**	**675**	**934**	**44**	**289**	**1155**	**936**	**851**	**608**	**274**

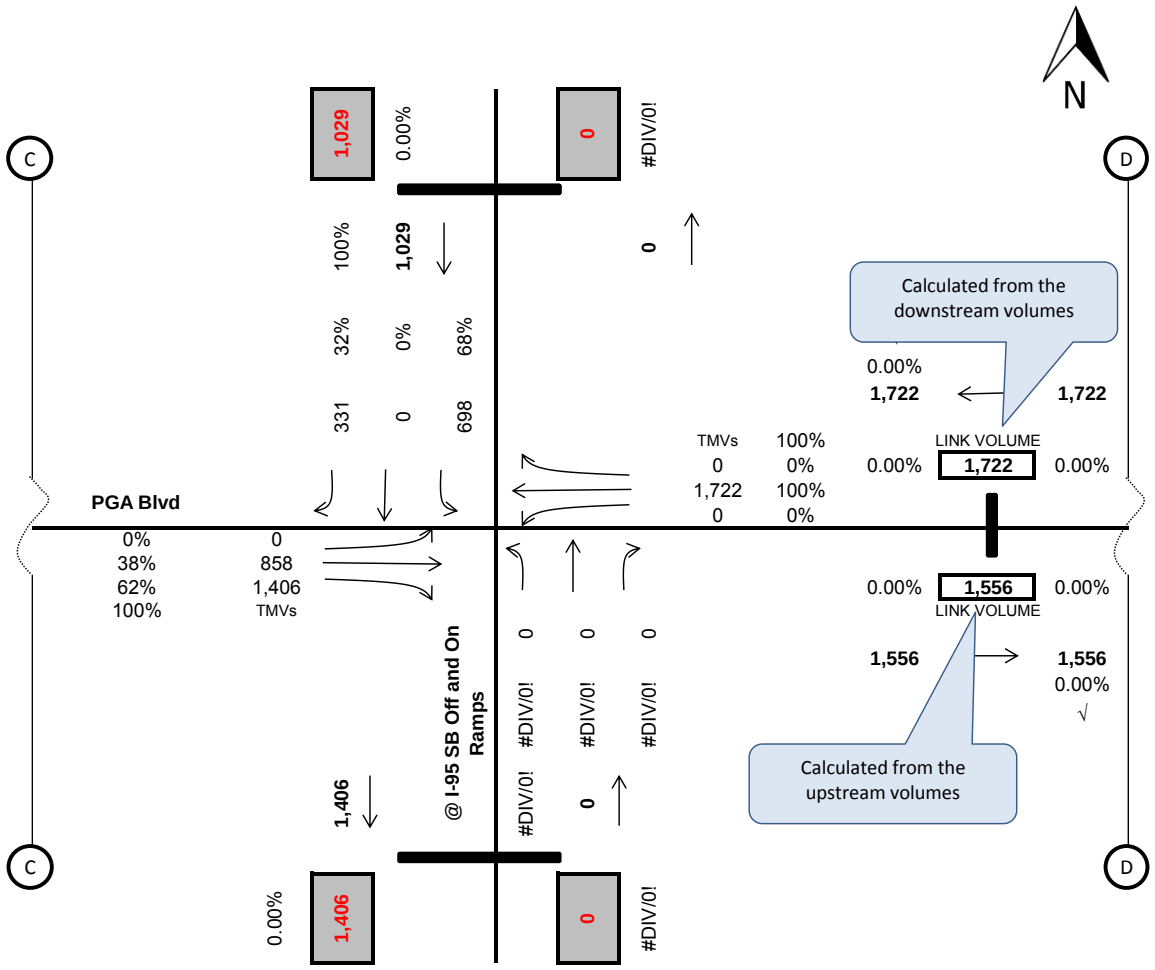
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard** **Turning Movement Volume Development** **2040 Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **3 of 8** *Date:* 9/24/15

@ I-95 SB Off and On Ramps



Turning Movement Volumes
@ I-95 SB Off and On Ramps

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,722**			**0**			**2,384**			**1,029**	
TM Pk Hr Counts	0	2108	0	0	0	0	0	965	1846	607	0	288
% Turns	0%	100%	0%	0%	0%	0%	0%	34%	66%	68%	0%	32%
Calc. Pk Hr Volumes	0	1722	0	0	0	0	0	818	1566	698	0	331
Adjustments	0			0				40	-160		0	
Bal Pk Hr Volumes	**0**	**1722**	**0**	**0**	**0**	**0**	**0**	**858**	**1406**	**698**	**0**	**331**

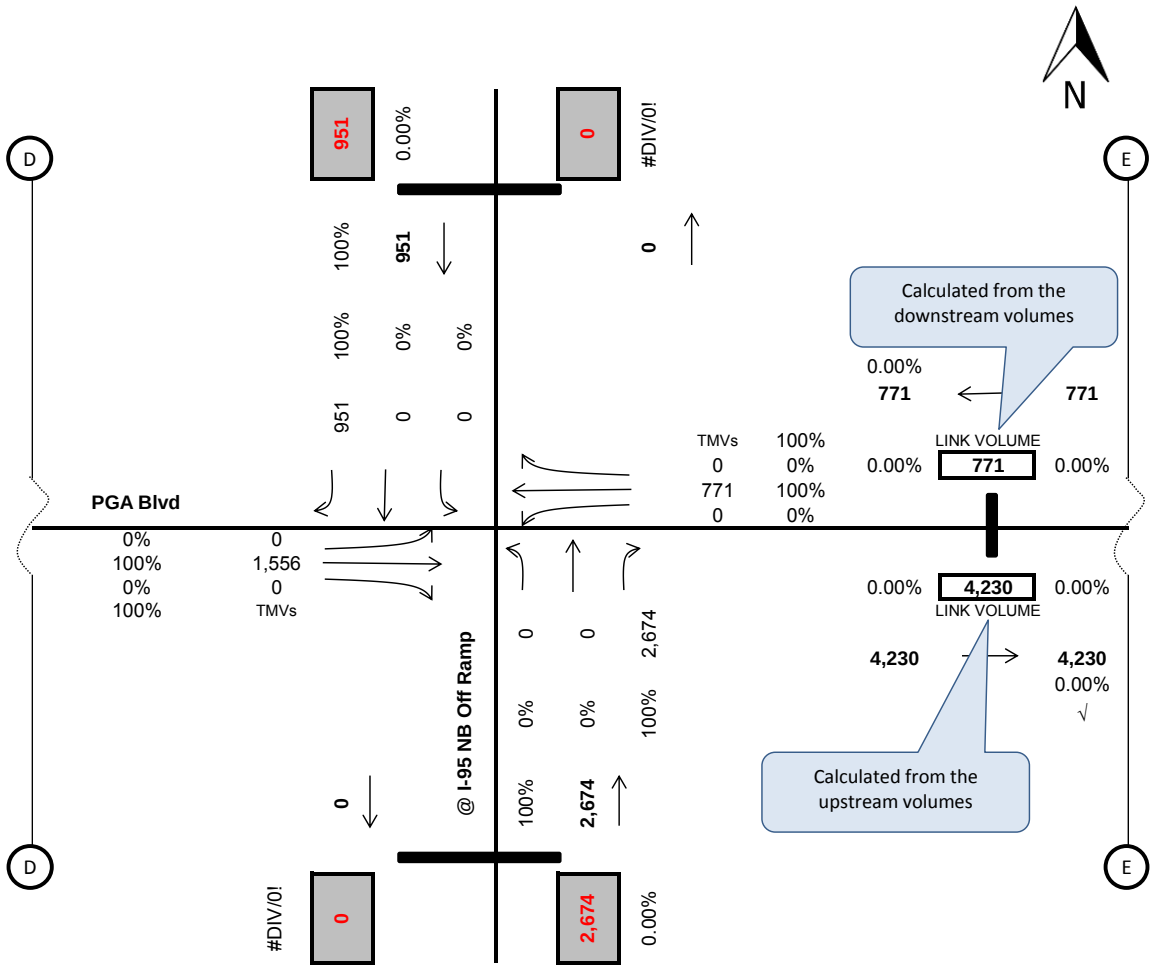
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A … A	Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard** **Turning Movement Volume Development** **2040 Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **4 of 8** *Date:* 9/24/15

@ I-95 NB Off Ramp



Turning Movement Volumes
@ I-95 NB Off Ramp

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**771**			**2,674**			**1,556**			**951**	
TM Pk Hr Counts	0	2108	0	0	0	2217	0	1571	0	0	0	1334
% Turns	0%	100%	0%	0%	0%	100%	0%	100%	0%	0%	0%	100%
Calc. Pk Hr Volumes	0	771	0	0	0	2674	0	1556	0	0	0	951
Adjustments												
Bal Pk Hr Volumes	**0**	**771**	**0**	**0**	**0**	**2674**	**0**	**1556**	**0**	**0**	**0**	**951**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

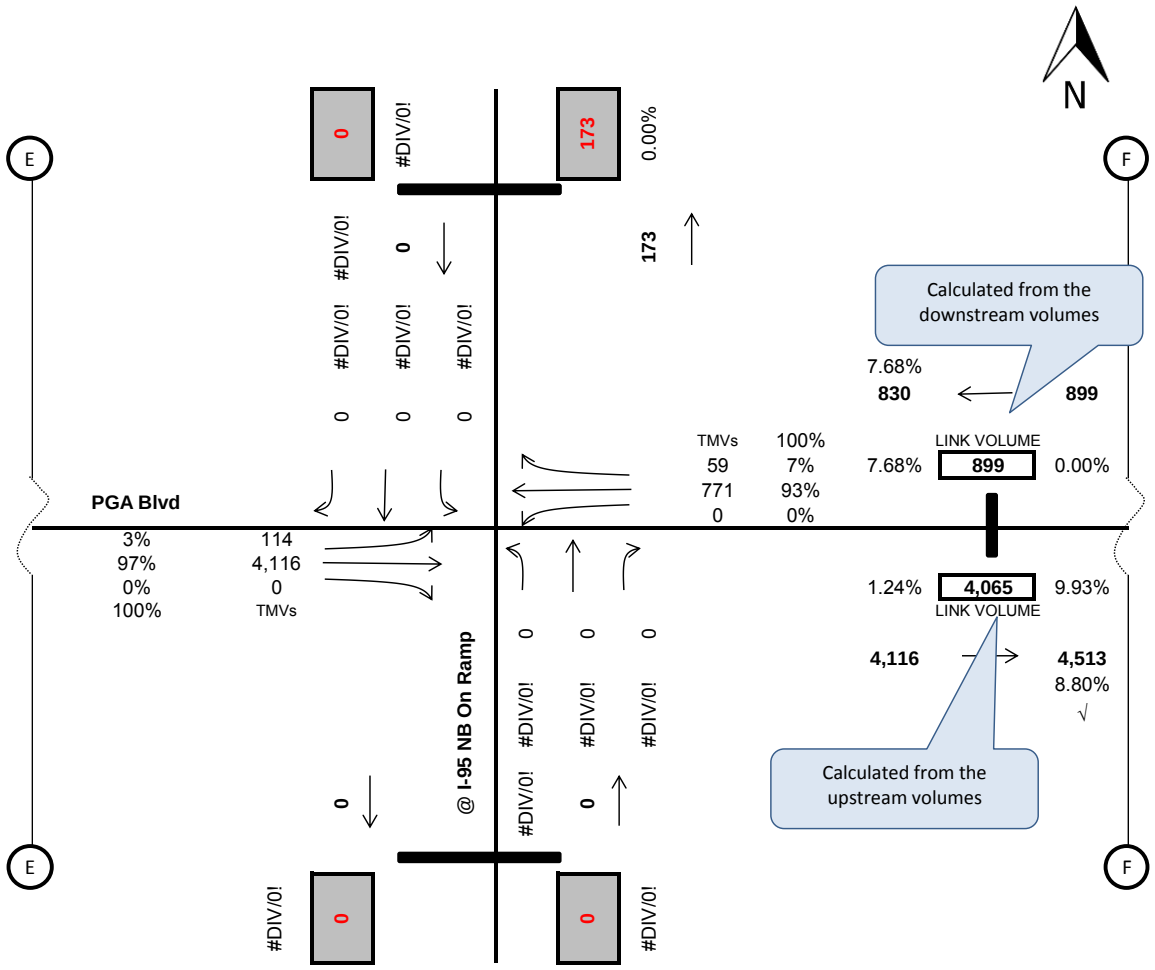
66 → Turning Movement Volumes (Balanced)

A … A — Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard** **Turning Movement Volume Development** **2040 Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **5 of 8** *Date:* 9/24/15

@ I-95 NB On Ramp



Turning Movement Volumes
@ I-95 NB On Ramp

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**899**			**0**			**4,230**			**0**	
TM Pk Hr Counts	0	774	128	0	0	0	179	2913	0	0	0	0
% Turns	0%	86%	14%	0%	0%	0%	6%	94%	0%	0%	0%	0%
Calc. Pk Hr Volumes	0	771	128	0	0	0	245	3985	0	0	0	0
Adjustments			-69		0		-131	131				
Bal Pk Hr Volumes	**0**	**771**	**59**	**0**	**0**	**0**	**114**	**4116**	**0**	**0**	**0**	**0**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

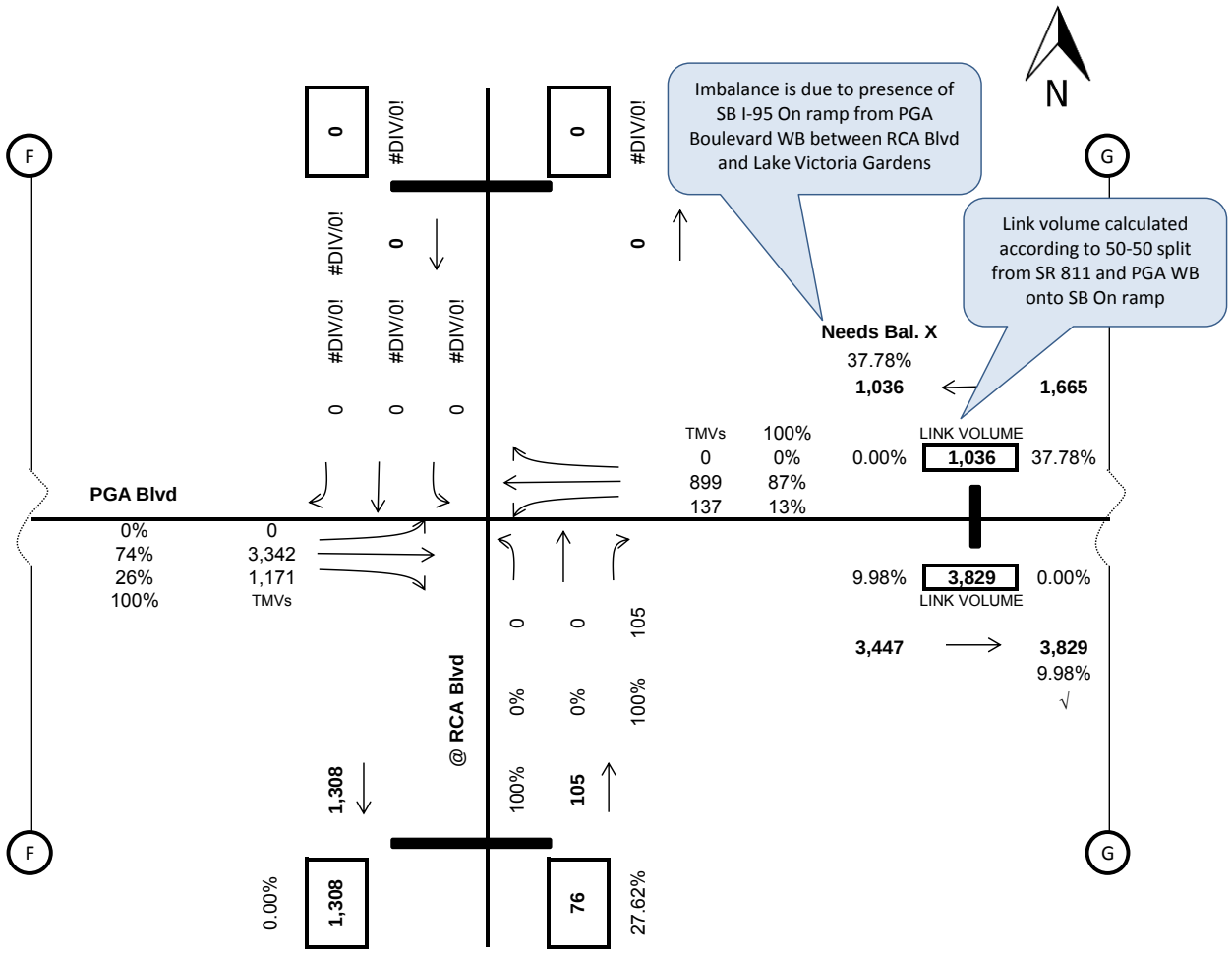
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard** **Turning Movement Volume Development** **2040 Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **6 of 8** *Date:* 9/24/15

@ RCA Blvd



Turning Movement Volumes
@ RCA Blvd

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,036**			**76**			**4,065**			**0**	
TM Pk Hr Counts	137	902	0	0	0	76	0	2506	1276	0	0	0
% Turns	13%	87%	0%	0%	0%	100%	0%	66%	34%	0%	0%	0%
Calc. Pk Hr Volumes	137	899	0	0	0	76	0	2694	1371	0	0	0
Adjustments	0			0		29		648	-200	0		0
Bal Pk Hr Volumes	**137**	**899**	**0**	**0**	**0**	**105**	**0**	**3342**	**1171**	**0**	**0**	**0**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 → Turning Movement Volumes (Balanced)

A — Match Line

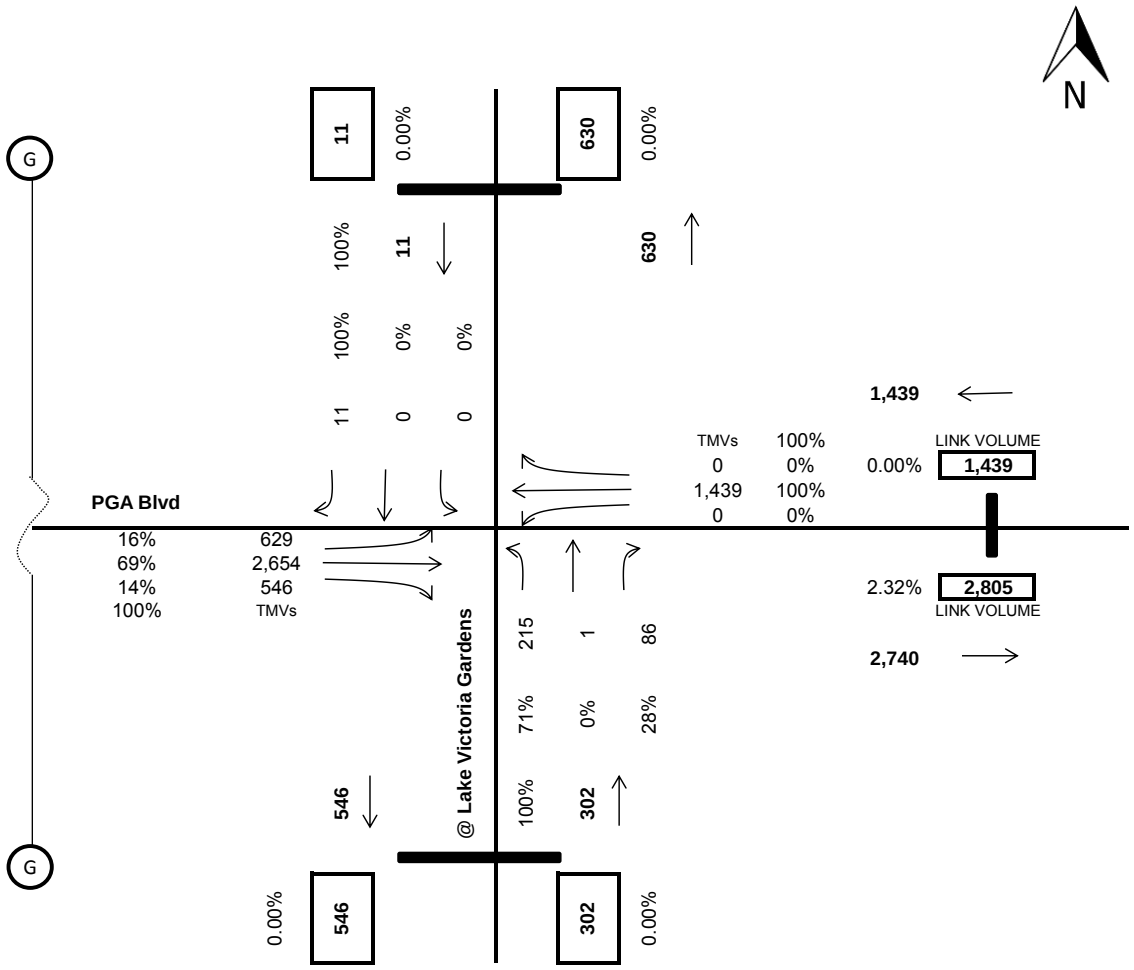
A

Adjustments were made to achieve balance between upstream and downstream intersection volumes as well as reasonable split between movements

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard** **Turning Movement Volume Development** **2040 Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **7 of 8** *Date:* 9/24/15

@ Lake Victoria Gardens



Turning Movement Volumes
@ Lake Victoria Gardens

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,439**			**302**			**3,829**			**11**	
TM Pk Hr Counts	0	1500	0	215	1	86	424	1789	368	0	0	11
% Turns	0%	100%	0%	71%	0%	28%	16%	69%	14%	0%	0%	100%
Calc. Pk Hr Volumes	0	1439	0	215	1	86	629	2654	546	0	0	11
Adjustments												
Bal Pk Hr Volumes	**0**	**1439**	**0**	**215**	**1**	**86**	**629**	**2654**	**546**	**0**	**0**	**11**

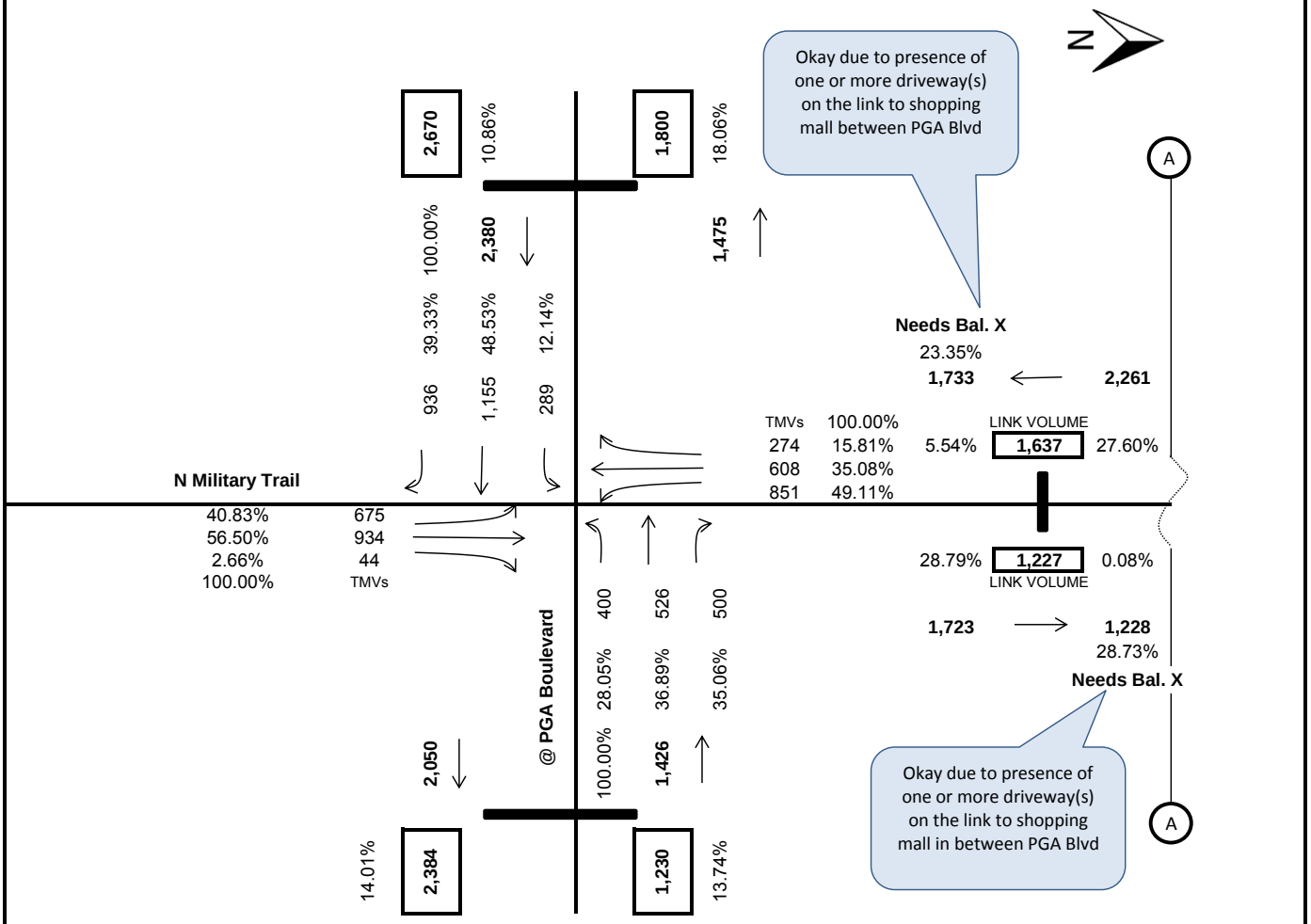
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard** **Turning Movement Volume Development** **2040 Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **8 of 8** *Date:* 9/24/15

@ PGA Boulevard



Turning Movement Volumes
@ PGA Boulevard

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes												
TM Pk Hr Counts												
% Turns												
Calc. Pk Hr Volumes												
Adjustments												
Bal Pk Hr Volumes	**851**	**608**	**274**	**400**	**526**	**500**	**675**	**934**	**44**	**289**	**1155**	**936**

For consistency, balanced peak hour volumes from major street arterial (aka PGA Boulevard) were used. See PGA Boulevard Arterial for details

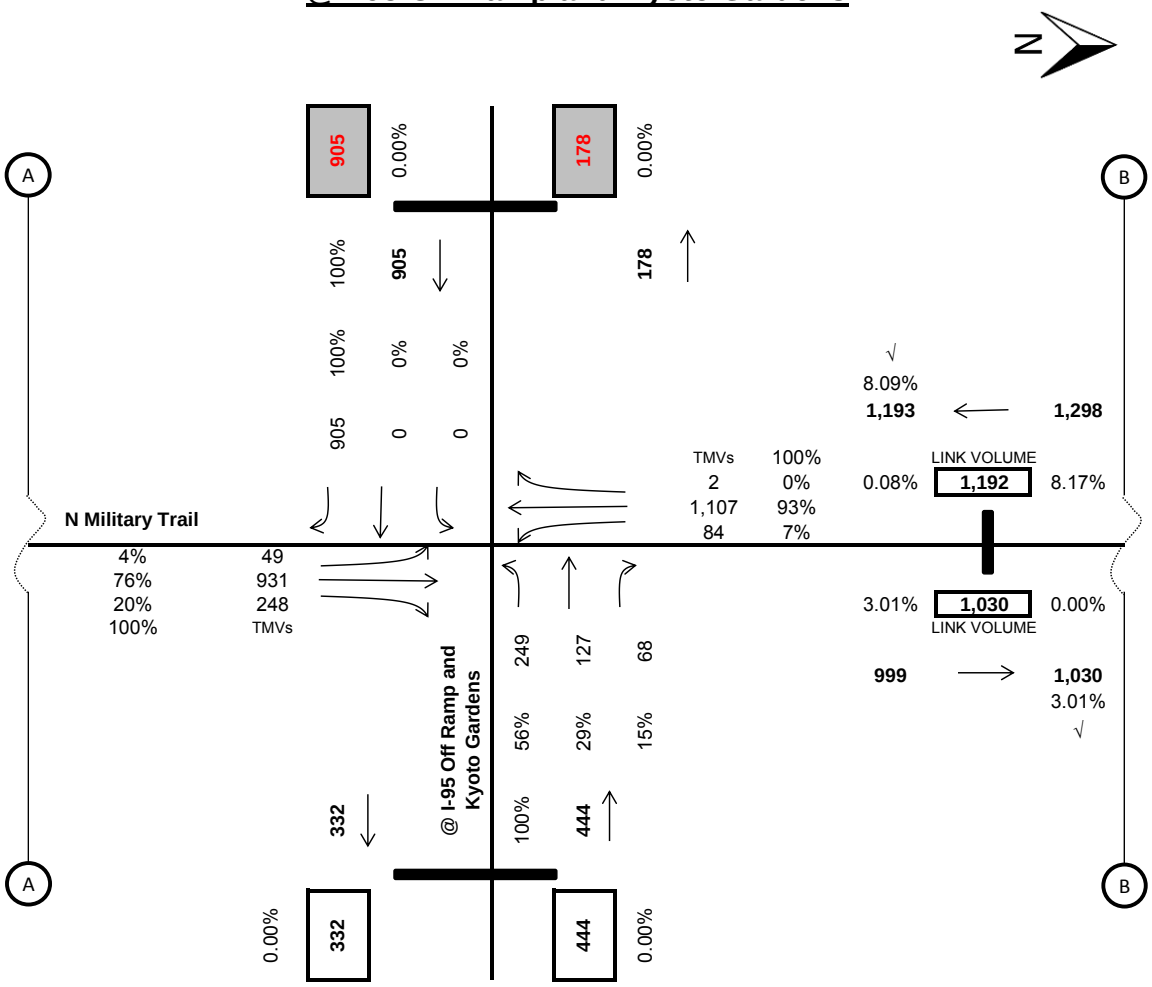
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A / A	Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **N Military Trail** **Turning Movement Volume Development** **2040 Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **1 of 4** *Date:* 9/24/15

@ I-95 Off Ramp and Kyoto Gardens



Turning Movement Volumes
@ I-95 Off Ramp and Kyoto

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,192**			**444**			**1,227**			**905**	
TM Pk Hr Counts	205	2697	3	271	93	80	79	2094	550	0	0	167
% Turns	7%	93%	0%	61%	21%	18%	3%	77%	20%	0%	0%	100%
Calc. Pk Hr Volumes	84	1107	1	271	93	80	36	944	248	0	0	905
Adjustments			1	-22	34	-12	13	-13				
Bal Pk Hr Volumes	**84**	**1107**	**2**	**249**	**127**	**68**	**49**	**931**	**248**	**0**	**0**	**905**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 → Turning Movement Volumes (Balanced)

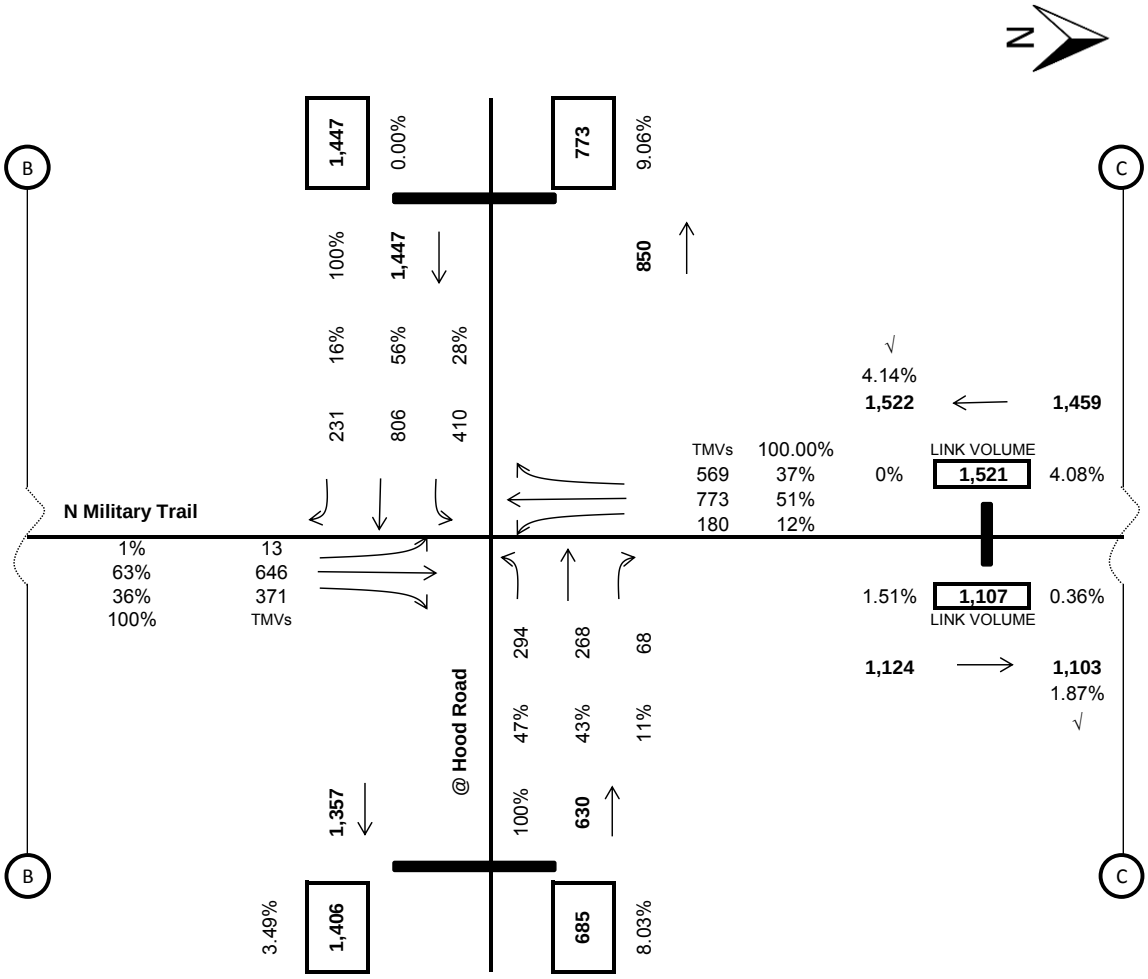
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard, Project Development & Environmental Study, FM No. 413265-1-22-01	*Exhibit Name:* **N Military Trail, Turning Movement Volume Development, 2040 Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **2 of 4** *Date:* 9/24/15

@ Hood Road



Turning Movement Volumes
@ Hood Road

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,521**			**685**			**1,030**			**1,447**	
TM Pk Hr Counts	284	1220	898	871	712	174	26	1333	765	633	1190	413
% Turns	12%	51%	37%	50%	41%	10%	1%	63%	36%	28%	53%	18%
Calc. Pk Hr Volumes	180	773	569	340	278	68	13	646	371	410	770	267
Adjustments				-46	-10						36	-36
Bal Pk Hr Volumes	**180**	**773**	**569**	**294**	**268**	**68**	**13**	**646**	**371**	**410**	**806**	**231**

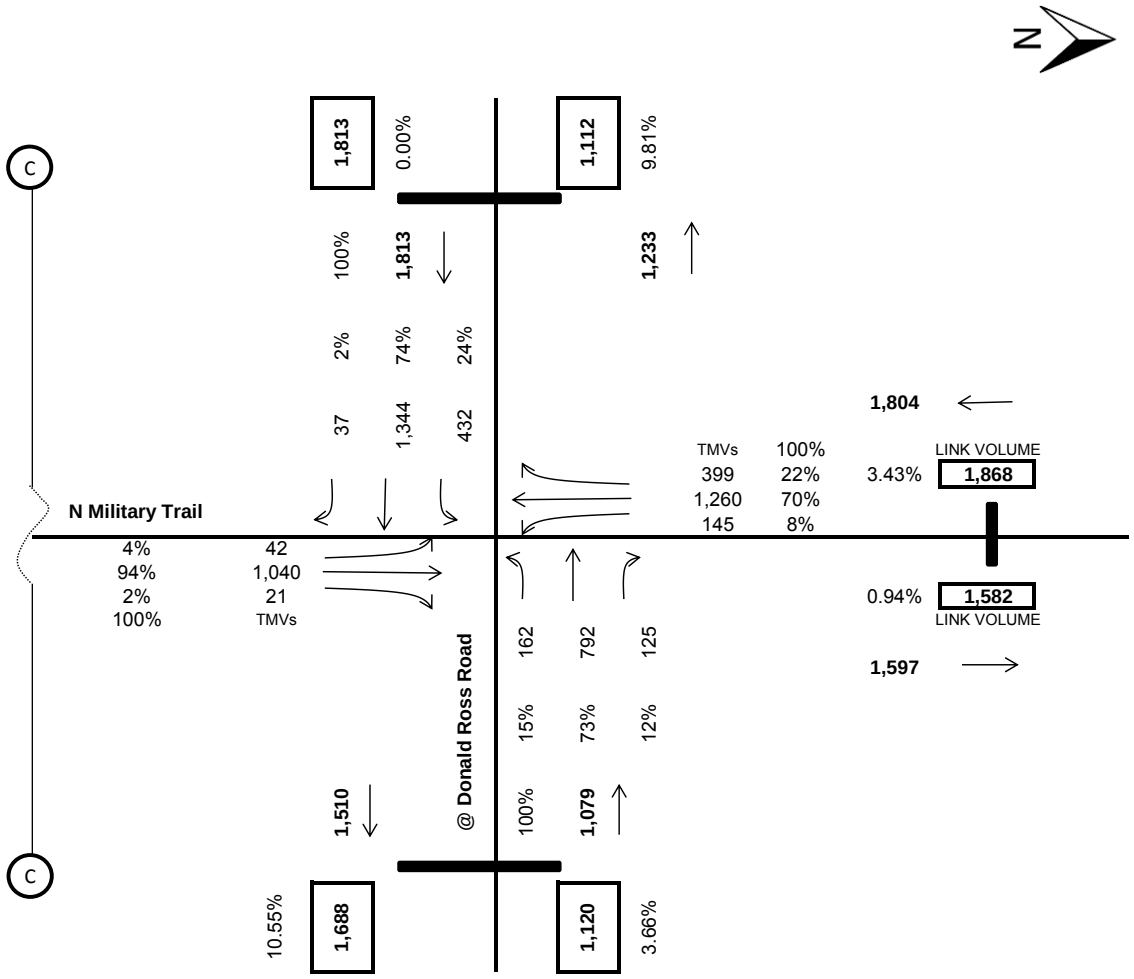
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **N Military Trail** **Turning Movement Volume Development** **2040 Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **3 of 4** *Date:* 9/24/15

@ Donald Ross Road



Turning Movement Volumes
@ Donald Ross Road

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,868**			**1,120**			**1,107**			**1,813**	
TM Pk Hr Counts	210	1884	605	154	804	123	76	1698	34	447	1390	38
% Turns	8%	70%	22%	14%	74%	11%	4%	94%	2%	24%	74%	2%
Calc. Pk Hr Volumes	145	1304	419	160	833	127	47	1040	21	432	1344	37
Adjustments		-44	-20	2	-41	-2	-5				0	0
Bal Pk Hr Volumes	**145**	**1260**	**399**	**162**	**792**	**125**	**42**	**1040**	**21**	**432**	**1344**	**37**

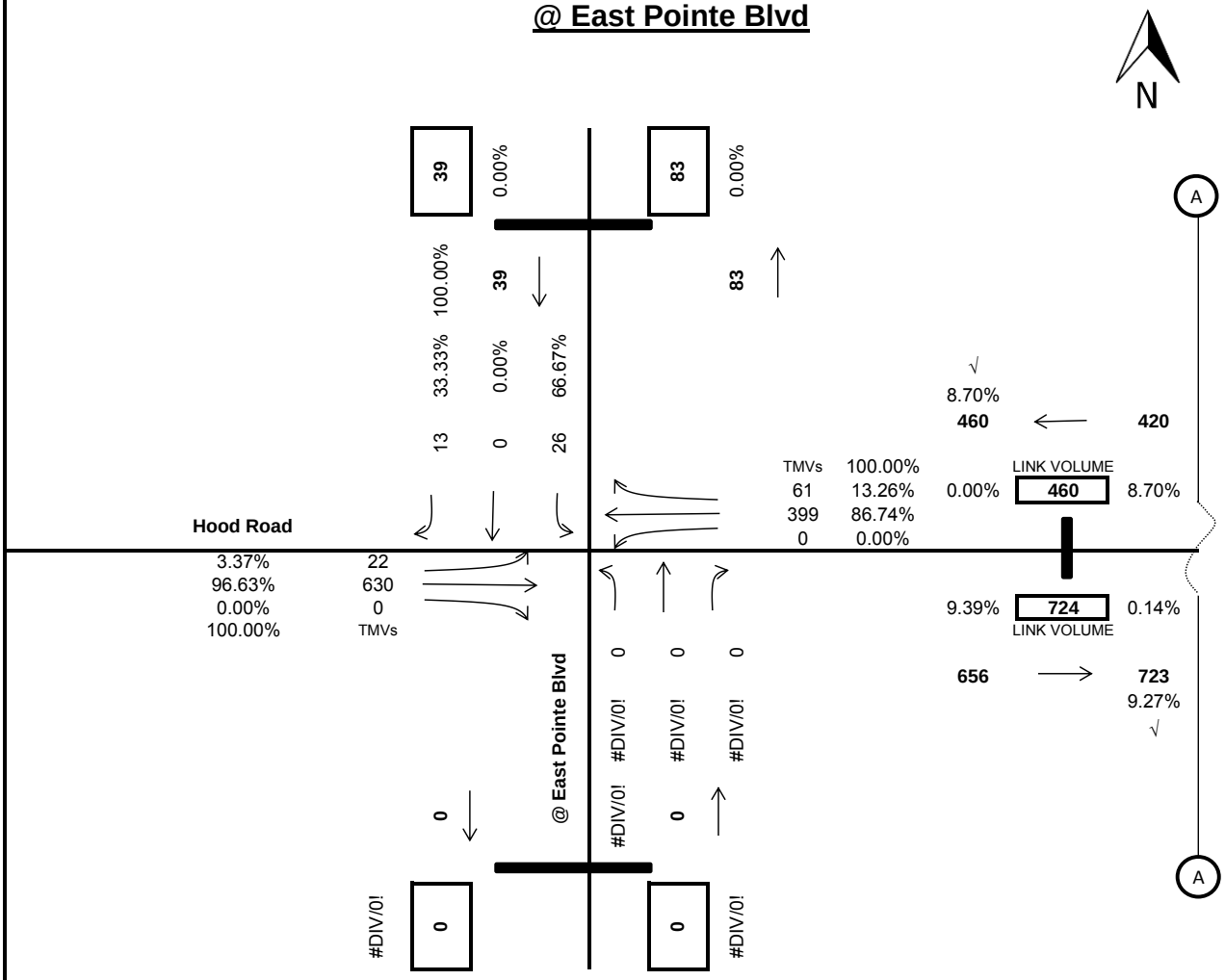
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **N Military Trail** **Turning Movement Volume Development** **2040 Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **4 of 4** *Date:* 9/24/15

@ East Pointe Blvd



Turning Movement Volumes
@ East Pointe Blvd

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**460**			**0**			**724**			**39**	
TM Pk Hr Counts	0	195	30	0	0	0	10	316	0	29	0	10
% Turns	0%	87%	13%	0%	0%	0%	3%	97%	0%	74%	0%	26%
Calc. Pk Hr Volumes	0	399	61	0	0	0	22	702	0	29	0	10
Adjustments						0		-72		-3		3
Bal Pk Hr Volumes	**0**	**399**	**61**	**0**	**0**	**0**	**22**	**630**	**0**	**26**	**0**	**13**

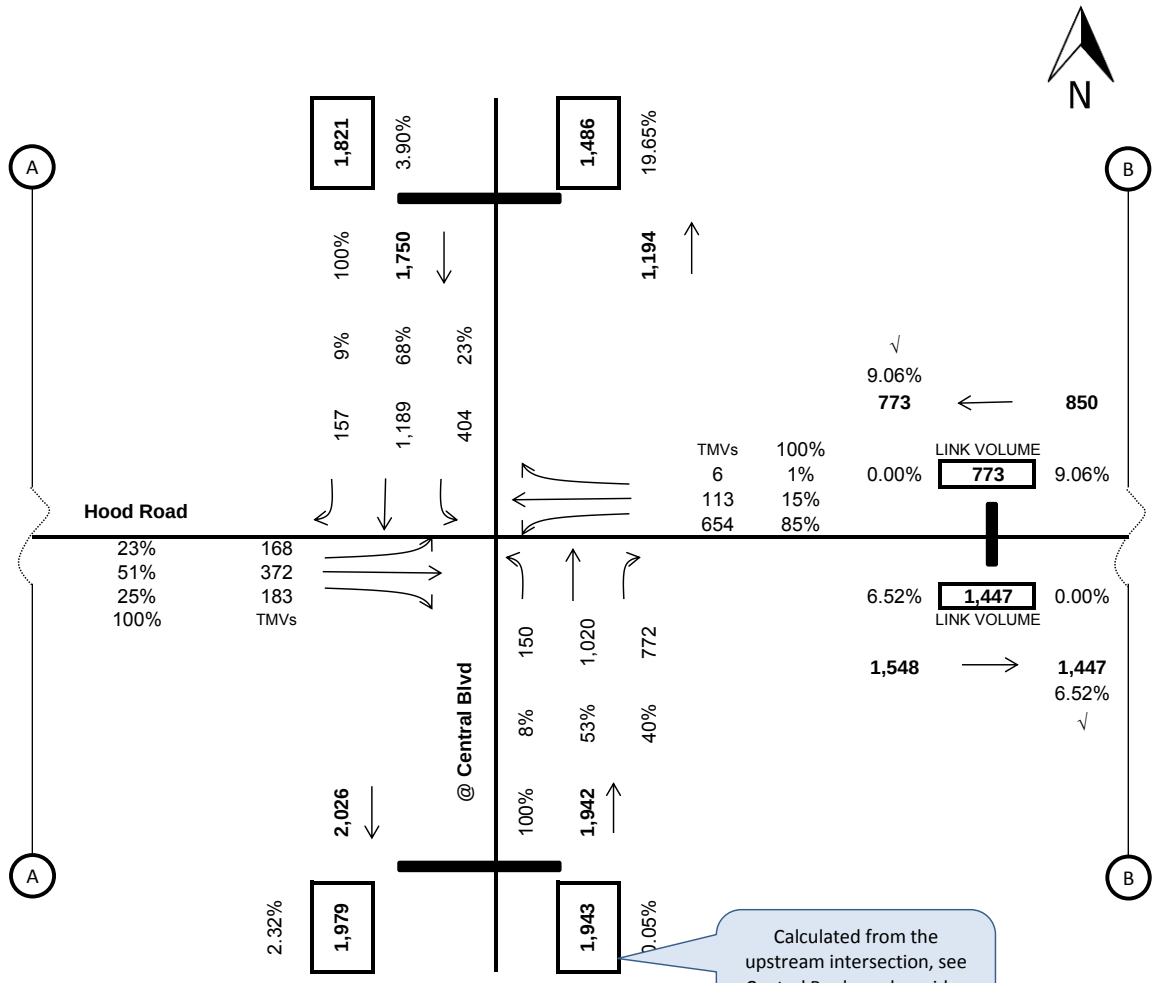
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66 →	Turning Movement Volumes (Balanced)
A / A	Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Hood Road** **Turning Movement Volume Development** **2040 Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **1 of 3** *Date:* 9/24/15

@ Central Blvd



Calculated from the upstream intersection, see Central Boulevard corridor for upstream volume

Turning Movement Volumes
@ Central Blvd

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes												
TM Pk Hr Counts												
% Turns												
Calc. Pk Hr Volumes												
Adjustments												
Bal Pk Hr Volumes	**654**	**113**	**6**	**150**	**1020**	**772**	**168**	**372**	**183**	**404**	**1189**	**157**

For consistency, balanced peak hour volumes from major street arterial (aka Central Boulevard) were used. See Central Boulevard Arterial for details

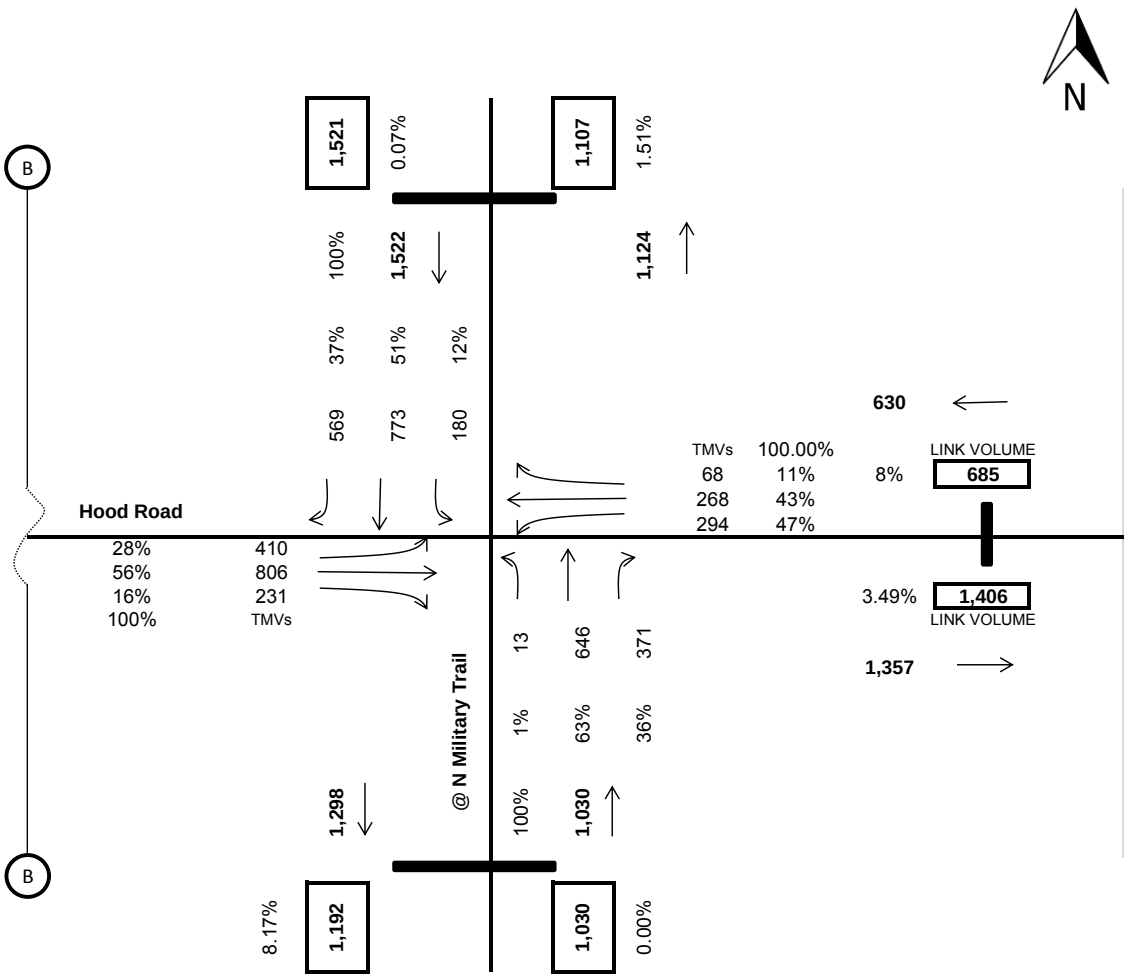
LEGEND

- **1,500** — Control Volumes (Peak Hour)*
- **1,300** — Link Volumes (Peak Hour)
- 66 → Turning Movement Volumes (Balanced)
- A … A — Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Hood Road** **Turning Movement Volume Development** **2040 Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **2 of 3** *Date:* 9/24/15

@ N Military Trail



Turning Movement Volumes
@ N Military Trail

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes												
TM Pk Hr Counts												
% Turns												
Calc. Pk Hr Volumes												
Adjustments												
Bal Pk Hr Volumes	**294**	**268**	**68**	**13**	**646**	**371**	**410**	**806**	**231**	**180**	**773**	**569**

For consistency, balanced peak hour volumes from major street arterial (aka N Military Trail) were used. See N Military Trail Arterial for details

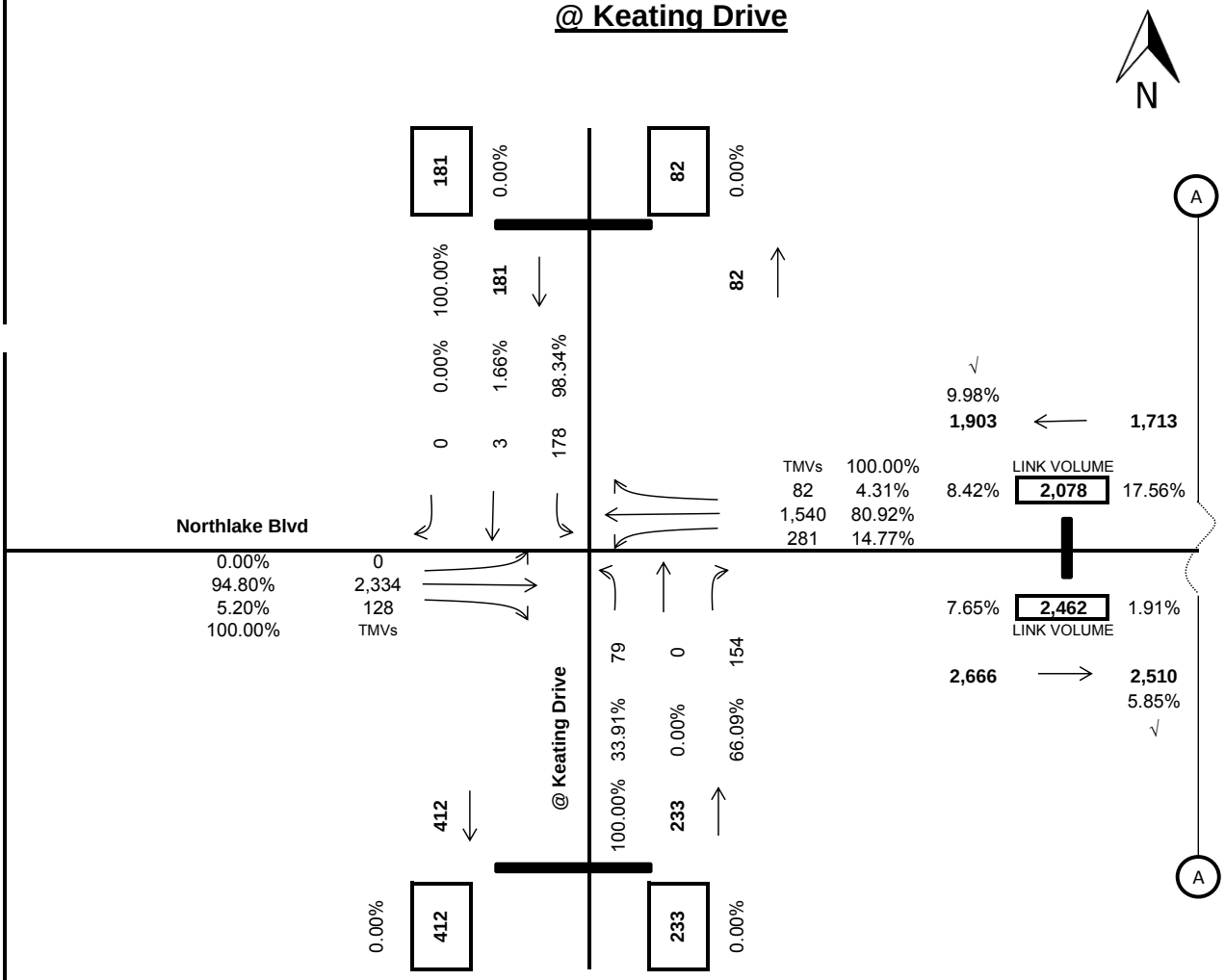
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66 →	Turning Movement Volumes (Balanced)
A … A	Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Hood Road** **Turning Movement Volume Development** **2040 Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **3 of 3** *Date:* 9/24/15

@ Keating Drive



Turning Movement Volumes
@ Keating Drive

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**2,078**			**233**			**2,462**			**181**	
TM Pk Hr Counts	288	1564	86	79	0	154	0	2850	156	178	3	0
% Turns	15%	81%	4%	34%	0%	66%	0%	95%	5%	98%	2%	0%
Calc. Pk Hr Volumes	309	1677	92	79	0	154	0	2334	128	178	3	0
Adjustments	-28	-137	-10	0								
Bal Pk Hr Volumes	**281**	**1540**	**82**	**79**	**0**	**154**	**0**	**2334**	**128**	**178**	**3**	**0**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

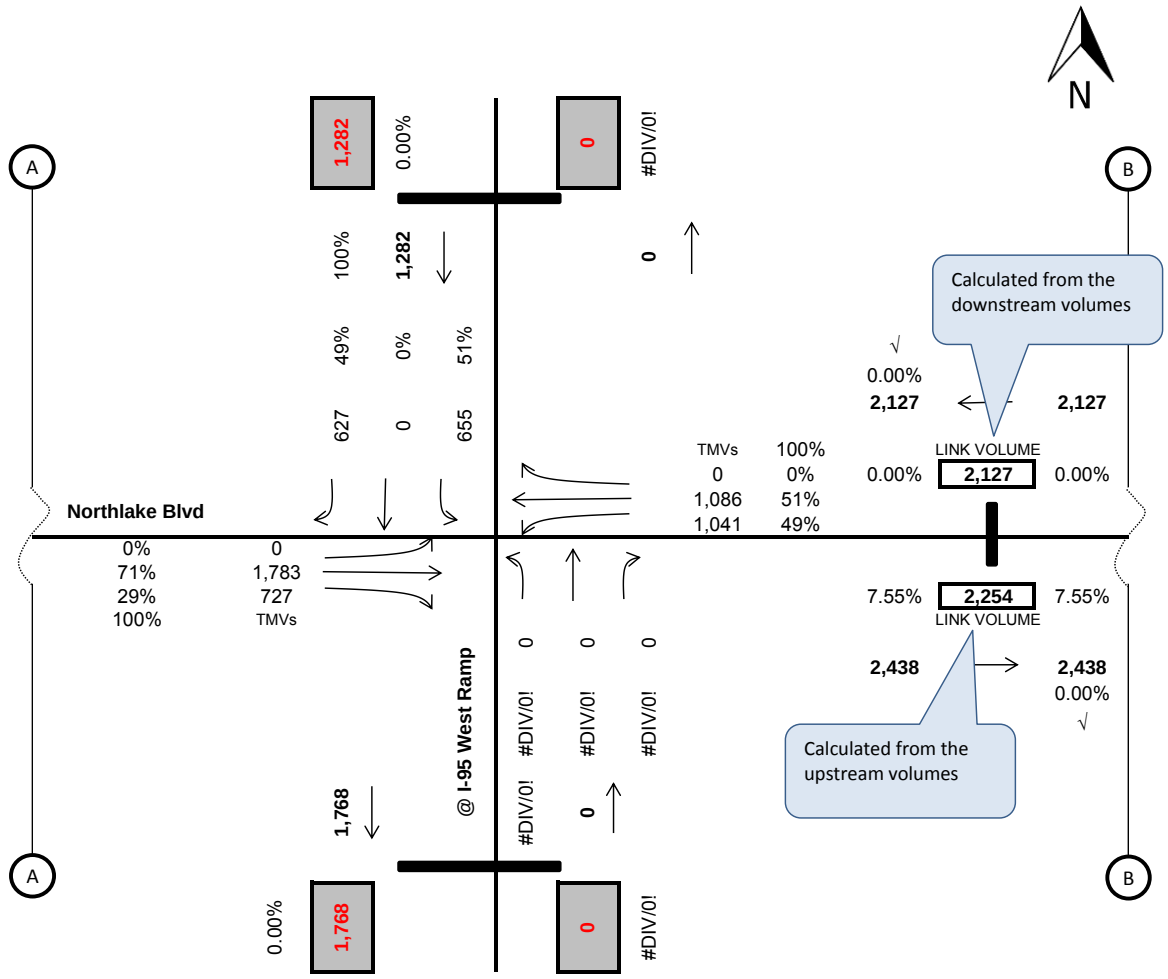
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Northlake Boulevard** **Turning Movement Volume Development** **2040 Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **1 of 5** *Date:* 9/24/15

@ I-95 West Ramp



Turning Movement Volumes
@ I-95 West Ramp

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**2,127**			**0**			**2,462**			**1,282**		
TM Pk Hr Counts	896	984	0	0	0	0	0	2267	915	1160	0	955
% Turns	48%	52%	0%	0%	0%	0%	0%	71%	29%	55%	0%	45%
Calc. Pk Hr Volumes	1014	1113	0	0	0	0	0	1754	708	703	0	579
Adjustments	27	-27		0				29	19	-48		48
Bal Pk Hr Volumes	**1041**	**1086**	**0**	**0**	**0**	**0**	**0**	**1783**	**727**	**655**	**0**	**627**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

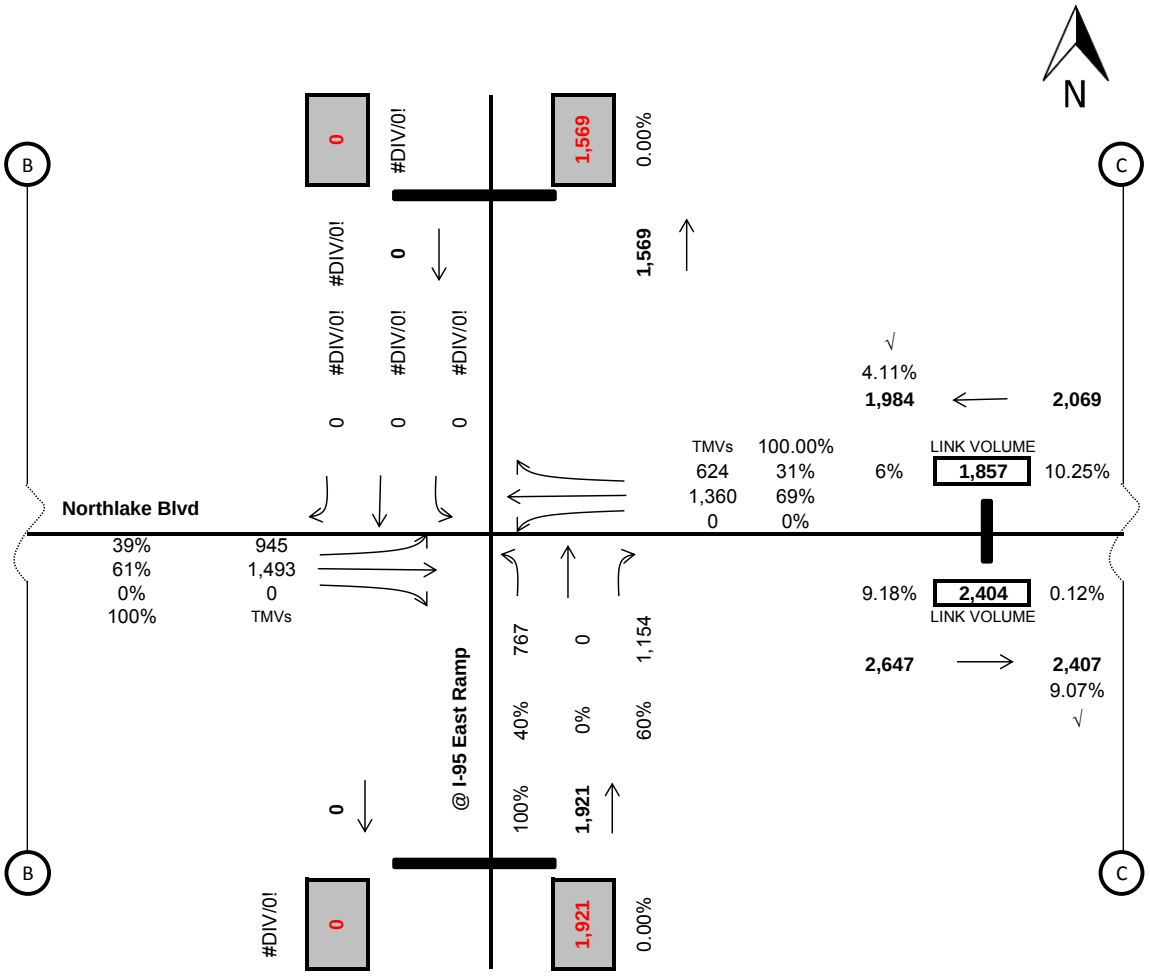
66 → — Turning Movement Volumes (Balanced)

A … A — Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Northlake Boulevard** **Turning Movement Volume Development** **2040 Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **2 of 5** *Date:* 9/24/15

@ I-95 East Ramp



Turning Movement Volumes
@ I-95 East Ramp

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,857**			**1,921**			**2,254**			**0**	
TM Pk Hr Counts	0	1305	531	575	0	1007	1203	2223	0	0	0	0
% Turns	0%	71%	29%	36%	0%	64%	35%	65%	0%	0%	0%	0%
Calc. Pk Hr Volumes	0	1320	537	698	0	1223	791	1463	0	0	0	0
Adjustments		40	87	69	0	-69	154	30				
Bal Pk Hr Volumes	**0**	**1360**	**624**	**767**	**0**	**1154**	**945**	**1493**	**0**	**0**	**0**	**0**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

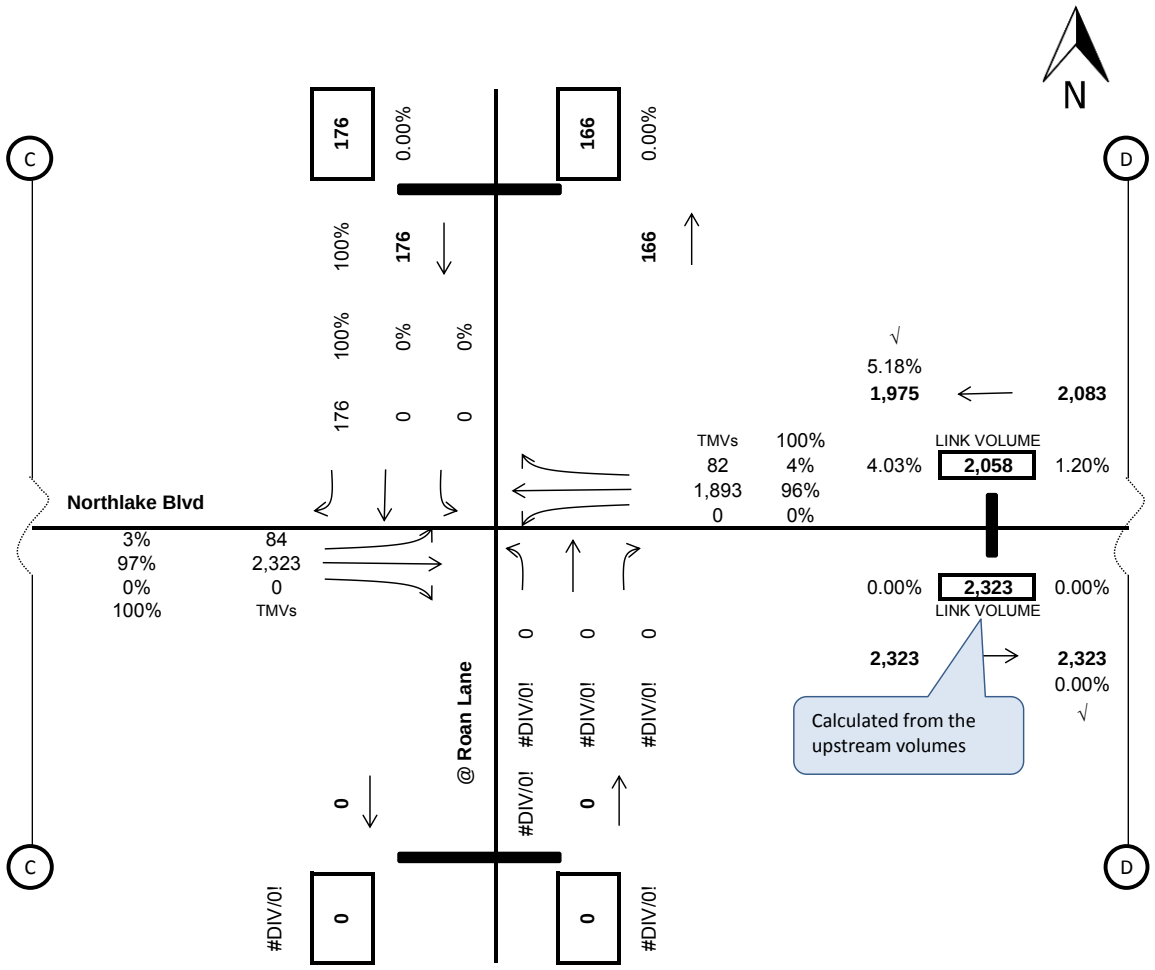
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Northlake Boulevard** **Turning Movement Volume Development** **2040 Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **3 of 5** *Date:* 9/24/15

@ Roan Lane



Turning Movement Volumes
@ Roan Lane

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**2,058**			**0**			**2,404**			**176**	
TM Pk Hr Counts	0	1938	80	0	0	0	118	3382	0	0	0	176
% Turns	0%	96%	4%	0%	0%	0%	3%	97%	0%	0%	0%	100%
Calc. Pk Hr Volumes	0	1976	82	0	0	0	81	2323	0	0	0	176
Adjustments		-83				0	3			0		
Bal Pk Hr Volumes	**0**	**1893**	**82**	**0**	**0**	**0**	**84**	**2323**	**0**	**0**	**0**	**176**

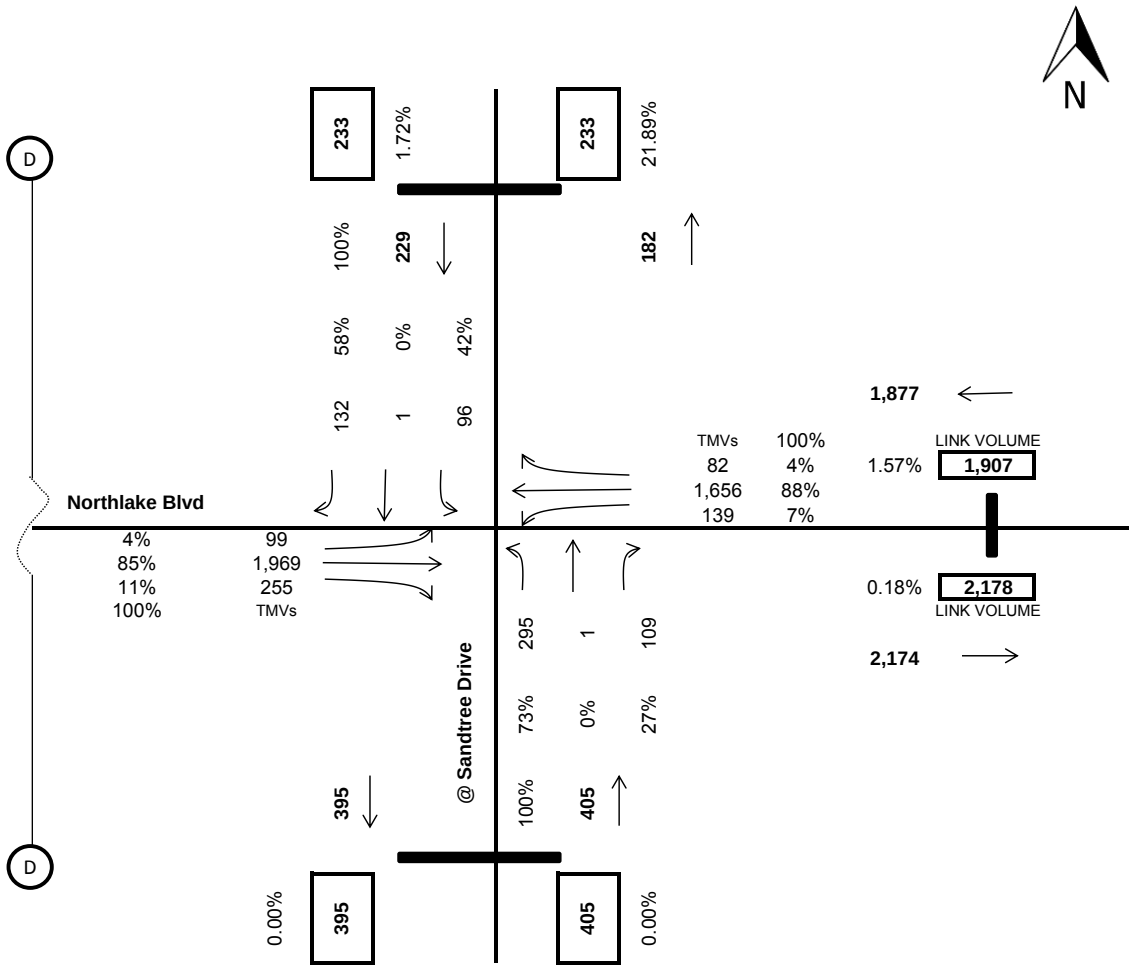
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Northlake Boulevard Turning Movement Volume Development 2040 Build AM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **4 of 5** *Date:* 9/24/15

@ Sandtree Drive



Turning Movement Volumes
@ Sandtree Drive

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,907**			**405**			**2,323**			**233**	
TM Pk Hr Counts	115	1396	68	305	1	99	138	2738	355	96	1	136
% Turns	7%	88%	4%	75%	0%	24%	4%	85%	11%	41%	0%	58%
Calc. Pk Hr Volumes	139	1686	82	305	1	99	99	1969	255	96	1	136
Adjustments		-30		-10		10						-4
Bal Pk Hr Volumes	**139**	**1656**	**82**	**295**	**1**	**109**	**99**	**1969**	**255**	**96**	**1**	**132**

LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

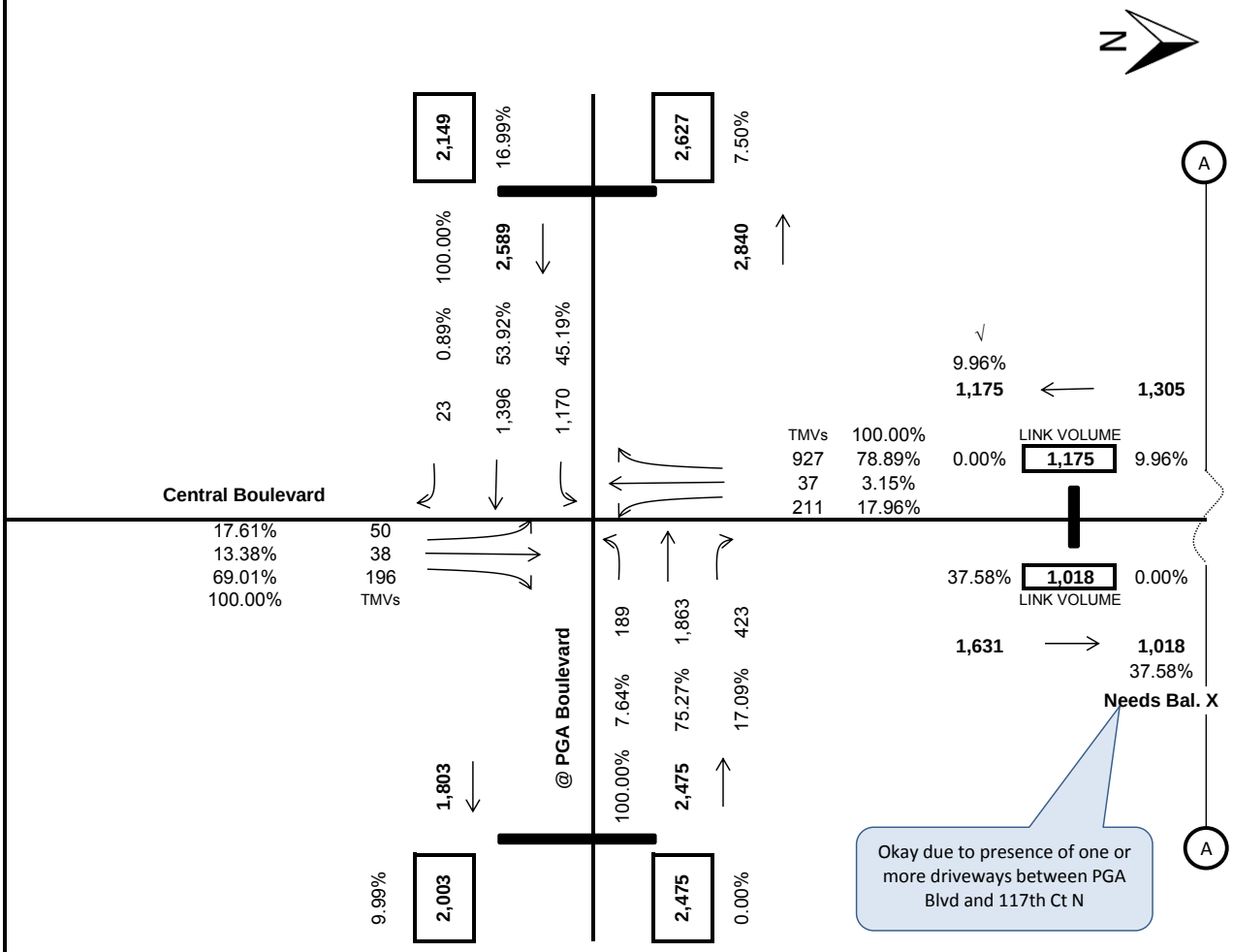
Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Northlake Boulevard Turning Movement Volume Development 2040 Build AM Peak Hour**	*Exhibit No:* **TBD**
		Page No: **5 of 5**
		Date: 9/24/15

APPENDIX AI

BALANCED TURNING MOVEMENT DEVELOPMENT SHEETS

2040 BUILD PM PEAK HOUR

@ PGA Boulevard



Turning Movement Volumes
@ PGA Boulevard

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes												
TM Pk Hr Counts												
% Turns												
Calc. Pk Hr Volumes												
Adjustments												
Bal Pk Hr Volumes	**211**	**37**	**927**	**189**	**1863**	**423**	**50**	**38**	**196**	**1170**	**1396**	**23**

LEGEND

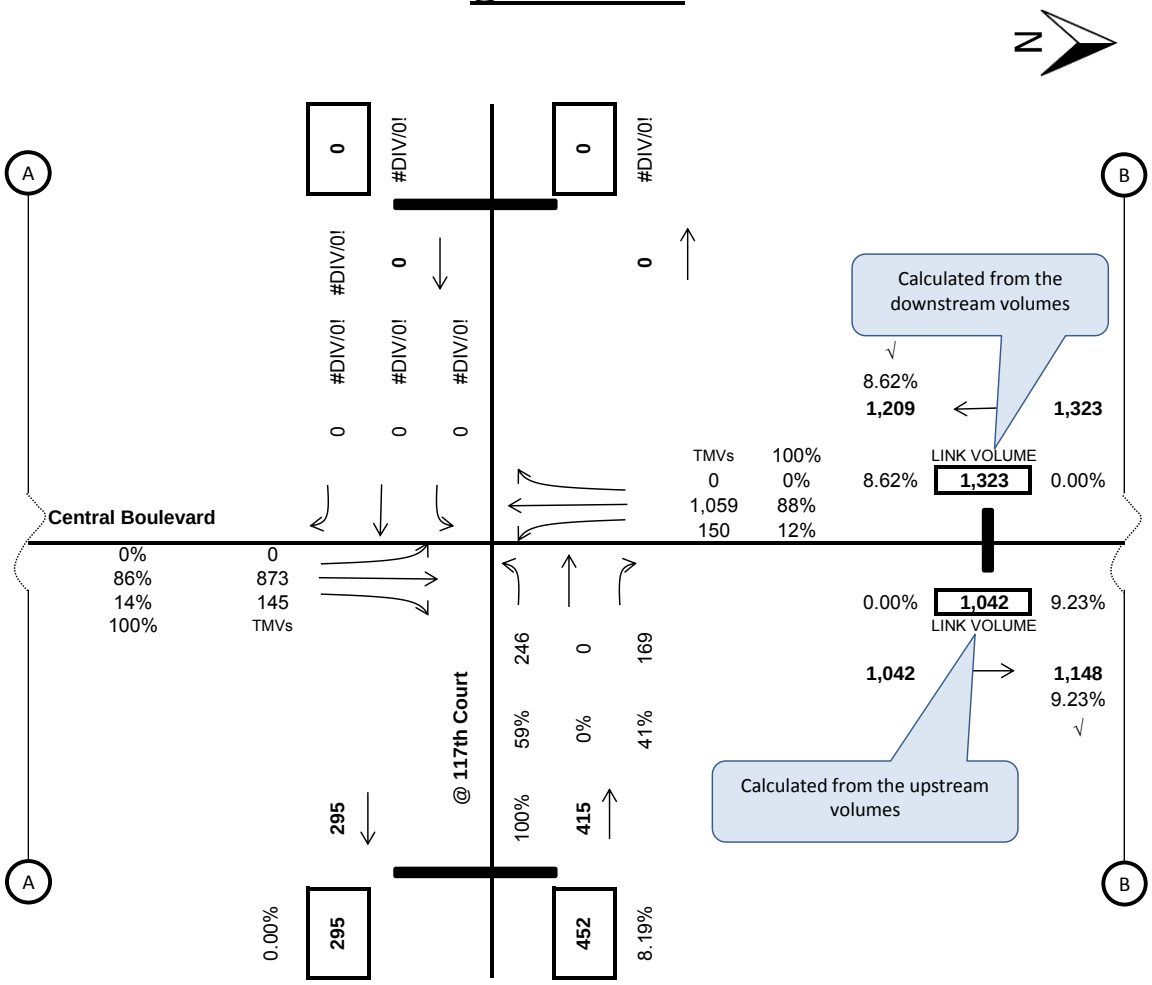
1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

For consistency, balanced peak hour volumes from major street arterial (aka PGA Boulevard) were used. See PGA Boulevard Arterial for details

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Central Boulevard** **Turning Movement Volume Development** **2040 Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **1 of 6** *Date:* 9/24/15

@ 117th Court



Turning Movement Volumes
@ 117th Court

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,323**			**452**			**1,018**			**0**	
TM Pk Hr Counts	196	1534	0	271	0	181	0	1714	285	0	0	0
% Turns	11%	89%	0%	60%	0%	40%	0%	86%	14%	0%	0%	0%
Calc. Pk Hr Volumes	150	1173	0	271	0	181	0	873	145	0	0	0
Adjustments		-114		-25		-12						
Bal Pk Hr Volumes	**150**	**1059**	**0**	**246**	**0**	**169**	**0**	**873**	**145**	**0**	**0**	**0**

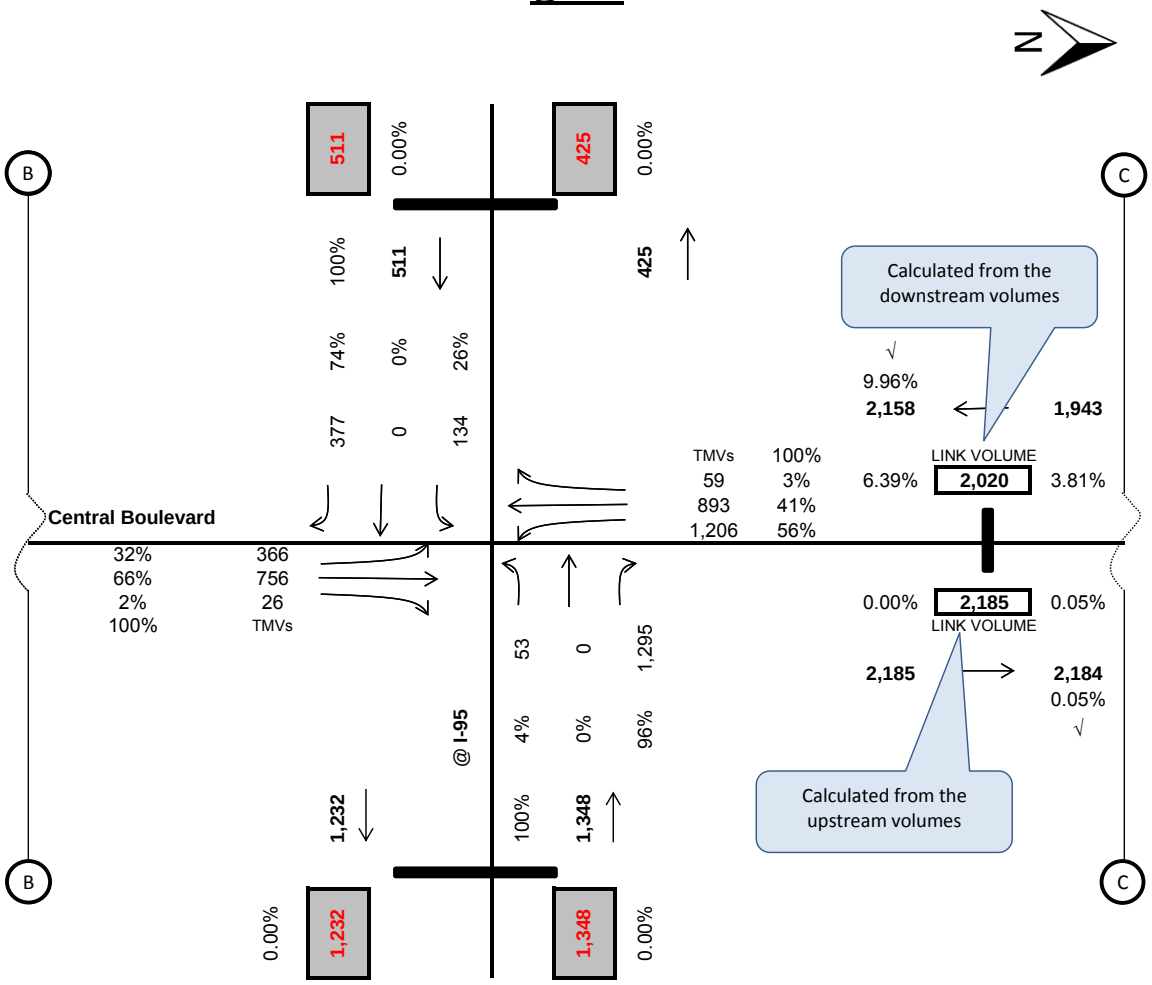
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A / A	Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Central Boulevard Turning Movement Volume Development 2040 Build PM Peak Hour**	*Exhibit No:* **TBD**
		Page No: **2 of 6**
		Date: 9/24/15

@ I-95



Turning Movement Volumes
@ I-95

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**2,020**			**1,348**			**1,042**			**511**		
TM Pk Hr Counts	1686	1300	63	76	0	1857	535	1544	49	184	0	520
% Turns	55%	43%	2%	4%	0%	96%	25%	73%	2%	26%	0%	74%
Calc. Pk Hr Volumes	1117	861	42	53	0	1295	262	756	24	134	0	377
Adjustments	89	32	17		0		104		2		0	
Bal Pk Hr Volumes	**1206**	**893**	**59**	**53**	**0**	**1295**	**366**	**756**	**26**	**134**	**0**	**377**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

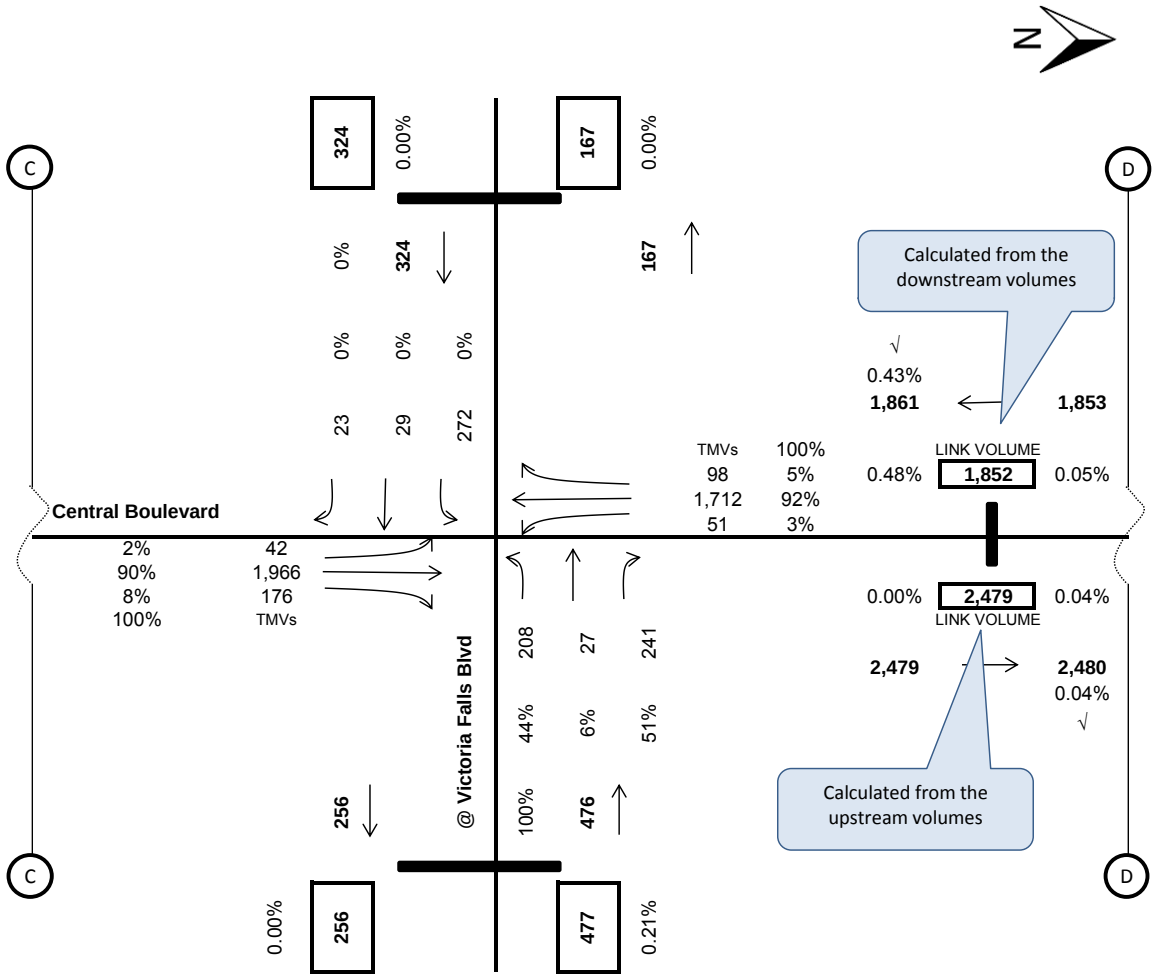
66 → — Turning Movement Volumes (Balanced)

A … A — Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name:	Exhibit Name:		
SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	**Central Boulevard** **Turning Movement Volume Development** **2040 Build PM Peak Hour**	*Exhibit No:*	**TBD**
		Page No:	**3 of 6**
		Date:	9/24/15

@ Victoria Falls Blvd



Turning Movement Volumes
@ Victoria Falls Blvd

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,852**			**477**			**2,185**			**324**	
TM Pk Hr Counts	83	2752	159	221	29	256	67	3121	280	272	30	22
% Turns	3%	92%	5%	44%	6%	51%	2%	90%	8%	84%	9%	7%
Calc. Pk Hr Volumes	51	1702	98	208	27	241	42	1966	176	272	29	23
Adjustments		10										
Bal Pk Hr Volumes	**51**	**1712**	**98**	**208**	**27**	**241**	**42**	**1966**	**176**	**272**	**29**	**23**

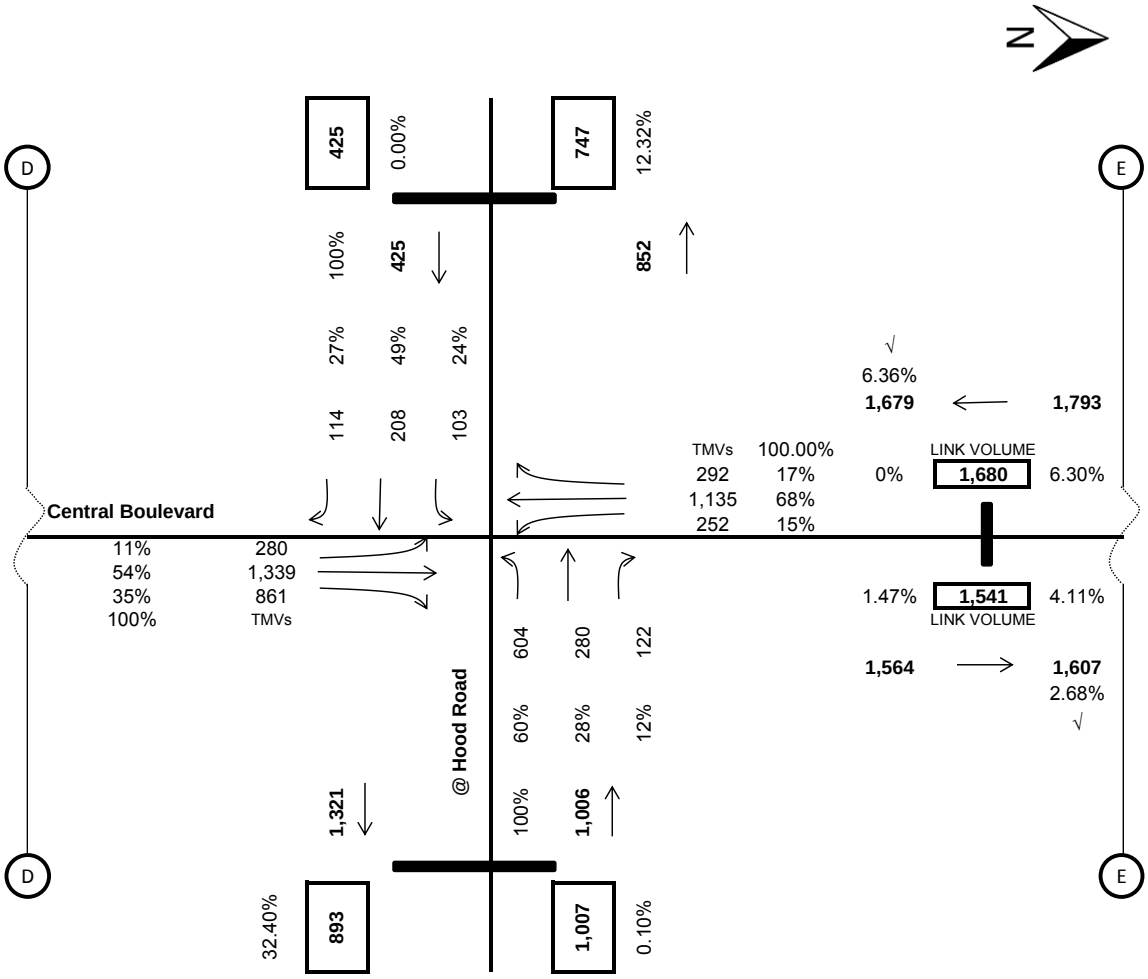
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A … A	Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Central Boulevard Turning Movement Volume Development 2040 Build PM Peak Hour**	*Exhibit No:* **TBD**
		Page No: **4 of 6**
		Date: 9/24/15

@ Hood Road



Turning Movement Volumes
@ Hood Road

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**1,680**			**1,007**			**2,479**			**425**		
TM Pk Hr Counts	291	1309	337	1299	603	263	381	1823	1173	204	412	227
% Turns	15%	68%	17%	60%	28%	12%	11%	54%	35%	24%	49%	27%
Calc. Pk Hr Volumes	252	1135	292	604	280	122	280	1338	861	103	208	114
Adjustments								1				
Bal Pk Hr Volumes	**252**	**1135**	**292**	**604**	**280**	**122**	**280**	**1339**	**861**	**103**	**208**	**114**

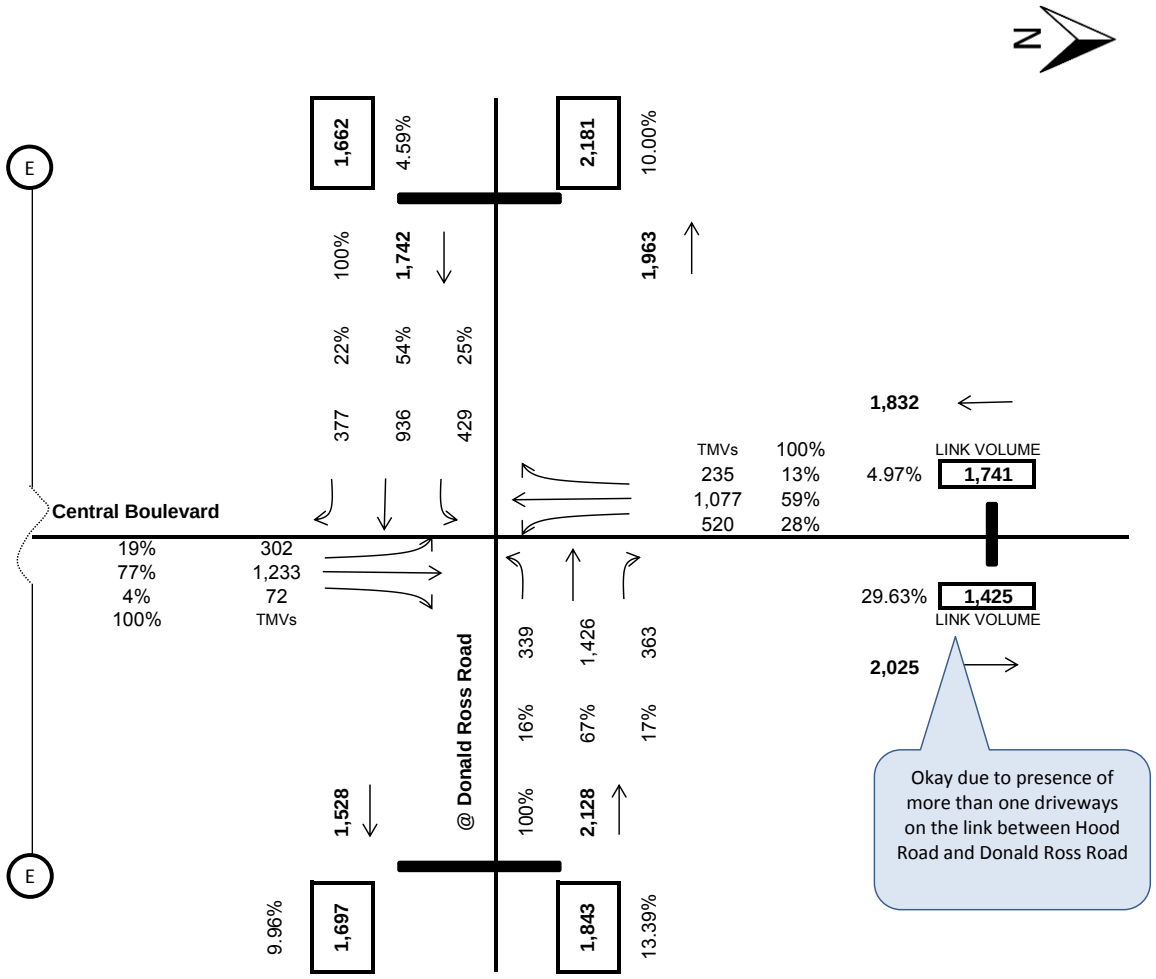
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Central Boulevard** **Turning Movement Volume Development** **2040 Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **5 of 6** *Date:* 9/24/15

@ Donald Ross Road



Turning Movement Volumes
@ Donald Ross Road

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**1,741**			**1,843**			**1,541**			**1,662**		
TM Pk Hr Counts	599	1355	237	356	1198	381	387	1970	105	542	1082	476
% Turns	27%	62%	11%	18%	62%	20%	16%	80%	4%	26%	52%	23%
Calc. Pk Hr Volumes	476	1077	188	339	1141	363	242	1233	66	429	856	377
Adjustments	44		47		285		60		6		80	
Bal Pk Hr Volumes	**520**	**1077**	**235**	**339**	**1426**	**363**	**302**	**1233**	**72**	**429**	**936**	**377**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

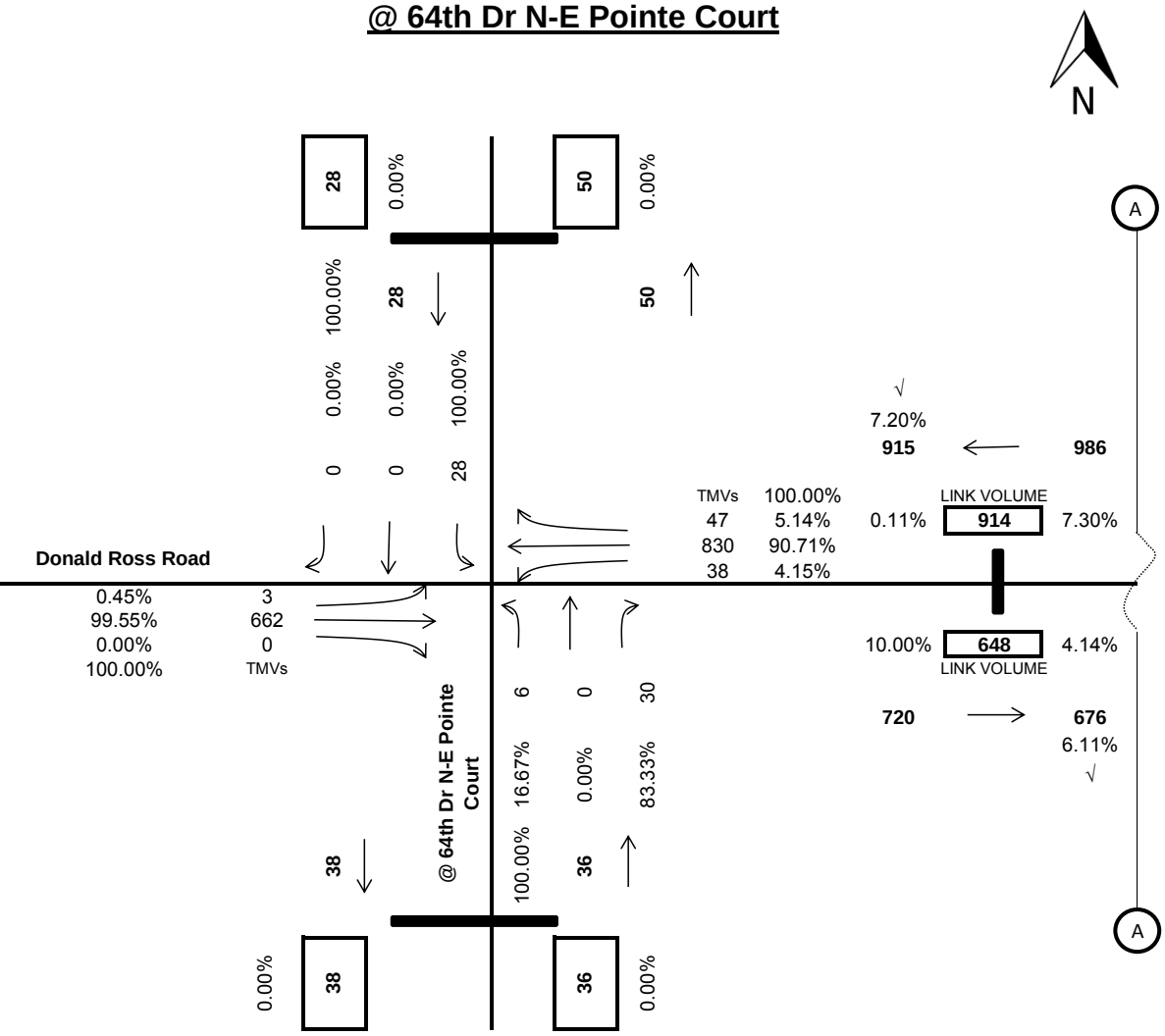
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Central Boulevard** **Turning Movement Volume Development** **2040 Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **6 of 6** *Date:* 9/24/15

@ 64th Dr N-E Pointe Court



Turning Movement Volumes
@ 64th Dr N-E Pointe Court

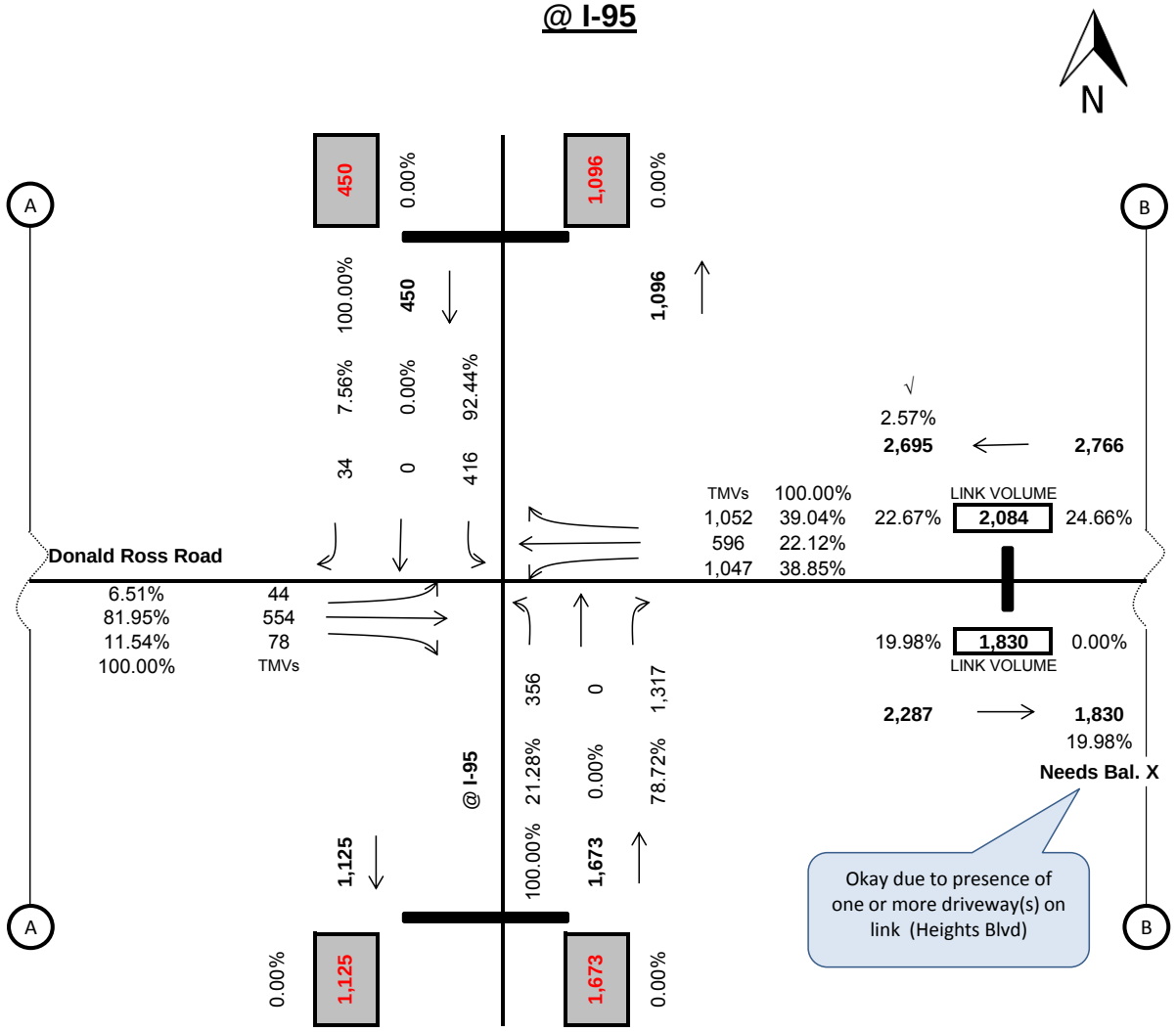
Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**914**			**36**			**665**			**28**	
TM Pk Hr Counts	39	855	48	6	0	30	3	662	0	28	0	0
% Turns	4%	91%	5%	17%	0%	83%	0%	100%	0%	100%	0%	0%
Calc. Pk Hr Volumes	38	830	47	6	0	30	3	662	0	28	0	0
Adjustments												
Bal Pk Hr Volumes	**38**	**830**	**47**	**6**	**0**	**30**	**3**	**662**	**0**	**28**	**0**	**0**

LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66 →	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

@ I-95



Turning Movement Volumes
@ I-95

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**2,084**			**1,673**			**648**			**450**	
TM Pk Hr Counts	1366	831	707	385	0	1425	43	1139	150	704	0	58
% Turns	47%	29%	24%	21%	0%	79%	3%	86%	11%	92%	0%	8%
Calc. Pk Hr Volumes	980	596	507	356	0	1317	21	554	73	416	0	34
Adjustments	67		545				23		5			
Bal Pk Hr Volumes	**1047**	**596**	**1052**	**356**	**0**	**1317**	**44**	**554**	**78**	**416**	**0**	**34**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

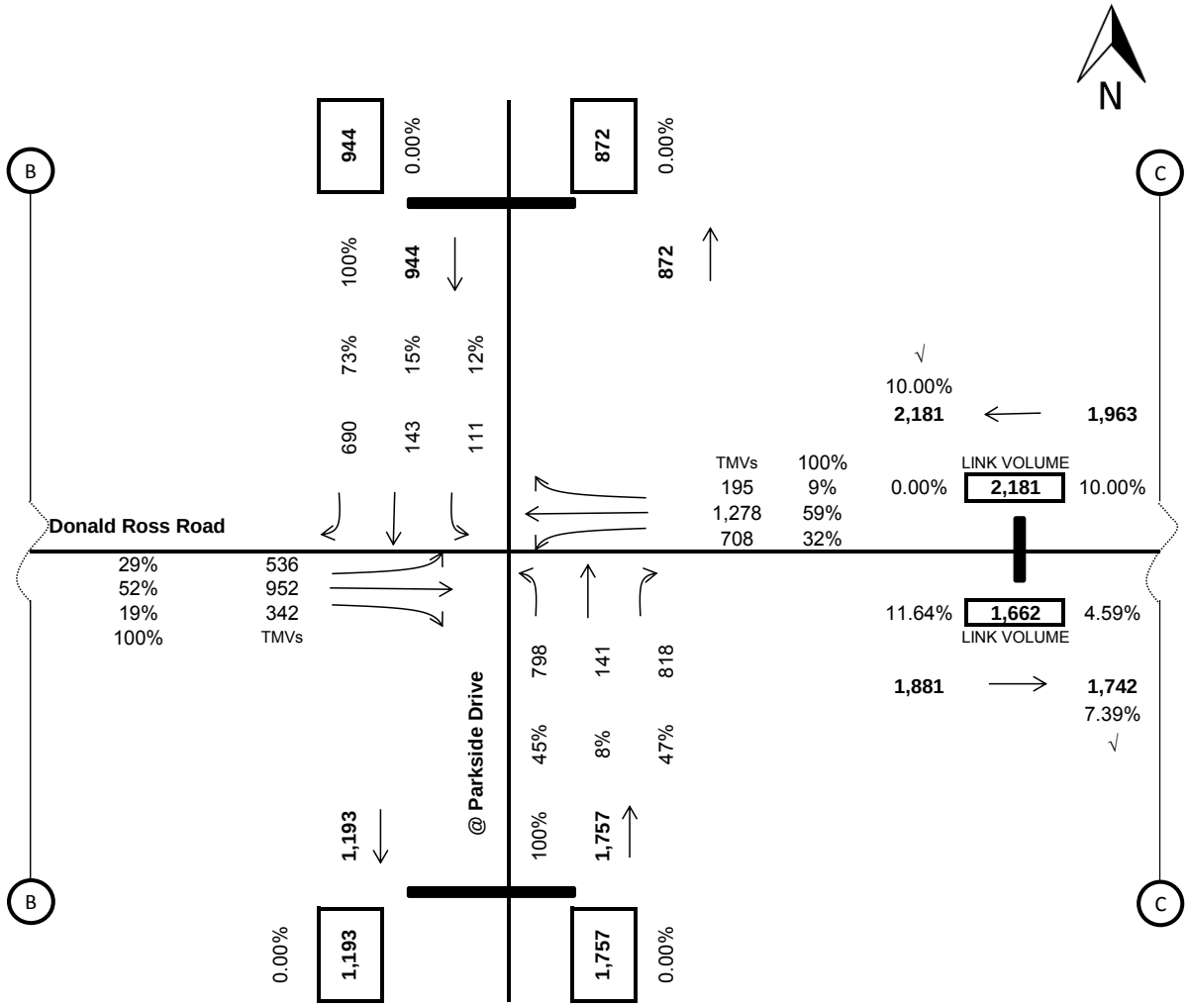
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name:	Exhibit Name:	Exhibit No: TBD
SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No.: 432625-1-22-01	**Donald Ross Road** **Turning Movement Volume Development** **2040 Build PM Peak Hour**	Page No: 2 of 5 Date: 9/24/15

@ Parkside Drive



Turning Movement Volumes
@ Parkside Drive

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**2,181**			**1,757**			**1,830**			**944**	
TM Pk Hr Counts	653	1178	180	798	141	818	710	1260	453	111	143	690
% Turns	32%	59%	9%	45%	8%	47%	29%	52%	19%	12%	15%	73%
Calc. Pk Hr Volumes	708	1278	195	798	141	818	536	952	342	111	143	690
Adjustments												
Bal Pk Hr Volumes	**708**	**1278**	**195**	**798**	**141**	**818**	**536**	**952**	**342**	**111**	**143**	**690**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

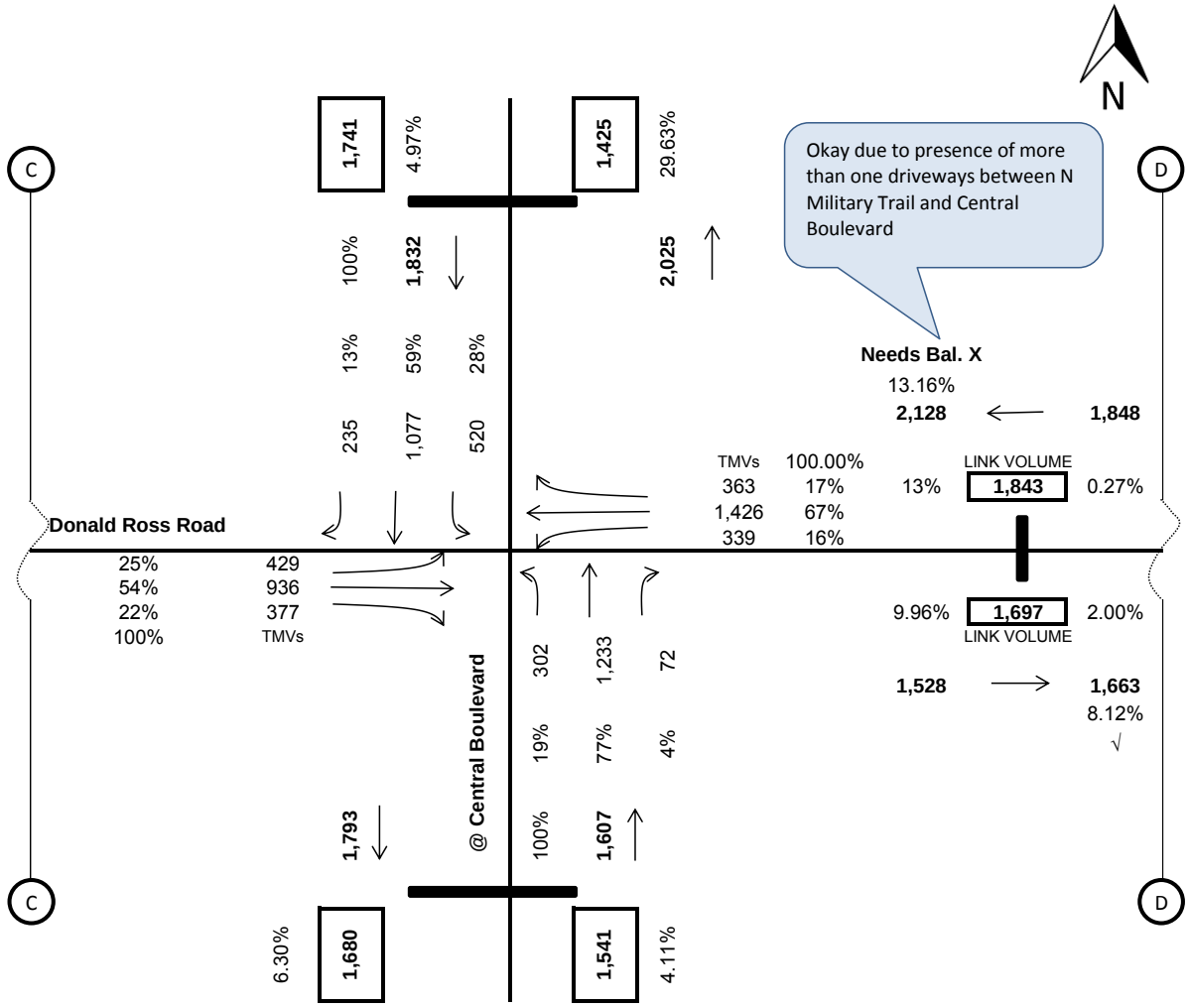
66 — Turning Movement Volumes (Balanced)

A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

@ Central Boulevard



Turning Movement Volumes
@ Central Boulevard

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes												
TM Pk Hr Counts												
% Turns												
Calc. Pk Hr Volumes												
Adjustments												
Bal Pk Hr Volumes	**339**	**1426**	**363**	**302**	**1233**	**72**	**429**	**936**	**377**	**520**	**1077**	**235**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

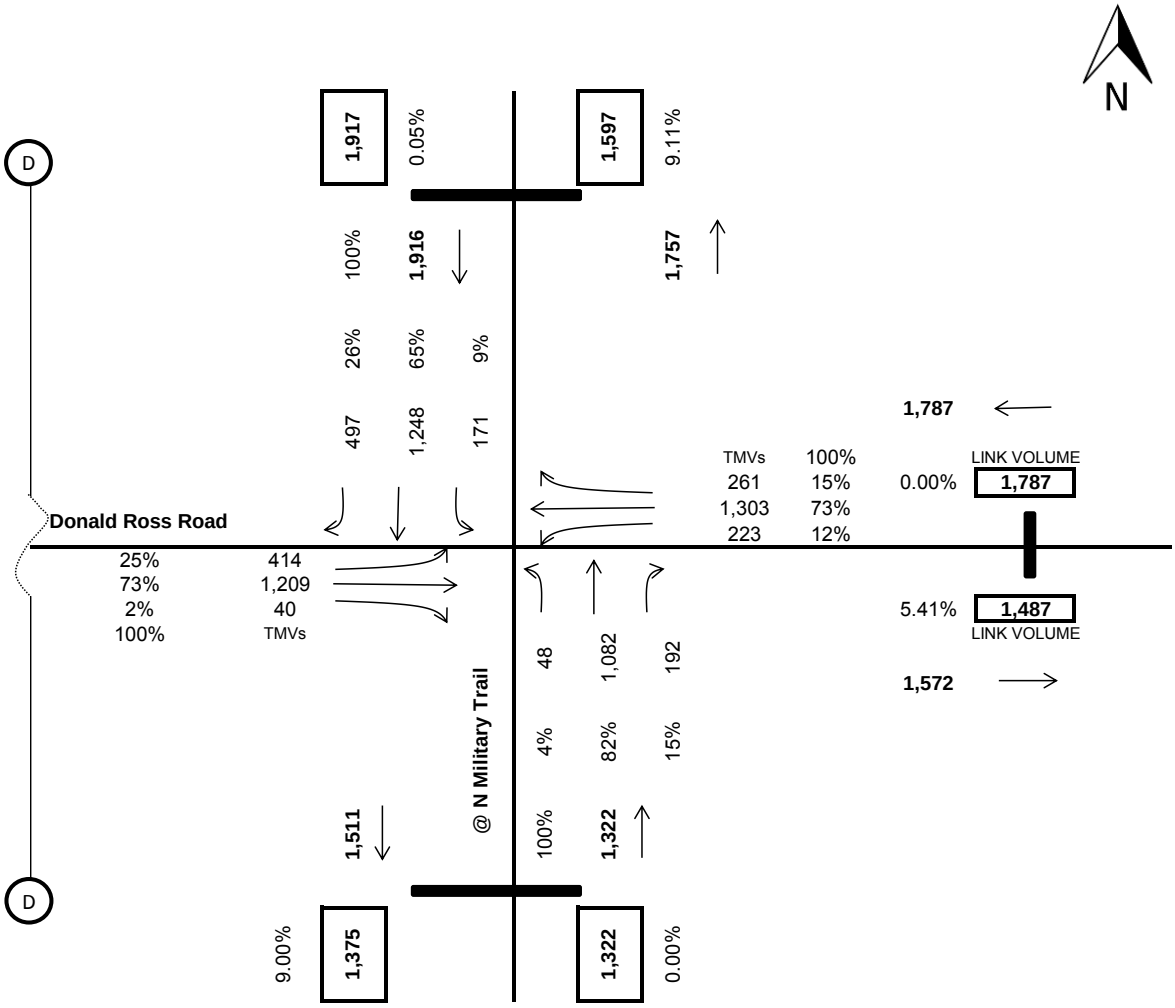
66 → Turning Movement Volumes (Balanced)

A … A — Match Line

For consistency, balanced peak hour volumes from major street arterial (aka Central Boulevard) were used. See Central Boulevard Arterial for details

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

@ N Military Trail



Turning Movement Volumes
@ N Military Trail

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes												
TM Pk Hr Counts												
% Turns												
Calc. Pk Hr Volumes												
Adjustments												
Bal Pk Hr Volumes	**223**	**1303**	**261**	**48**	**1082**	**192**	**414**	**1209**	**40**	**171**	**1248**	**497**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

A — Match Line

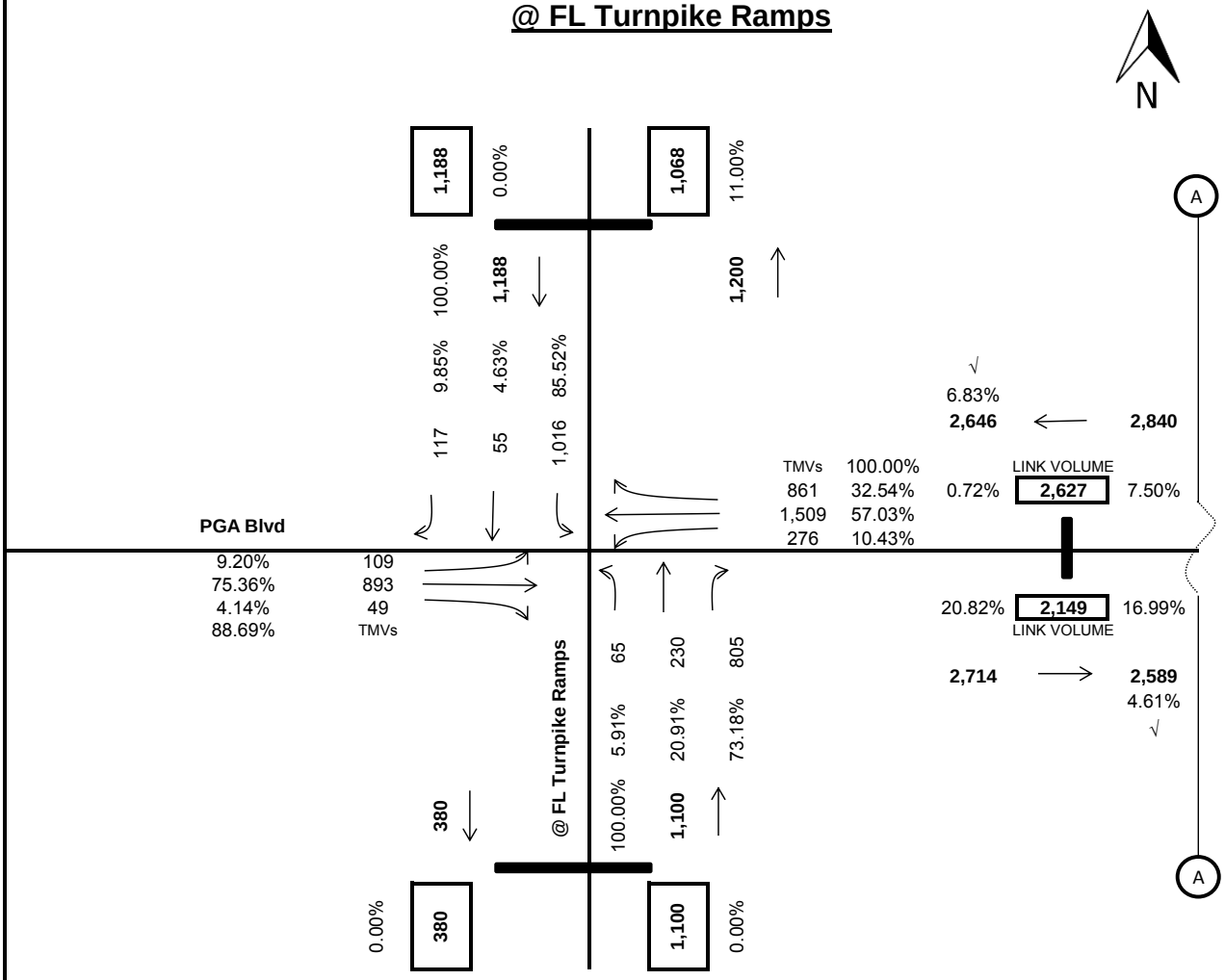
A

For consistency, balanced peak hour volumes from major street arterial (aka N Military Trail) were used. See N Military Trail Arterial for details

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FPID No. 413205-2-22-01	*Exhibit Name:* **Donald Ross Road Turning Movement Volume Development 2040 Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **5 of 5** *Date:* 9/24/15

@ FL Turnpike Ramps



Turning Movement Volumes
@ FL Turnpike Ramps

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**2,627**			**1,100**			**1,049**			**1,188**		
TM Pk Hr Counts	389	2277	1299	65	230	805	226	1850	97	1016	55	117
% Turns	10%	57%	33%	6%	21%	73%	10%	85%	4%	86%	5%	10%
Calc. Pk Hr Volumes	258	1509	861	65	230	805	109	893	47	1016	55	117
Adjustments	18								2			
Bal Pk Hr Volumes	**276**	**1509**	**861**	**65**	**230**	**805**	**109**	**893**	**49**	**1016**	**55**	**117**

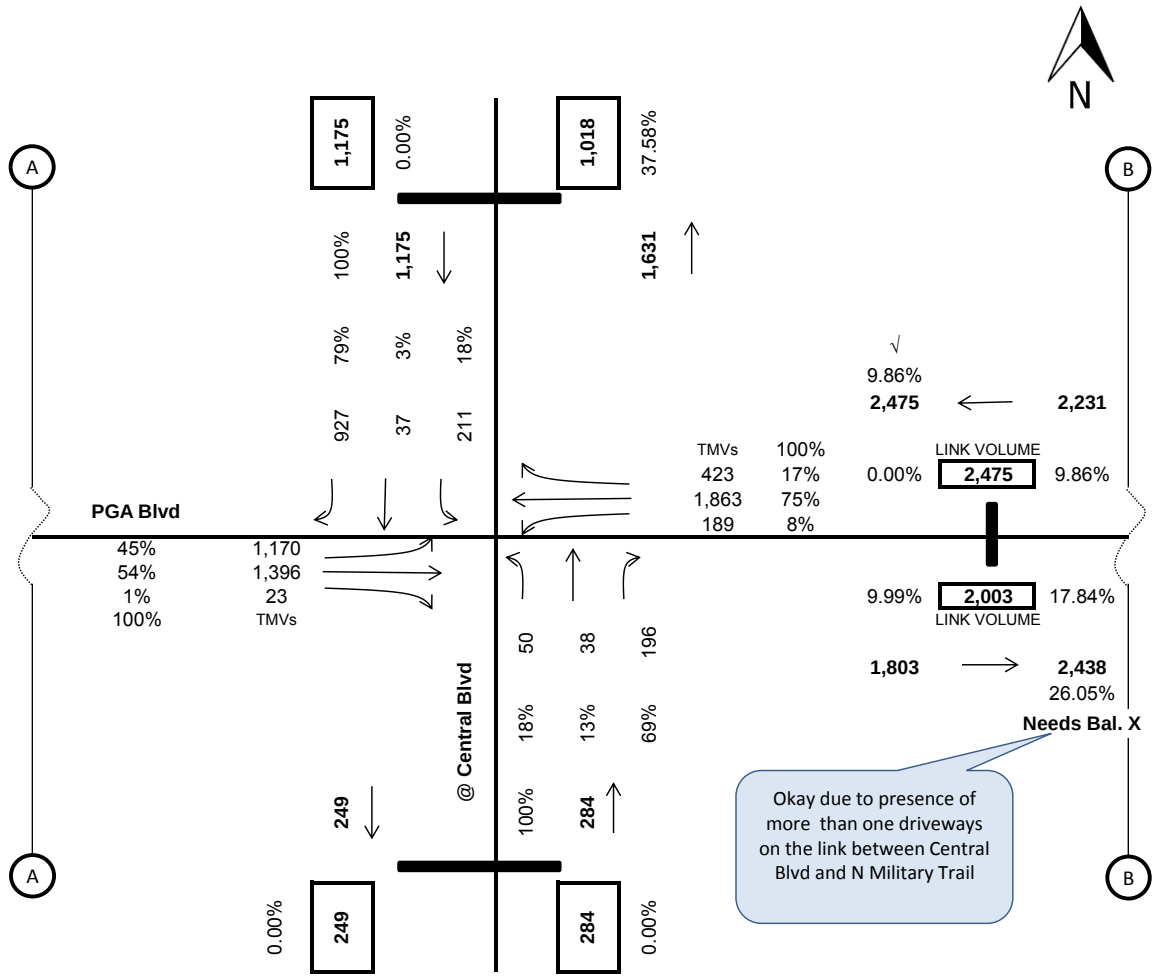
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66 →	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard Turning Movement Volume Development 2040 Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **1 of 8** *Date:* 9/24/15

@ Central Blvd



Turning Movement Volumes
@ Central Blvd

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**2,475**			**284**			**2,149**			**1,175**		
TM Pk Hr Counts	218	2148	488	50	62	172	1629	1330	32	334	58	1467
% Turns	8%	75%	17%	18%	22%	61%	54%	44%	1%	18%	3%	79%
Calc. Pk Hr Volumes	189	1863	423	50	62	172	1170	956	23	211	37	927
Adjustments					-24	24		440				
Bal Pk Hr Volumes	**189**	**1863**	**423**	**50**	**38**	**196**	**1170**	**1396**	**23**	**211**	**37**	**927**

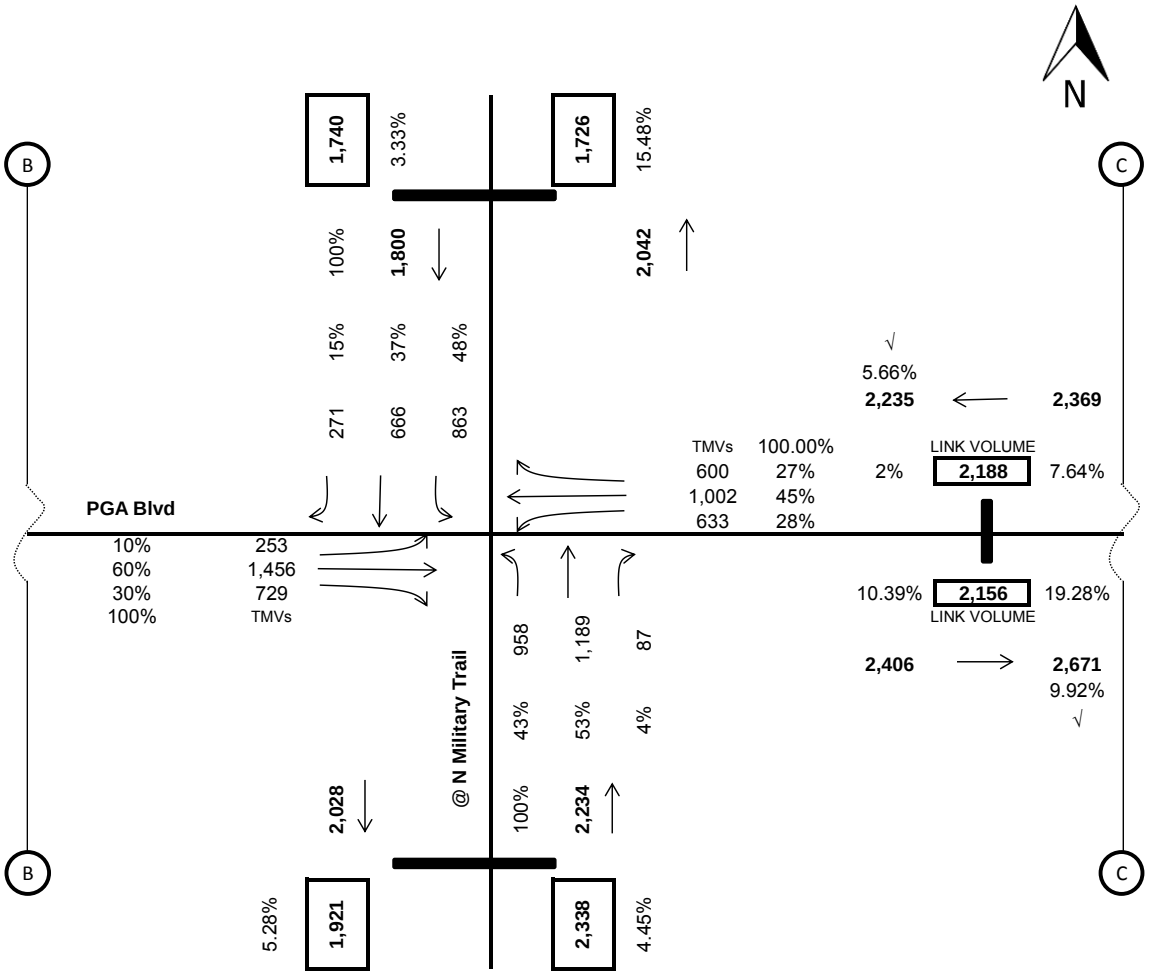
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A … A	Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard, Project Development & Environmental Study, FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard Turning Movement Volume Development 2040 Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **2 of 8** *Date:* 9/24/15

@ N Military Trail



Turning Movement Volumes
@ N Military Trail

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**2,188**			**2,338**			**2,003**			**1,740**		
TM Pk Hr Counts	958	1346	1006	1253	2154	131	242	975	696	1443	1113	353
% Turns	29%	41%	30%	35%	61%	4%	13%	51%	36%	50%	38%	12%
Calc. Pk Hr Volumes	633	890	665	828	1423	87	253	1021	729	863	666	211
Adjustments		112	-65	130	-234			435				60
Bal Pk Hr Volumes	**633**	**1002**	**600**	**958**	**1189**	**87**	**253**	**1456**	**729**	**863**	**666**	**271**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

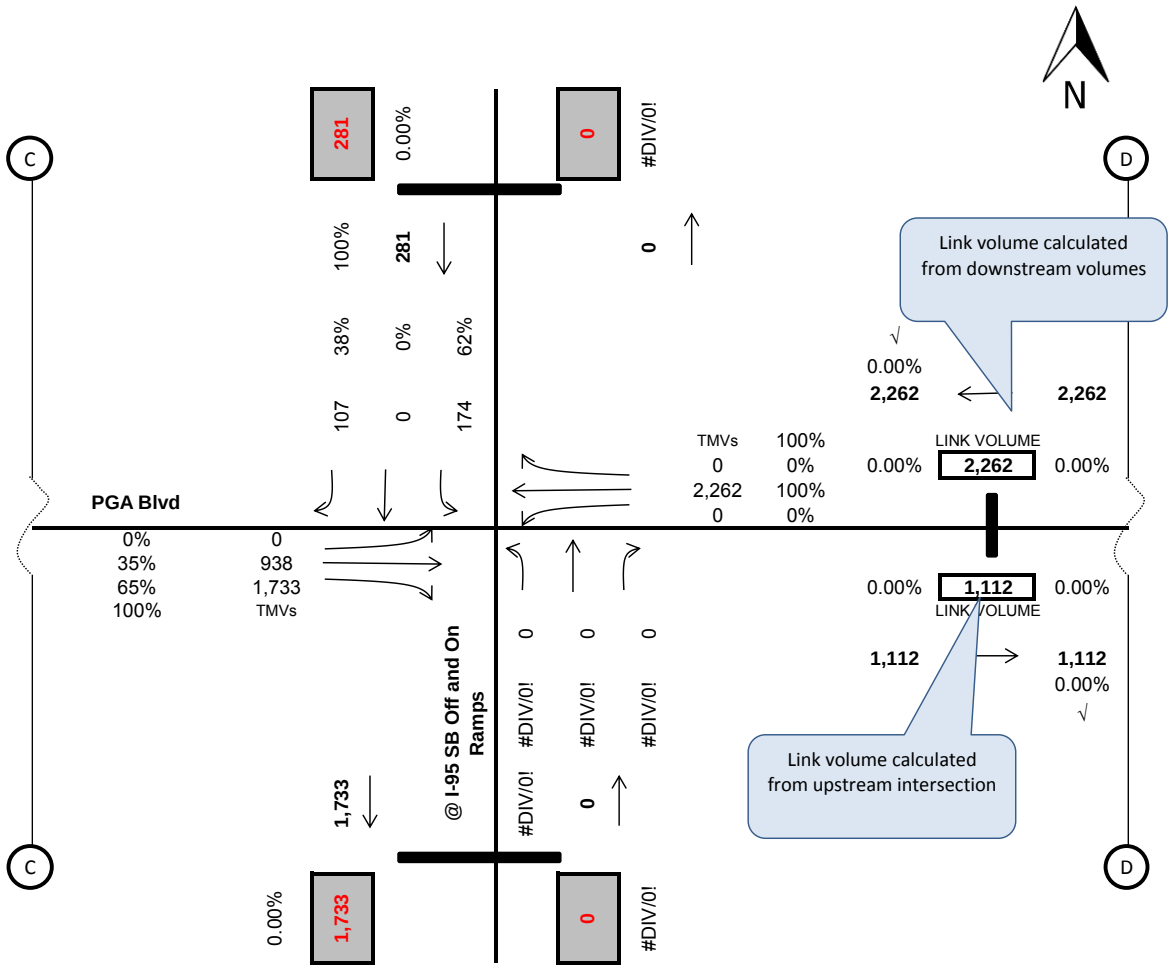
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard** **Turning Movement Volume Development** **2040 Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **3 of 8** *Date:* 9/24/15

@ I-95 SB Off and On Ramps



Turning Movement Volumes
@ I-95 SB Off and On Ramps

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**2,262**			**0**			**2,156**			**281**	
TM Pk Hr Counts	0	3154	0	0	0	0	0	743	1760	194	0	120
% Turns	0%	100%	0%	0%	0%	0%	0%	30%	70%	62%	0%	38%
Calc. Pk Hr Volumes	0	2262	0	0	0	0	0	640	1516	174	0	107
Adjustments	0							298	217		0	
Bal Pk Hr Volumes	**0**	**2262**	**0**	**0**	**0**	**0**	**0**	**938**	**1733**	**174**	**0**	**107**

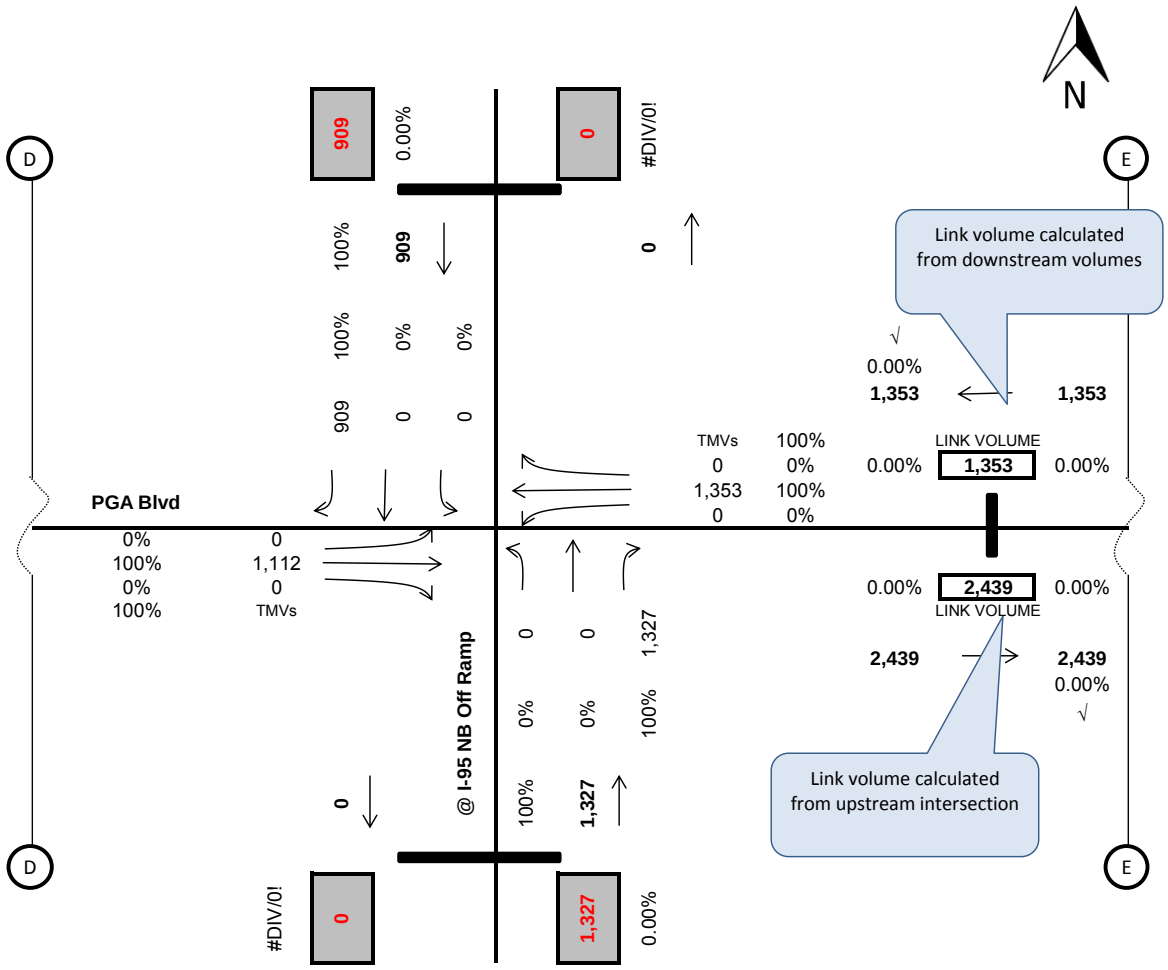
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A … A	Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard** **Turning Movement Volume Development** **2040 Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **4 of 8** *Date:* 9/24/15

@ I-95 NB Off Ramp



Turning Movement Volumes
@ I-95 NB Off Ramp

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,353**			**1,327**			**1,112**			**909**	
TM Pk Hr Counts	0	3154	0	0	0	2156	0	937	0	0	0	1610
% Turns	0%	100%	0%	0%	0%	100%	0%	100%	0%	0%	0%	100%
Calc. Pk Hr Volumes	0	1353	0	0	0	1327	0	1112	0	0	0	909
Adjustments												
Bal Pk Hr Volumes	**0**	**1353**	**0**	**0**	**0**	**1327**	**0**	**1112**	**0**	**0**	**0**	**909**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

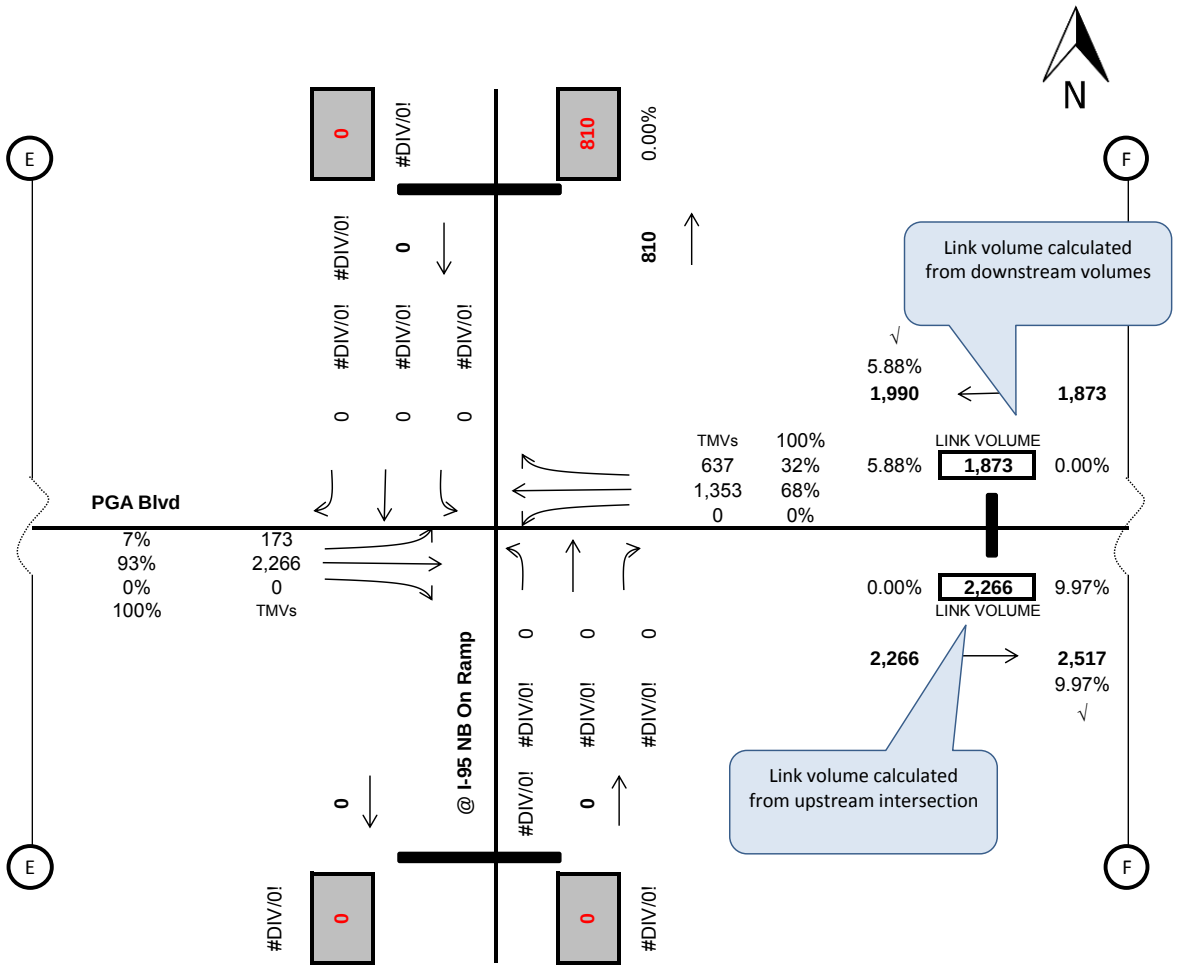
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard** **Turning Movement Volume Development** **2040 Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **5 of 8** *Date:* 9/24/15

@ I-95 NB On Ramp



Turning Movement Volumes
@ I-95 NB On Ramp

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,873**			**0**			**2,439**			**0**	
TM Pk Hr Counts	0	1545	594	0	0	0	179	2913	0	0	0	0
% Turns	0%	72%	28%	0%	0%	0%	6%	94%	0%	0%	0%	0%
Calc. Pk Hr Volumes	0	1353	520	0	0	0	141	2298	0	0	0	0
Adjustments			117		0		32	-32				
Bal Pk Hr Volumes	**0**	**1353**	**637**	**0**	**0**	**0**	**173**	**2266**	**0**	**0**	**0**	**0**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 → — Turning Movement Volumes (Balanced)

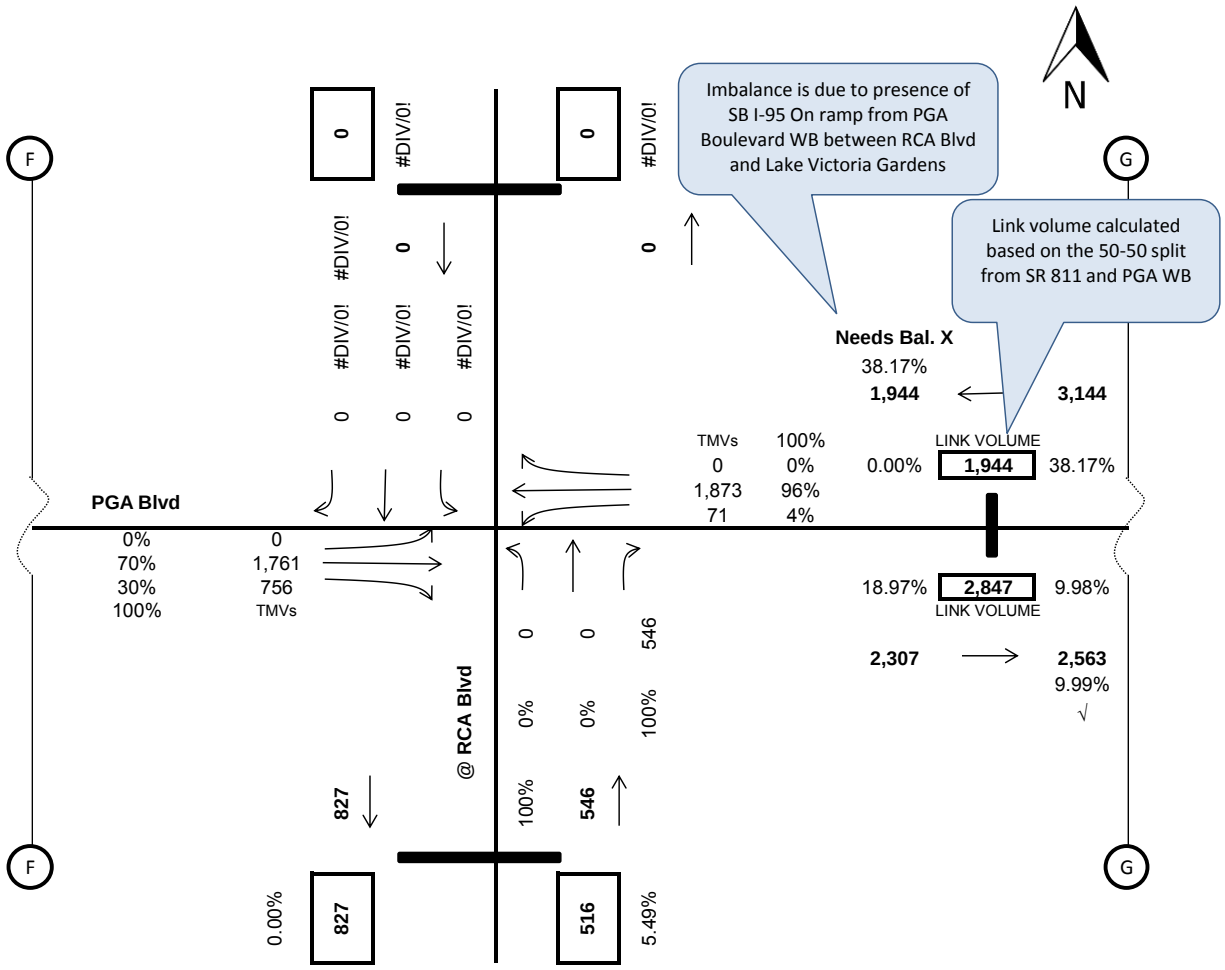
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard** **Turning Movement Volume Development** **2040 Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **6 of 8** *Date:* 9/24/15

@ RCA Blvd



Turning Movement Volumes
@ RCA Blvd

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,944**			**516**			**2,266**			**0**	
TM Pk Hr Counts	81	2139	0	0	0	516	0	1800	1113	0	0	0
% Turns	4%	96%	0%	0%	0%	100%	0%	62%	38%	0%	0%	0%
Calc. Pk Hr Volumes	71	1873	0	0	0	516	0	1400	866	0	0	0
Adjustments						30		361	-110			
Bal Pk Hr Volumes	**71**	**1873**	**0**	**0**	**0**	**546**	**0**	**1761**	**756**	**0**	**0**	**0**

Adjustments were made to achieve balance between upstream and downstream intersection volumes as well as reasonable split between

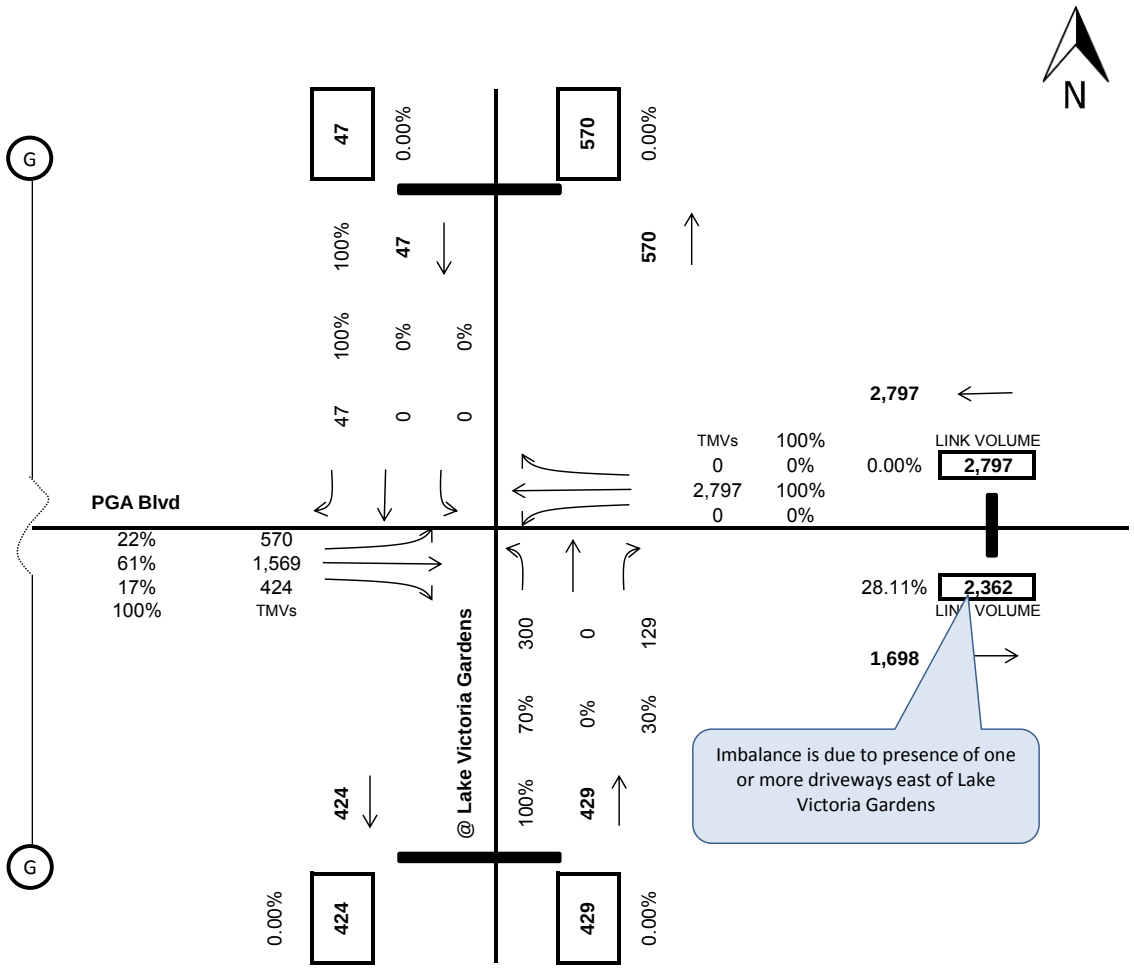
LEGEND

- 1,500 — Control Volumes (Peak Hour)*
- 1,300 — Link Volumes (Peak Hour)
- 66 → — Turning Movement Volumes (Balanced)
- A … A — Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name:	Exhibit Name:		
SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	**PGA Boulevard** **Turning Movement Volume Development** **2040 Build PM Peak Hour**	*Exhibit No:*	**TBD**
		Page No:	**7 of 8**
		Date:	9/24/15

@ Lake Victoria Gardens



Turning Movement Volumes
@ Lake Victoria Gardens

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**2,797**			**429**			**2,847**			**47**	
TM Pk Hr Counts	0	3093	0	300	0	129	507	1436	373	0	0	47
% Turns	0%	100%	0%	70%	0%	30%	22%	62%	16%	0%	0%	100%
Calc. Pk Hr Volumes	0	2797	0	300	0	129	623	1765	459	0	0	47
Adjustments							-53	-196	-35			
Bal Pk Hr Volumes	**0**	**2797**	**0**	**300**	**0**	**129**	**570**	**1569**	**424**	**0**	**0**	**47**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

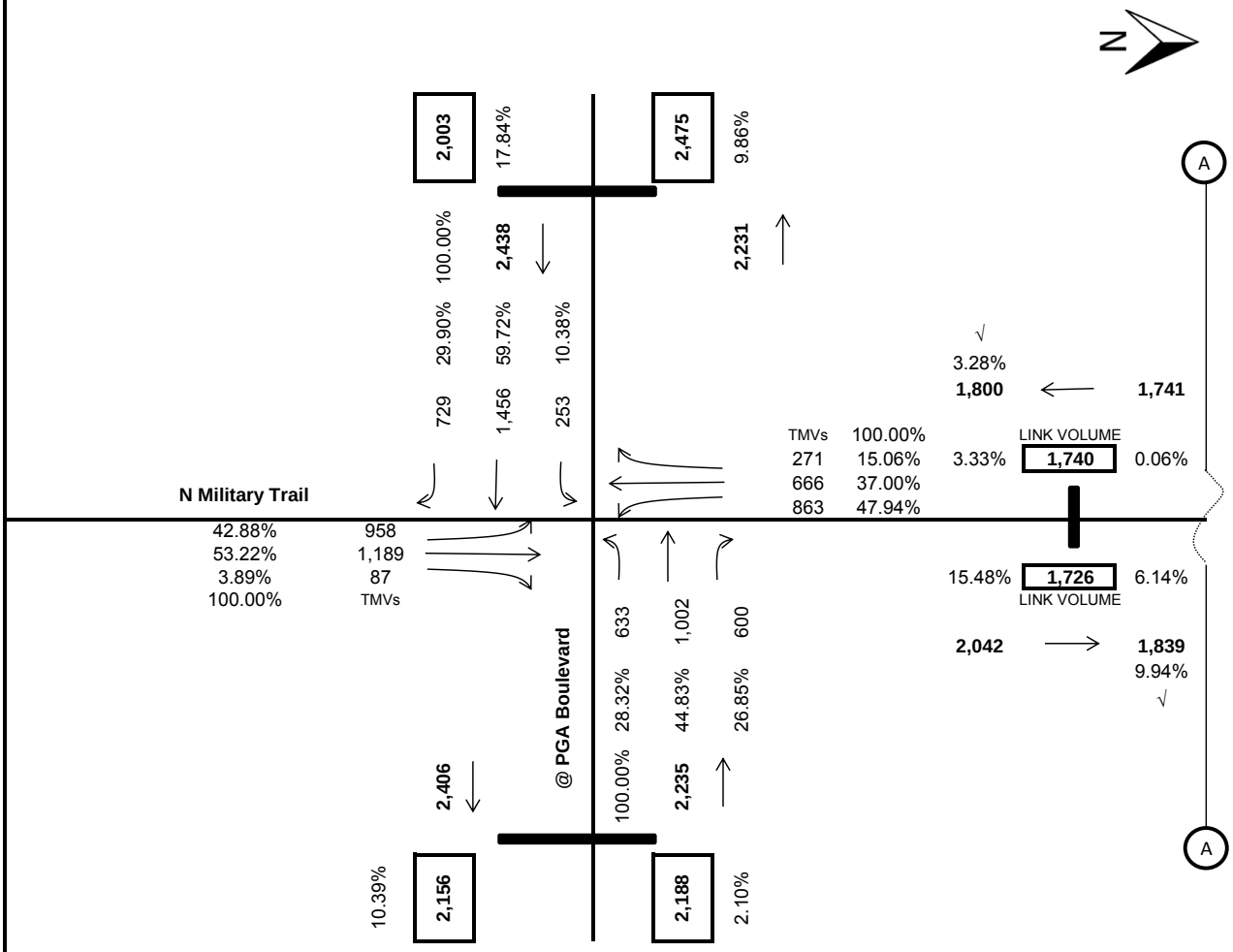
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **PGA Boulevard** **Turning Movement Volume Development** **2040 Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **8 of 8** *Date:* 9/24/15

@ PGA Boulevard



Turning Movement Volumes
@ PGA Boulevard

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes												
TM Pk Hr Counts												
% Turns												
Calc. Pk Hr Volumes												
Adjustments												
Bal Pk Hr Volumes	**863**	**666**	**271**	**633**	**1002**	**600**	**958**	**1189**	**87**	**253**	**1456**	**729**

LEGEND

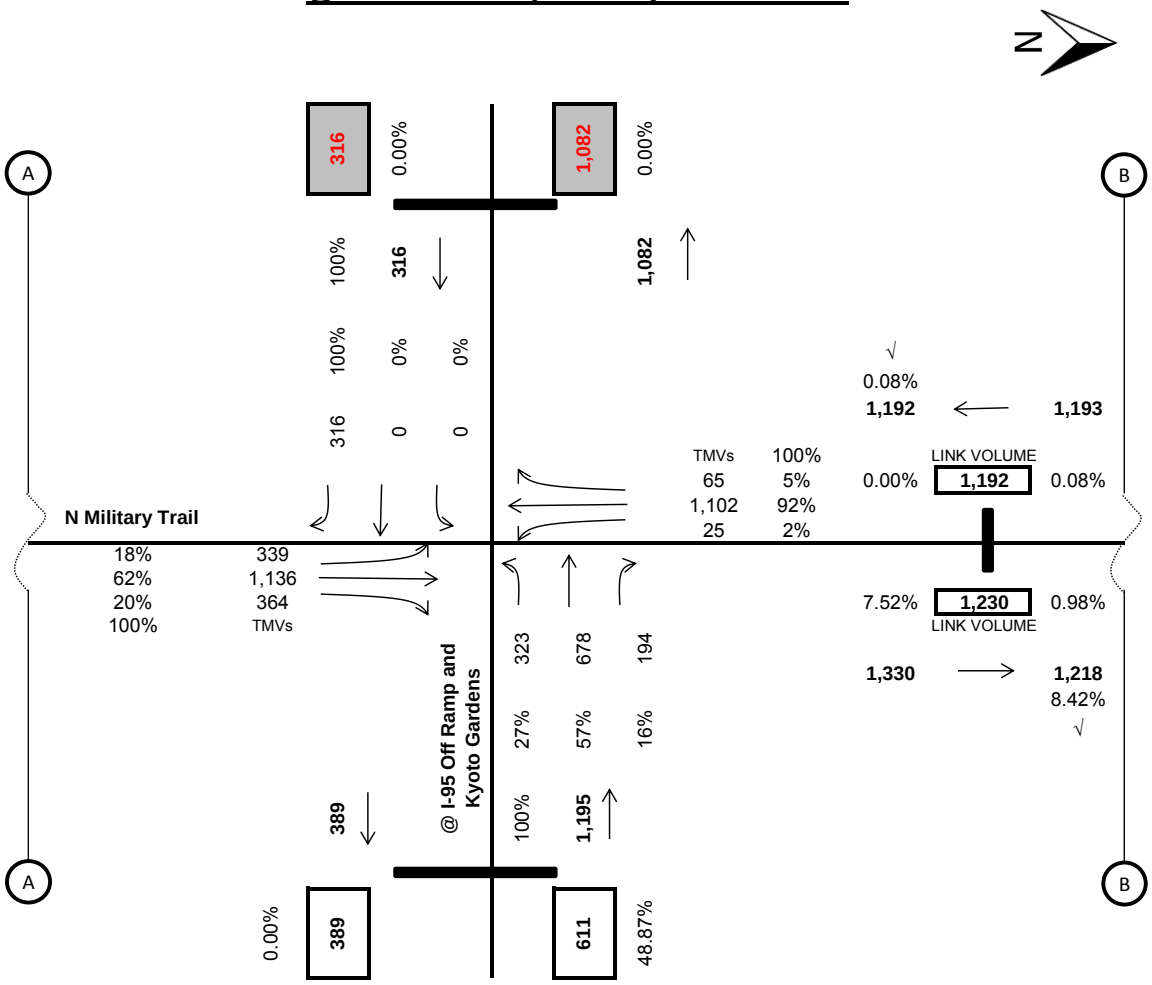
1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A / A	Match Line

For consistency, balanced peak hour volumes from major street arterial (aka PGA Boulevard) were used. See PGA Boulevard Arterial for details

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **N Military Trail** **Turning Movement Volume Development** **2040 Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **1 of 4** *Date:* 9/24/15

@ I-95 Off Ramp and Kyoto Gardens



Turning Movement Volumes
@ I-95 Off Ramp and Kyoto

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**1,192**			**611**			**1,726**			**316**	
TM Pk Hr Counts	50	2305	17	323	94	194	94	2607	723	0	0	106
% Turns	2%	97%	1%	53%	15%	32%	3%	76%	21%	0%	0%	100%
Calc. Pk Hr Volumes	25	1158	9	323	94	194	47	1314	364	0	0	316
Adjustments		-56	56		584		292	-178				
Bal Pk Hr Volumes	**25**	**1102**	**65**	**323**	**678**	**194**	**339**	**1136**	**364**	**0**	**0**	**316**

Had to make heavy changes to make up the control volumes discrepancies in WB and NB

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 → Turning Movement Volumes (Balanced)

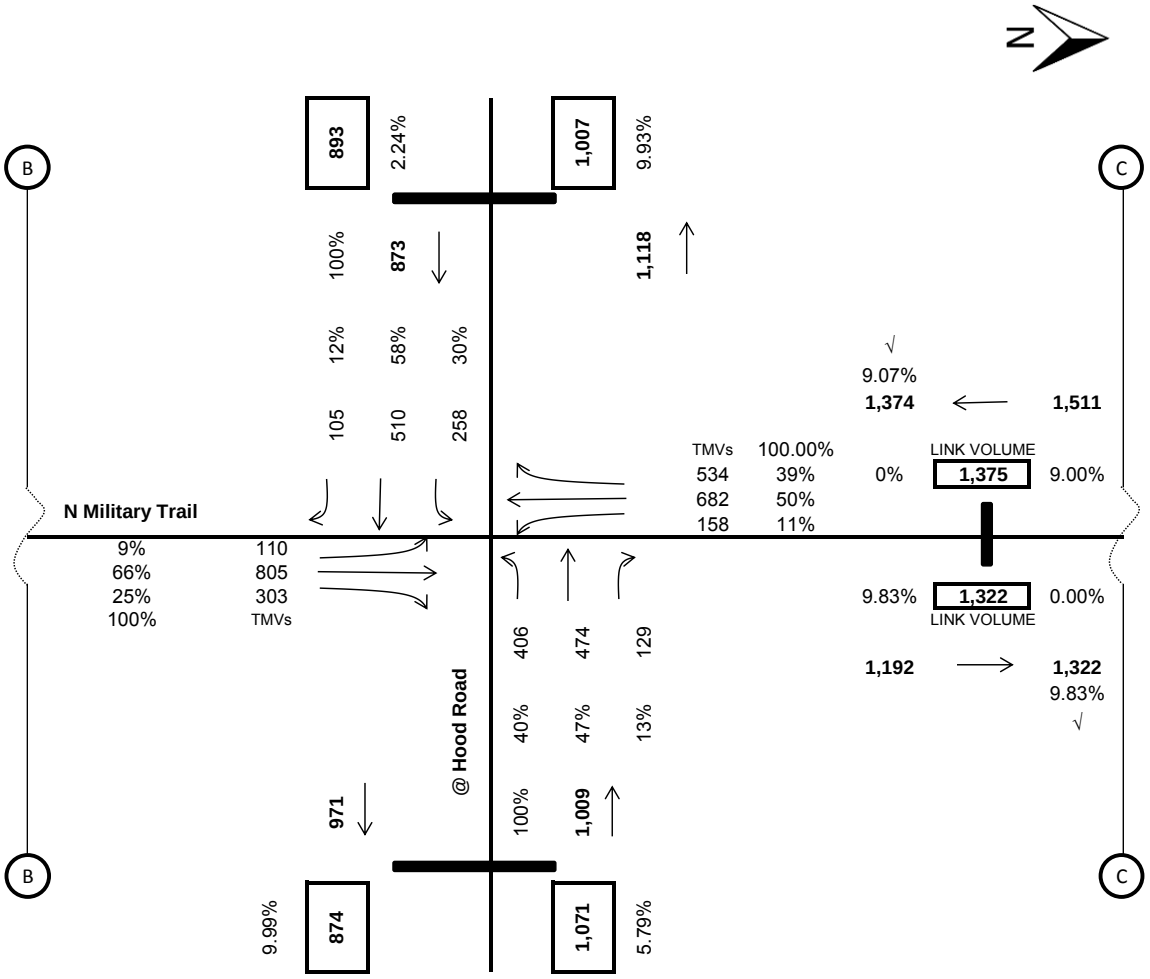
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **N Military Trail** **Turning Movement Volume Development** **2040 Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **2 of 4** *Date:* 9/24/15

@ Hood Road



Turning Movement Volumes
@ Hood Road

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**1,375**			**1,071**			**1,230**			**893**		
TM Pk Hr Counts	263	1133	887	833	1133	234	238	1655	762	478	1177	221
% Turns	12%	50%	39%	38%	52%	11%	9%	62%	29%	25%	63%	12%
Calc. Pk Hr Volumes	158	682	534	406	552	114	110	767	353	228	560	105
Adjustments		0			-78	15		38	-50	30	-50	
Bal Pk Hr Volumes	**158**	**682**	**534**	**406**	**474**	**129**	**110**	**805**	**303**	**258**	**510**	**105**

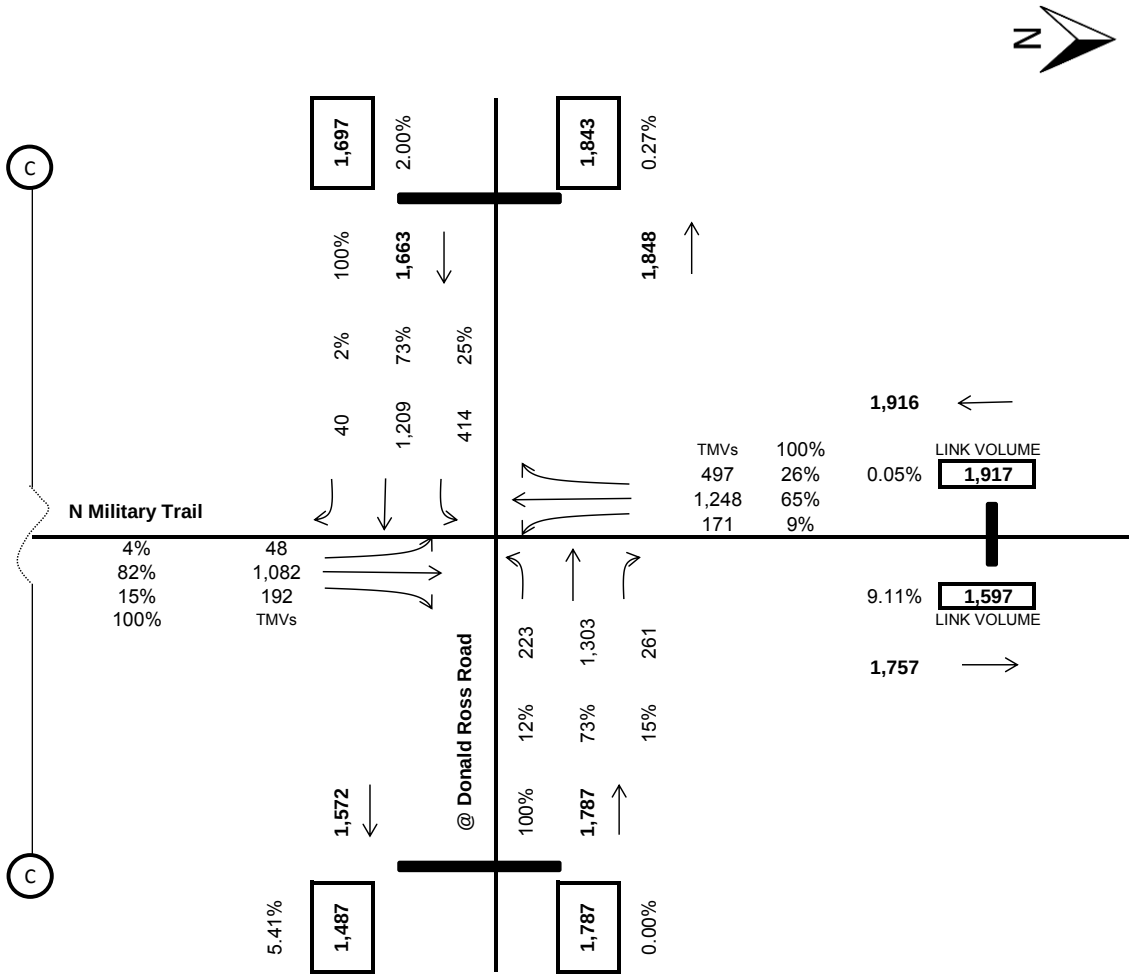
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **N Military Trail** **Turning Movement Volume Development** **2040 Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **3 of 4** *Date:* 9/24/15

@ Donald Ross Road



Turning Movement Volumes
@ Donald Ross Road

Volume Elements	SB			WB			NB			EB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**1,917**			**1,787**			**1,322**			**1,697**		
TM Pk Hr Counts	193	1693	561	254	1358	301	49	1790	195	466	1265	45
% Turns	8%	69%	23%	13%	71%	16%	2%	88%	10%	26%	71%	3%
Calc. Pk Hr Volumes	151	1326	439	237	1269	281	32	1163	127	445	1209	43
Adjustments	20	-78	58	-14	34	-20	16	-81	65	-31		-3
Bal Pk Hr Volumes	**171**	**1248**	**497**	**223**	**1303**	**261**	**48**	**1082**	**192**	**414**	**1209**	**40**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

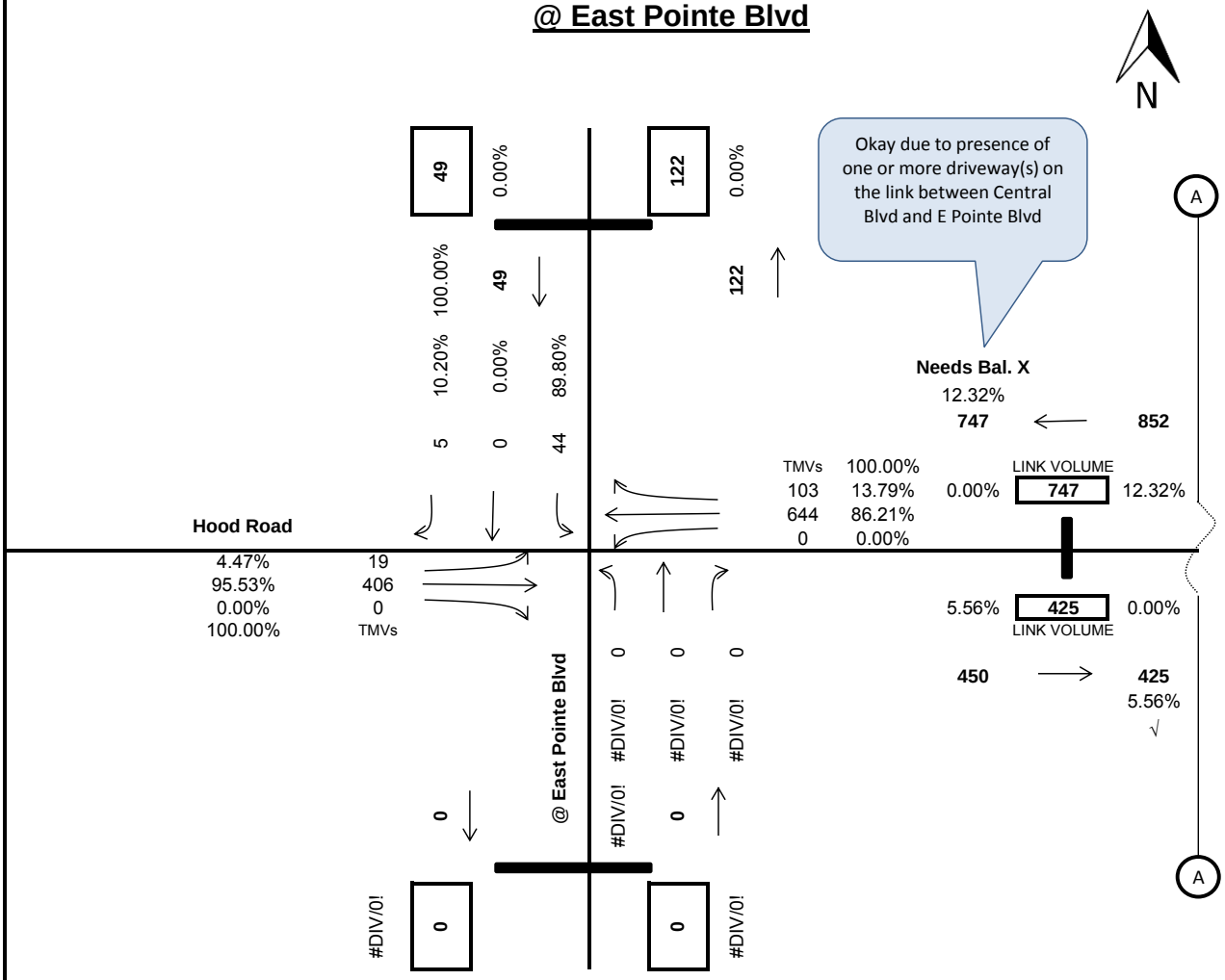
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **N Military Trail** **Turning Movement Volume Development** **2040 Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **4 of 4** *Date:* 9/24/15

@ East Pointe Blvd



Turning Movement Volumes
@ East Pointe Blvd

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**747**			**0**			**425**			**49**	
TM Pk Hr Counts	0	320	51	0	0	0	13	271	0	44	0	5
% Turns	0%	86%	14%	0%	0%	0%	5%	95%	0%	90%	0%	10%
Calc. Pk Hr Volumes	0	644	103	0	0	0	19	406	0	44	0	5
Adjustments												
Bal Pk Hr Volumes	**0**	**644**	**103**	**0**	**0**	**0**	**19**	**406**	**0**	**44**	**0**	**5**

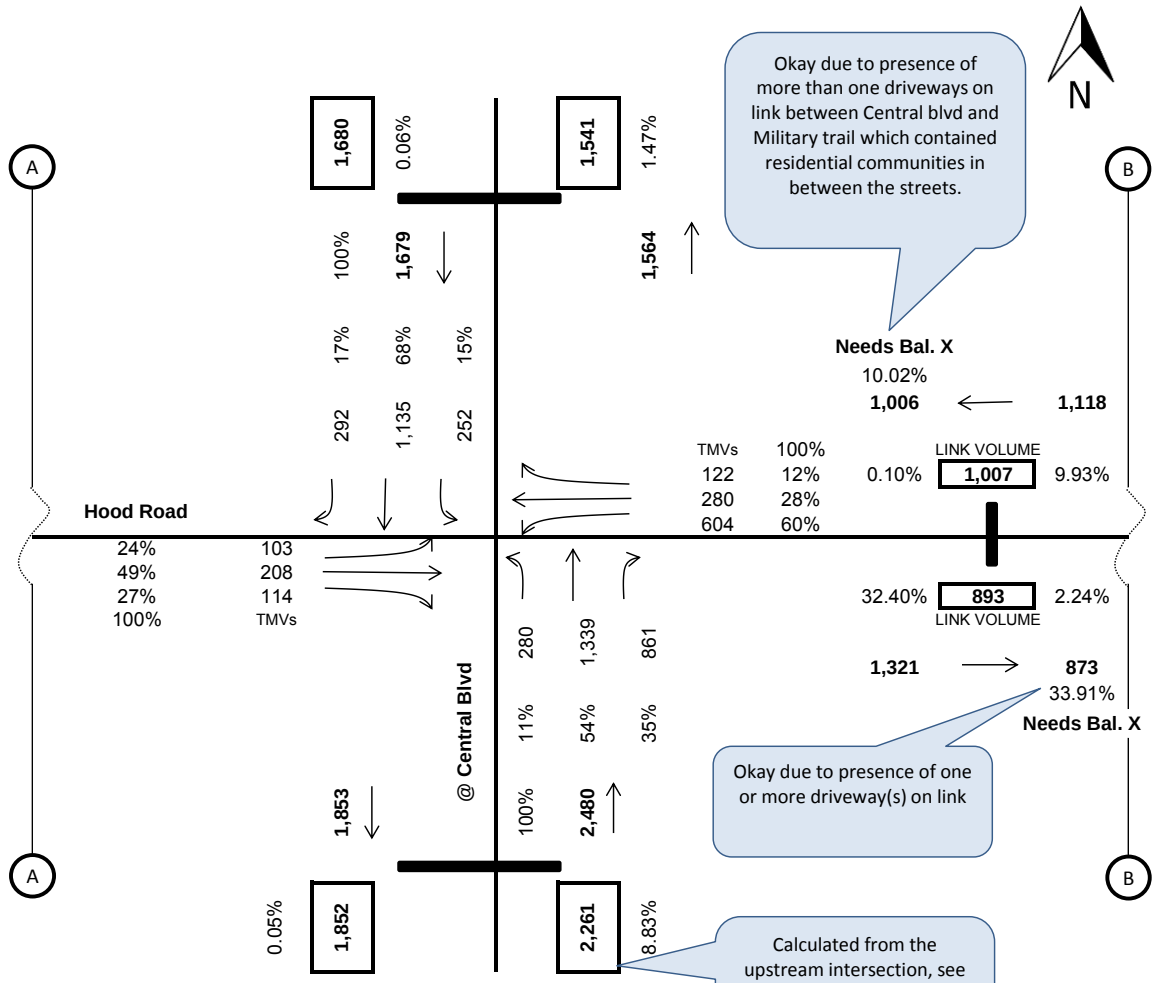
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66 →	Turning Movement Volumes (Balanced)
A … A	Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Hood Road** **Turning Movement Volume Development** **2040 Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **1 of 3** *Date:* 9/24/15

@ Central Blvd



Turning Movement Volumes
@ Central Blvd

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes												
TM Pk Hr Counts												
% Turns												
Calc. Pk Hr Volumes												
Adjustments												
Bal Pk Hr Volumes	**604**	**280**	**122**	**280**	**1339**	**861**	**103**	**208**	**114**	**252**	**1135**	**292**

LEGEND

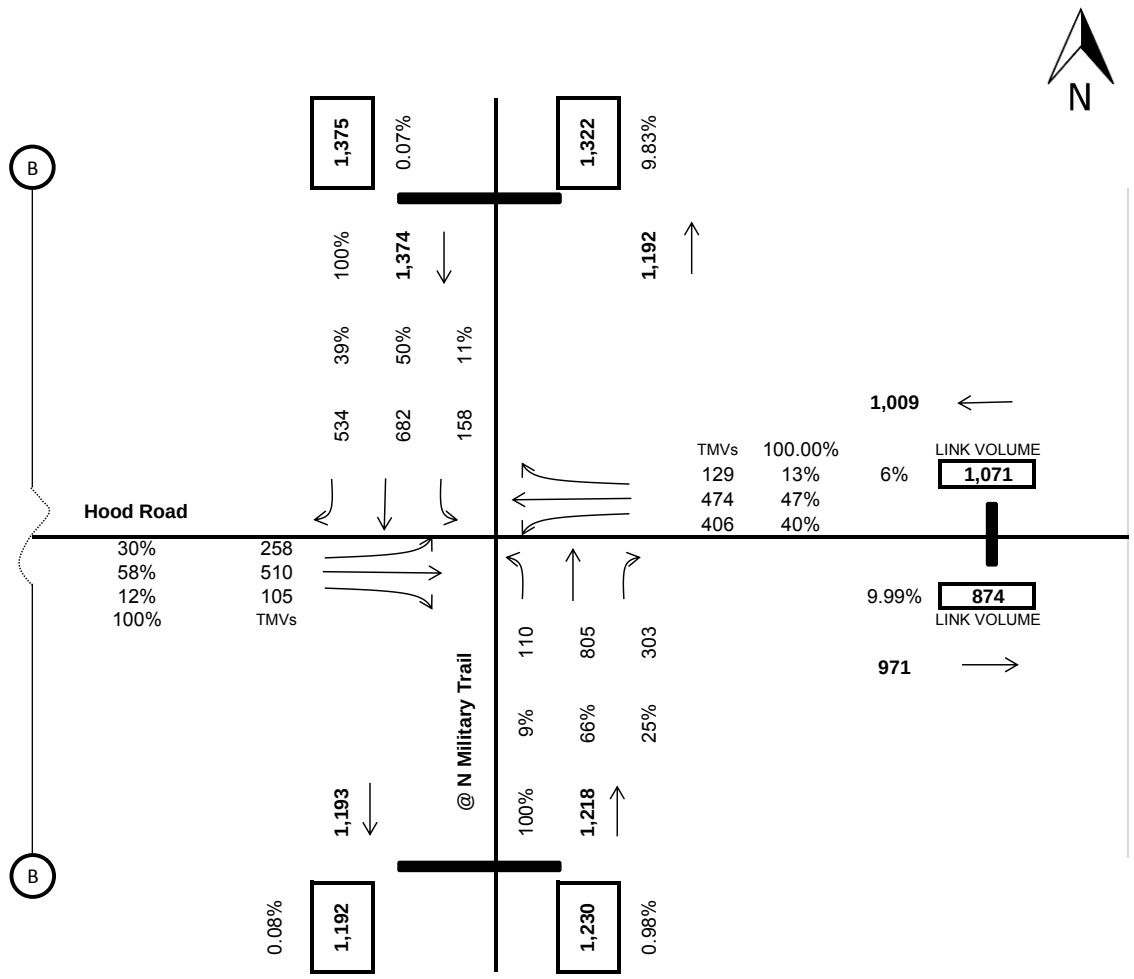
- 1,500 — Control Volumes (Peak Hour)*
- 1,300 — Link Volumes (Peak Hour)
- 66 — Turning Movement Volumes (Balanced)
- A / A — Match Line

For consistency, balanced peak hour volumes from major street arterial (aka Central Boulevard) were used. See Central Boulevard Arterial for details

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Hood Road** **Turning Movement Volume Development** **2040 Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **2 of 3** *Date:* 9/24/15

@ N Military Trail



Turning Movement Volumes
@ N Military Trail

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes												
TM Pk Hr Counts												
% Turns												
Calc. Pk Hr Volumes												
Adjustments												
Bal Pk Hr Volumes	**406**	**474**	**129**	**110**	**805**	**303**	**258**	**510**	**105**	**158**	**682**	**534**

For consistency, balanced peak hour volumes from major street arterial (aka N Military Trail) were used. See N Military Trail Arterial for details

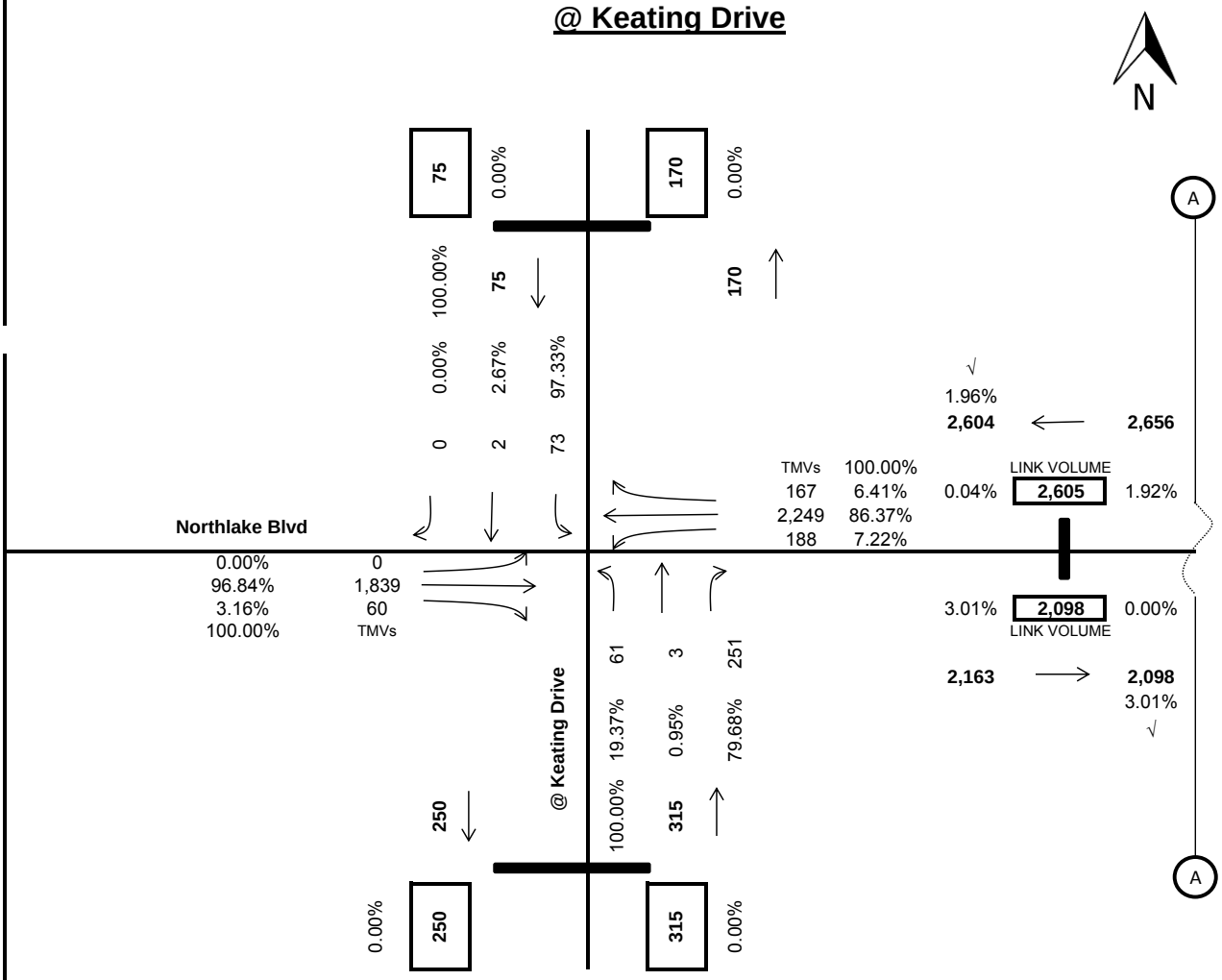
LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66 →	Turning Movement Volumes (Balanced)
A … A	Match Line

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Hood Road** **Turning Movement Volume Development** **2040 Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **3 of 3** *Date:* 9/24/15

@ Keating Drive



Turning Movement Volumes
@ Keating Drive

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**2,605**			**315**			**1,899**			**75**	
TM Pk Hr Counts	213	2543	189	61	3	251	0	1839	60	73	2	0
% Turns	7%	86%	6%	19%	1%	80%	0%	97%	3%	97%	3%	0%
Calc. Pk Hr Volumes	188	2249	167	61	3	251	0	1839	60	73	2	0
Adjustments												
Bal Pk Hr Volumes	**188**	**2249**	**167**	**61**	**3**	**251**	**0**	**1839**	**60**	**73**	**2**	**0**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

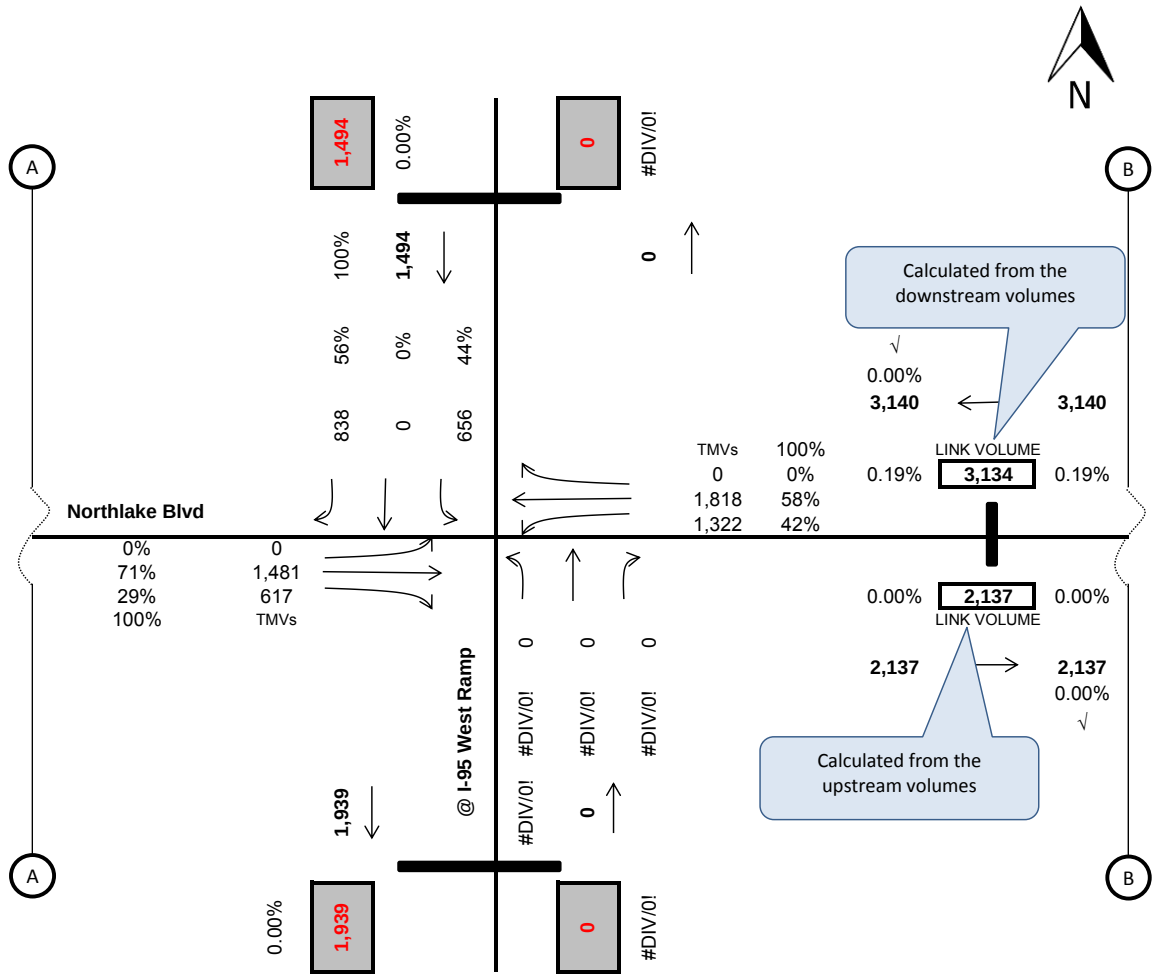
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Northlake Boulevard** **Turning Movement Volume Development** **2040 Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **1 of 5** *Date:* 9/24/15

@ I-95 West Ramp



Turning Movement Volumes
@ I-95 West Ramp

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes	**3,134**			**0**			**2,098**			**1,494**		
TM Pk Hr Counts	1333	1716	0	0	0	0	0	1505	659	884	0	1129
% Turns	44%	56%	0%	0%	0%	0%	0%	70%	30%	44%	0%	56%
Calc. Pk Hr Volumes	1370	1764	0	0	0	0	0	1459	639	656	0	838
Adjustments	-48	54						22	-22		0	
Bal Pk Hr Volumes	**1322**	**1818**	**0**	**0**	**0**	**0**	**0**	**1481**	**617**	**656**	**0**	**838**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 → — Turning Movement Volumes (Balanced)

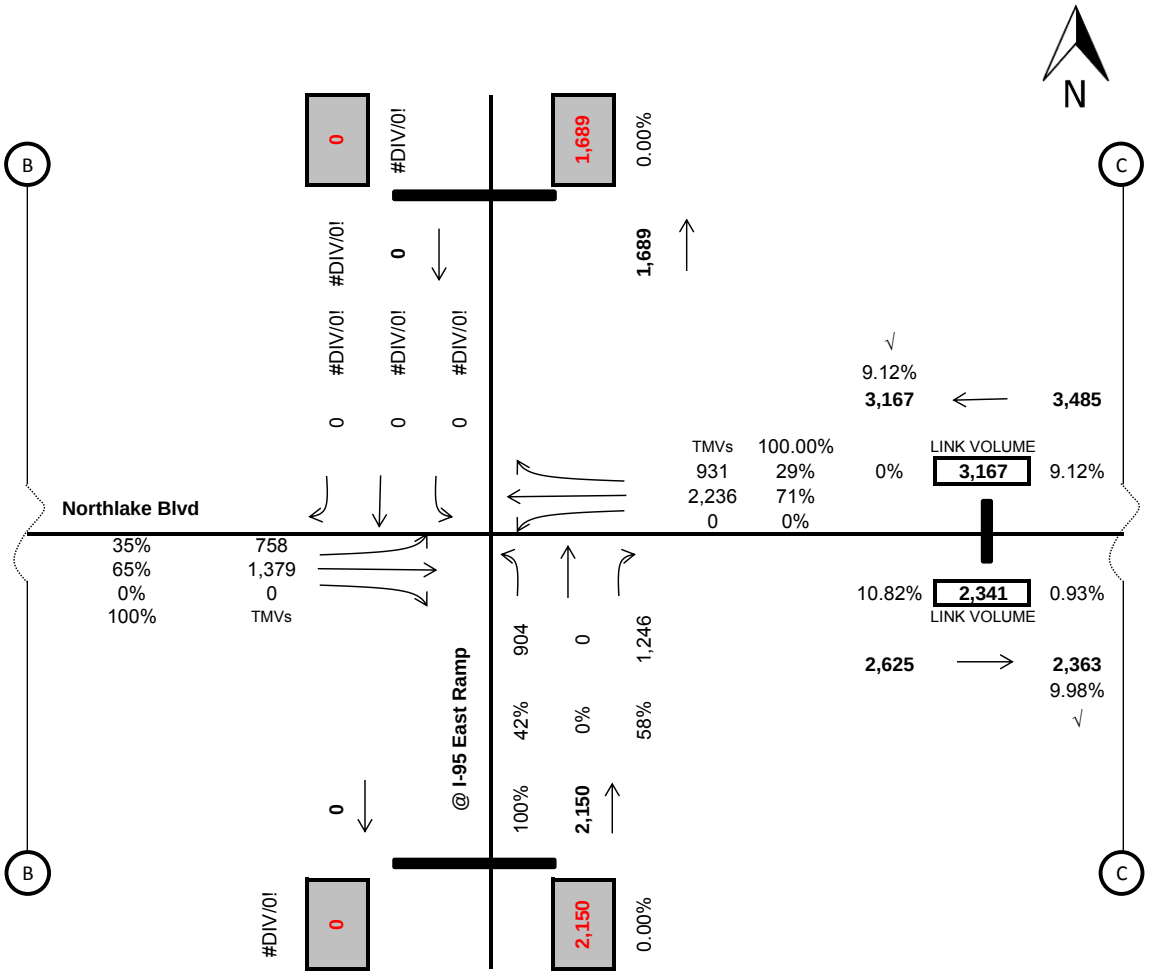
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Northlake Boulevard** **Turning Movement Volume Development** **2040 Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **2 of 5** *Date:* 9/24/15

@ I-95 East Ramp



Turning Movement Volumes
@ I-95 East Ramp

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**3,167**			**2,150**			**2,137**			**0**	
TM Pk Hr Counts	0	2223	1077	816	0	1397	940	1449	0	0	0	0
% Turns	0%	67%	33%	37%	0%	63%	39%	61%	0%	0%	0%	0%
Calc. Pk Hr Volumes	0	2133	1034	793	0	1357	841	1296	0	0	0	0
Adjustments		103	-103	111	0	-111	-83	83				
Bal Pk Hr Volumes	**0**	**2236**	**931**	**904**	**0**	**1246**	**758**	**1379**	**0**	**0**	**0**	**0**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

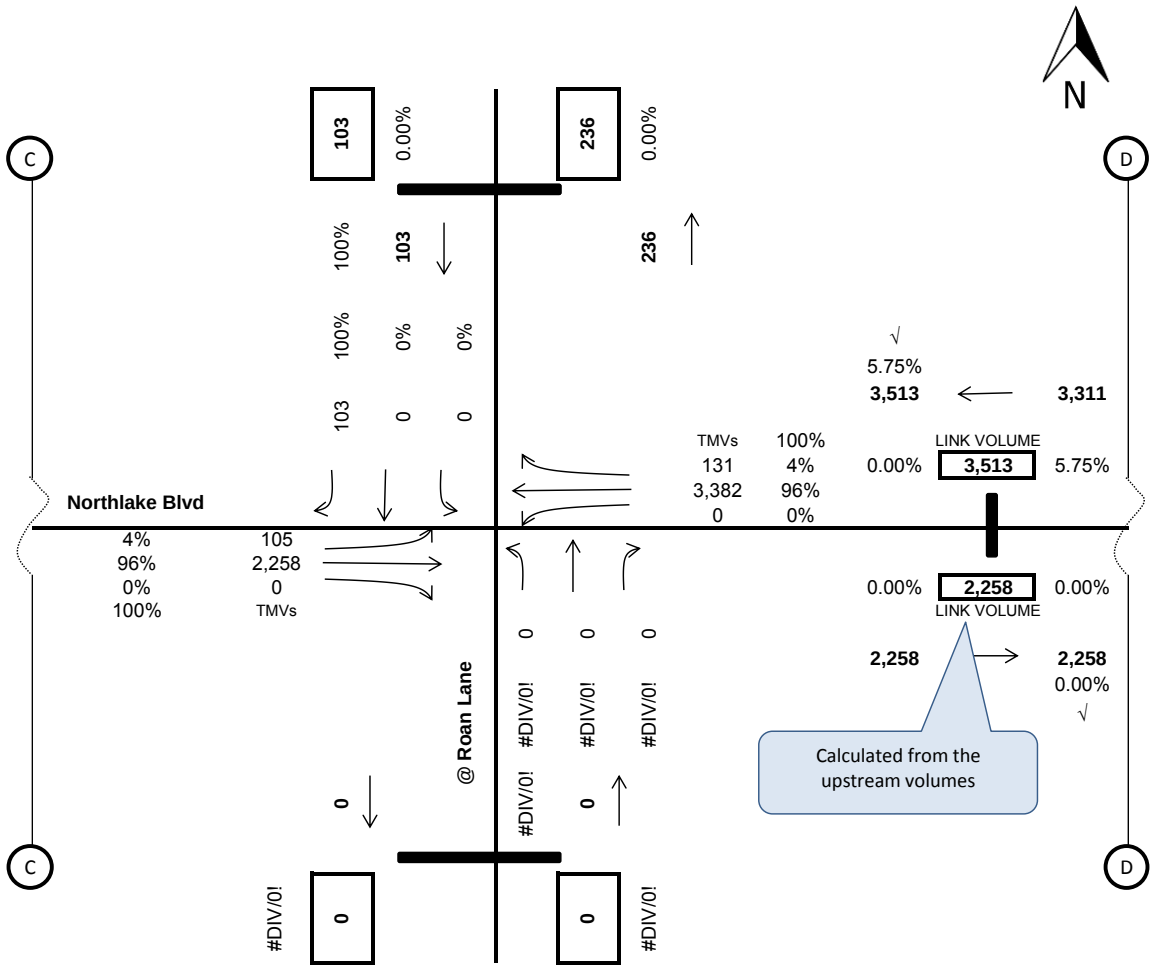
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Northlake Boulevard** **Turning Movement Volume Development** **2040 Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **3 of 5** *Date:* 9/24/15

@ Roan Lane



Turning Movement Volumes
@ Roan Lane

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**3,513**			**0**			**2,341**			**103**	
TM Pk Hr Counts	0	3422	91	0	0	0	127	2826	0	0	0	103
% Turns	0%	97%	3%	0%	0%	0%	4%	96%	0%	0%	0%	100%
Calc. Pk Hr Volumes	0	3422	91	0	0	0	101	2240	0	0	0	103
Adjustments		-40	40	0			4	18				
Bal Pk Hr Volumes	**0**	**3382**	**131**	**0**	**0**	**0**	**105**	**2258**	**0**	**0**	**0**	**103**

LEGEND

1,500 — Control Volumes (Peak Hour)*

1,300 — Link Volumes (Peak Hour)

66 — Turning Movement Volumes (Balanced)

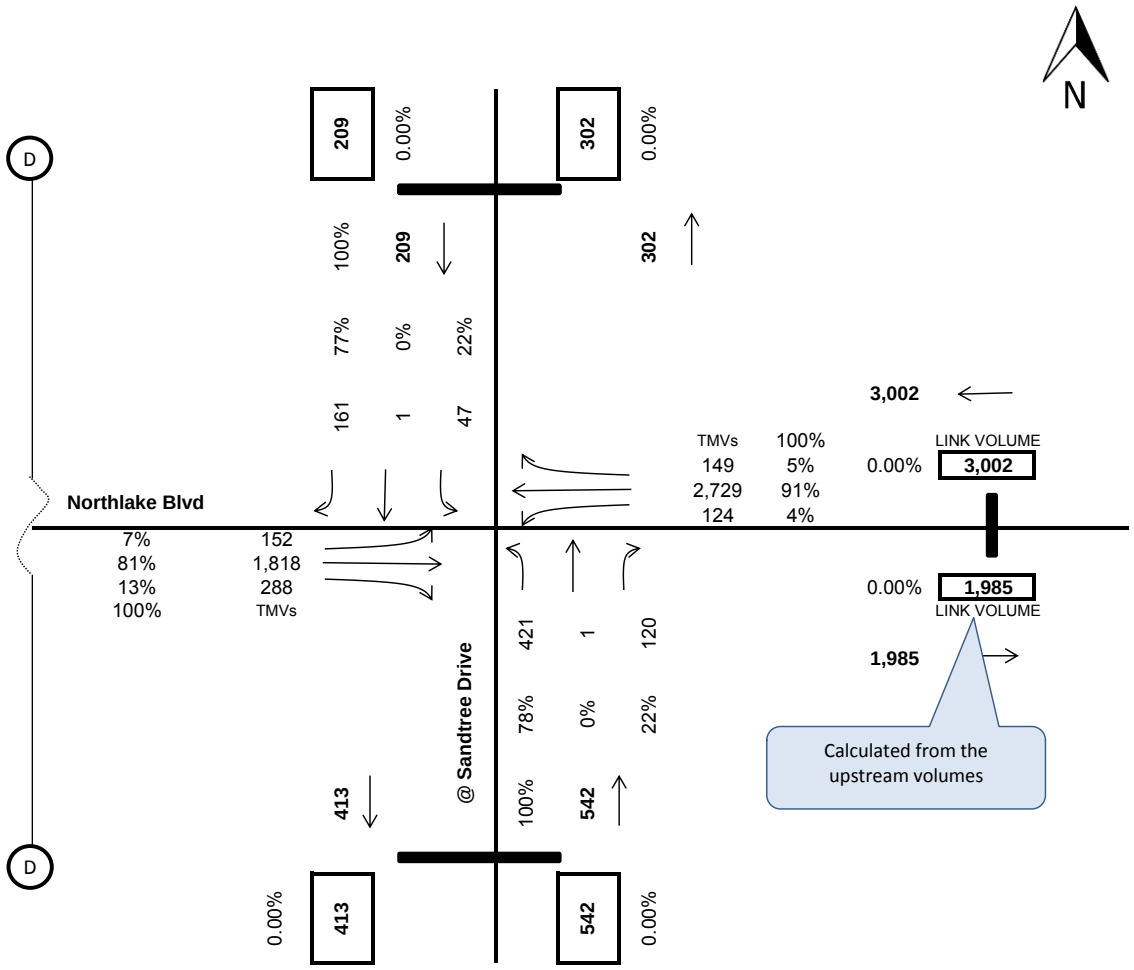
A — Match Line

A

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Northlake Boulevard Turning Movement Volume Development 2040 Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **4 of 5** *Date:* 9/24/15

@ Sandtree Drive



Turning Movement Volumes
@ Sandtree Drive

Volume Elements	WB			NB			EB			SB		
	LT	THU	RT	LT	THU	RT	LT	THU	RT	LT	THU	RT
Link Volumes		**3,002**			**542**			**2,258**			**209**	
TM Pk Hr Counts	124	2729	149	421	1	120	192	2292	363	47	1	161
% Turns	4%	91%	5%	78%	0%	22%	7%	81%	13%	22%	0%	77%
Calc. Pk Hr Volumes	124	2729	149	421	1	120	152	1818	288	47	1	161
Adjustments												
Bal Pk Hr Volumes	**124**	**2729**	**149**	**421**	**1**	**120**	**152**	**1818**	**288**	**47**	**1**	**161**

LEGEND

1,500	Control Volumes (Peak Hour)*
1,300	Link Volumes (Peak Hour)
66	Turning Movement Volumes (Balanced)
A	Match Line
A	

** Represents Volumes such as I-95 On/Off Ramp Volumes that may not be adjusted in the turning movement volume development process.*

Project Name: SR 9 / I-95 at PGA Boulevard/ Central Boulevard Project Development & Environmental Study FM No. 413265-1-22-01	*Exhibit Name:* **Northlake Boulevard Turning Movement Volume Development 2040 Build PM Peak Hour**	*Exhibit No:* **TBD** *Page No:* **5 of 5** *Date:* 9/24/15

APPENDIX AJ

DELAY COMPARISON SIX ALTERNATIVES

I-95 at PGA/Central Boulevard Interchange Justification Study
Calculation of Corridor Level Delay for Peak Hours

APPENDIX AJ - DELAY COMPARISON SIX ALTERNATIVES

Intersection	Period	Eastbound												Westbound											
		Left				Thru				Right				Left				Thru				Right			
		Vol.	Avg. Delay/ Veh (sec)	Total Delay Hours	LOS	Vol.	Avg. Delay/ Veh (sec)	Total Delay Hours	LOS	Vol.	Avg. Delay/ Veh (sec)	Total Delay Hours	LOS	Vol.	Avg. Delay/ Veh (sec)	Total Delay Hours	LOS	Vol.	Avg. Delay/ Veh (sec)	Total Delay Hours	LOS	Vol.	Avg. Delay/ Veh (sec)	Total Delay Hours	LOS
No Build																									
Central Boulevard and Donald Ross Road	AM	453	163.1	20.5	F	1,158	82.1	26.4	F	505	59.4	8.3	E	238	159.4	10.5	F	1,011	114.0	32.0	F	315	23.1	2.0	C
	PM	652	215.3	39.0	F	1,175	55.0	18.0	D	737	194.9	39.9	F	295	316.4	25.9	F	1,299	196.5	70.9	F	328	42.0	3.8	D
Central Boulevard and Hood Road	AM	343	71.6	6.8	E	848	100.7	23.7	F	246	36.4	2.5	D	855	470.8	111.8	F	270	47.3	3.5	D	18	16.9	0.1	B
	PM	231	109.6	7.0	F	437	51.4	6.2	D	194	15.7	0.8	B	793	662.3	145.9	F	685	56.8	10.8	E	476	56.8	7.5	E
Central Boulevard and Victoria Falls Boulevard	AM	-		0.0		-		0.0		-		0.0		65	-	0.0	0	-		0.0		463	-	0.0	0
	PM	-		0.0		-		0.0		-		0.0		149	-	0.0	0	-		0.0		547	-	0.0	0
Central Boulevard and I-95 SB Ramp	AM	-		0.0		1,374		0.0		-		0.0		-		0.0		1,934		0.0		-		0.0	
	PM	-		0.0		2,298		0.0		-		0.0		-		0.0		1,913		0.0		-		0.0	
Central Boulevard and I-95 NB Ramp	AM	-		0.0		1,374		0.0		-		0.0		-		0.0		1,934		0.0		-		0.0	
	PM	-		0.0		2,298		0.0		-		0.0		-		0.0		1,913		0.0		-		0.0	
Central Boulevard and 117th Court	AM	-		0.0		-		0.0		-		0.0		305	55.4	4.7	E	-		0.0		163	13.3	0.6	B
	PM	-		0.0		-		0.0		-		0.0		319	44.8	4.0	E	-		0.0		144	19.7	0.8	B
Central Boulevard and PGA Boulevard	AM	1,109	41.8	12.9	D	2,251	49.9	31.2	D	50	49.9	0.7	D	170	111.2	5.3	F	1,411	345.5	135.4	F	388	35.5	3.8	D
	PM	1,626	186.5	84.2	F	1,362	33.6	12.7	C	37	33.6	0.3	C	219	82.0	5.0	F	2,052	407.7	232.4	F	972	421.3	113.8	F
				170.5				118.2				52.6				313.1				485.1				132.4	
Donald Ross Rd and 64th Dr N-E Pointe Court	AM	3	8.5	0.0	A	947	-	0.0	A	4	-	0.0	A	14	10.5	0.0	B	459	-	0.0	A	19	-	0.0	A
	PM	3	10.2	0.0	B	660	-	0.0	A	-	-	0.0	A	39	9.3	0.1	A	865	-	0.0	A	48	-	0.0	A
Donald Ross Rd and West Ramp	AM	-		0.0		602	60.6	10.1	E	329	0.3	0.0	A	1,882	269.5	140.9	F	434	6.7	0.8	A	-		0.0	
	PM	-		0.0		504	52.7	7.4	D	136	0.1	0.0	A	1,656	192.8	88.7	F	829	9.5	2.2	A	-		0.0	
Donald Ross Rd and East Ramp	AM	45	36.9	0.5	D	1,411	207.6	81.4	F	-		0.0		-		0.0		2,177	16.1	9.7	B	453	0.5	0.1	A
	PM	47	37.4	0.5	D	1,242	152.7	52.7	F	-		0.0		-		0.0		2,113	14.3	8.4	B	760	1.2	0.3	A
Donald Ross Rd and Parkside Drive	AM	817	157.3	35.7	F	1,671	15.0	7.0	B	785		0.0		736		0.0		1,301	109.2	39.5	F	92	9.2	0.2	A
	PM	640	139.6	24.8	F	1,710	14.3	6.8	B	437	14.3	1.7	B	698		0.0		1,564	84.9	36.9	F	155	6.2	0.3	A
Donald Ross Rd and Central Boulevard	AM	453		0.0		1,158		0.0		505		0.0		238		0.0		1,011		0.0		315		0.0	
	PM	652		0.0		1,175		0.0		737		0.0		295		0.0		1,299		0.0		328		0.0	
Donald Ross Rd and North Military Trail	AM	470	261.5	34.1	F	1,304	136.2	49.3	F	121	9.0	0.3	A	85	190.0	4.5	F	952	179.7	47.5	F	162	18.3	0.8	B
	PM	717	200.1	39.9	F	958	85.6	22.8	F	52	12.9	0.2	B	715	198.8	39.5	F	1,219	157.1	53.2	F	190	22.0	1.2	C
				135.5				237.4				2.3				273.7				198.2				2.8	
Hood Rd and Eastpointe Boulevard	AM	10	0.3	0.0	A	346	0.3	0.0	A	-		0.0		-		0.0		195	-	0.0	A	30	-	0.0	A
	PM	13	0.5	0.0	A	250	0.5	0.0	A	-		0.0		-		0.0		333	-	0.0	A	51	-	0.0	A
Hood Rd and I-95 SB Ramp	AM	-		0.0		-		0.0		-		0.0		-		0.0		-		0.0		-		0.0	
	PM	-		0.0		-		0.0		-		0.0		-		0.0		-		0.0		-		0.0	
Hood Rd and I-95 NB Ramp	AM	-		0.0		-		0.0		-		0.0		-		0.0		-		0.0		-		0.0	
	PM	-		0.0		-		0.0		-		0.0		-		0.0		-		0.0		-		0.0	
Hood Rd and Central Boulevard	AM	343	71.6	6.8	E	848	265.9	62.6	F	246	28.1	1.9	C	855	624.4	148.3	F	270	39.2	2.9	D	18	14.1	0.1	B
	PM	231	113.4	7.3	F	437	105.6	12.8	F	194	15.4	0.8	B	793	676.7	149.1	F	685	55.0	10.5	E	476	53.0	7.0	D
Hood Rd and North Military Trail	AM	479	73.9	9.8	E	1,120	242.2	75.4	F	437	123.1	14.9	F	932	319.8	82.8	F	598	58.6	9.7	E	195	25.1	1.4	C
	PM	467	124.7	16.2	F	1,266	235.8	82.9	F	104	17.6	0.5	B	790	263.0	57.7	F	1,073	98.4	29.3	F	214	21.5	1.3	C
				40.1				233.8				18.2				437.9				52.5				9.7	
Northlake Boulevard and Keating Drive	AM	-	105.6	0.0	F	3,128	109.8	95.4	F	132	5.8	0.2	A	301	174.2	14.6	F	1,522	7.7	3.3	A	106	0.9	0.0	A
	PM	25	68.8	0.5	E	2,097	28.1	16.4	C	62	4.0	0.1	A	215	87.2	5.2	F	2,940	61.7	50.4	E	195	1.8	0.1	A
Northlake Boulevard and I-95 West Ramp	AM	-		0.0		2,396	78.6	52.3	E	1,104	3.5	1.1	A	1,001	182.3	50.7	F	1,049	55.3	16.1	E	-		0.0	
	PM	-		0.0		1,825	57.2	29.0	E	634	0.9	0.2	A	1,392	331.0	128.0	F	2,186	254.9	154.8	F	-		0.0	
Northlake Boulevard and I-95 East Ramp	AM	1,221	307.2	104.2	F	2,286	198.8	126.2	F	-		0.0		-		0.0		1,440	144.9	58.0	F	512	0.6	0.1	A
	PM	1,186	223.8	73.7	F	1,419	76.9	30.3	E	-		0.0		-		0.0		2,438	311.7	211.1	F	890	1.8	0.4	A
Northlake Boulevard and Roan Lane	AM	118	19.8	0.6	B	3,310	0.9	0.8	A	-		0.0		-		0.0		1,876	5.9	3.1	A	80	0.1	0.0	A
	PM	127	38.9	1.4	D	2,727	0.5	0.4	A	-		0.0		-		0.0		3,389	8.2	7.7	A	91	0.1	0.0	A
Northlake Boulevard and Sandtree Drive	AM	146	84.8	3.4	F	2,841	140.4	110.8	F	378	2.6	0.3	A	118	126.8	4.2	F	1,486	28.9	11.9	C	71	28.9	0.6	C
	PM	191	175.6	9.3	F	2,213	61.6	37.9	E	368	2.4	0.2	A	130	113.8	4.1	F	2,747	137.7	105.1	F	154	137.7	5.9	F
				193.2				499.5				2.0				206.7				621.4				7.1	
PGA Boulevard and FL Turnpike	AM	95	214.5	5.7	F	1,880	84.6	44.2	F	-		0.0		-		0.0		2,089	202.9	117.7	F	920	38.7	9.9	D
	PM	258	592.5	42.5	F	1,927	32.2	17.2	C	-		0.0		-		0.0		2,391	471.0	312.8	F	1,180	511.8	167.8	F
PGA Boulevard and Central Boulevard	AM	1,109		0.0		2,251		0.0		50		0.0		170		0.0		1,411		0.0		388		0.0	
	PM	1,626		0.0		1,362		0.0		37		0.0		219		0.0		2,052		0.0		972		0.0	
PGA Boulevard and North Military Trail	AM	362		0.0		1,523		0.0		1,140		0.0		736		0.0		742		0.0		1,459		0.0	
	PM	182		0.0		1,011		0.0		818		0.0		830		0.0		1,158		0.0		1,600		0.0	
PGA Boulevard and West Ramps	AM	-		0.0		1,112	468.4	144.7	F	2,164	235.2	141.4	F	-		0.0		2,620	738.2	537.2	F	-		0.0	
	PM	-		0.0		777	136.6	29.5	F	2,111	229.4	134.5	F	-		0.0		3,404	722.5	683.2	F	-		0.0	
PGA Boulevard and NB OFF Ramps	AM	-		0.0		1,550	739.2	318.3	F	-		0.0		-		0.0		2,620	714.6	520.1	F	-		0.0	
	PM	-		0.0		962	461.9	123.4	F	-		0.0		-		0.0		3,404	711.3	672.6	F	-		0.0	
I-95 and PGA Blvd NB On Ramps		5		0.0		4,245		0.0		-		0.0		-		0.0		798		0.0		132		0.0	
		188		0.0		3,284		0.0		-		0.0		-		0.0		1,479		0.0		642		0.0	
PGA Boulevard and RCA Boulevard	AM	-		0.0		2,829	-	0.0	A	1,416	-	0.0	A	186	######	166.8	F	931	-	0.0	A	-		0.0	
	PM	-		0.0		2,112	-	0.0	A	1,171	-	0.0	A	80	258.6	5.7	F	2,121	-	0.0	A	-		0.0	
PGA Boulevard and Lake Victoria Gardens	AM	424	111.1	13.1	F	2,114	16.5	9.7	B	368	2.4	0.2	A	-		0.0		1,593	58.3	25.8	E	-		0.0	
	PM	507	239.1	33.7	F	1,797	14.5	7.2	B	373	1.3	0.1	A	-		0.0		3,132	185.1	161.0	F	-		0.0	
PGA Passage and Lake Victoria Gardens	AM	-		0.0		-		0.0		-		0.0		-		0.0		38	20.9	0.2	C	93	5.3	0.1	A
	PM	-		0.0		-		0.0		-		0.0		-		0.0		17	22.4	0.1	C	236	3.1	0.2	A
				94.9				694.2				276.3				172.6				3030.8				178.0	
North Military Trail and Donald Ross	AM	470		0.0		1,304		0.0		121		0.0		85		0.0		952		0.0		162		0.0	
	PM	717		0.0		958		0.0		52		0.0		715		0.0		1,219		0.0		190		0.0	
North Military Trail and Hood Road	AM	479		0.0		1,120		0.0		437		0.0		932		0.0		598		0.0		195		0.0	
	PM	467		0.0		1,266		0.0		104		0.0		790		0.0		1,073		0.0		214		0.0	
North Military Trail and Kyoto Gardens Drive	AM	-		0.0		-		0.0		80		0.0		314	127.7	11.1	F	83	112.0	2.6	F	58	-	0.0	A
	PM	-		0.0		-		0.0		78		0.0		370	111.8	11.5	F	75	112.0	2.3	F	189	69.9	3.7	E
North Military Trail and PGA Boulevard	AM	362	117.4	11.8	F	1,523	276.4	116.9	F	1,140	201.4	63.8	F	736	470.9	96.3	F	742	78.4	16.2	E	1,459	229.6	93.1	F
	PM	182	329.9	16.7	F	1,011	250.3	70.3	F	818	11.1	2.5	B	830	472.3	108.9	F	1,158	99.1	31.9	F	1,600	239.4	106.4	F
				28.5				187.2				66.3				227.8				53.0				203.1	

Intersection	Period	Northbound												Southbound											
		Left				Thru				Right				Left				Thru				Right			
		Vol.	Avg. Delay/ Veh (sec)	Total Delay Hours	LOS	Vol.	Avg. Delay/ Veh (sec)	Total Delay Hours	LOS	Vol.	Avg. Delay/ Veh (sec)	Total Delay Hours	LOS	Vol.	Avg. Delay/ Veh (sec)	Total Delay Hours	LOS	Vol.	Avg. Delay/ Veh (sec)	Total Delay Hours	LOS	Vol.	Avg. Delay/ Veh (sec)	Total Delay Hours	LOS
No Build																									
Central Boulevard and Donald Ross Road	AM	449	199.9	24.9	F	1,107	89.6	27.6	F	127	15.5	0.5	B	622	239.6	41.4	F	1,514	181.9	76.5	F	596	54.3	9.0	D
	PM	490	326.5	44.4	F	1,830	323.1	164.2	F	166	22.7	1.0	C	376	338.4	35.3	F	1,296	154.6	55.7	F	410	20.6	2.3	C
Central Boulevard and Hood Road	AM	185	338.5	17.4	F	1,002	337.8	94.0	F	552	337.8	51.8	F	635	488.8	86.2	F	1,150	76.5	24.4	E	219	76.5	4.7	E
	PM	342	542.2	51.5	F	1,582	501.4	220.3	F	781	501.4	108.8	F	619	638.4	109.8	F	1,137	97.4	30.8	F	356	97.4	9.6	F
Central Boulevard and Victoria Falls Boulevard	AM	-		0.0		1,277	-	0.0	A	97	-	0.0	A	382	58.0	6.2	F	1,869	-	0.0	A	-		0.0	
	PM	-		0.0		2,157	-	0.0	A	141	-	0.0	A	360	589.1	58.9	F	1,765	-	0.0	A	-		0.0	
Central Boulevard and I-95 SB Ramp	AM	-		0.0		-		0.0		-		0.0		-		0.0		-		0.0		-		0.0	
	PM	-		0.0		-		0.0		-		0.0		-		0.0		-		0.0		-		0.0	
Central Boulevard and I-95 NB Ramp	AM	-		0.0		-		0.0		-		0.0		-		0.0		-		0.0		-		0.0	
	PM	-		0.0		-		0.0		-		0.0		-		0.0		-		0.0		-		0.0	
Central Boulevard and 117th Court	AM	-		0.0		1,152	17.9	5.7	B	326	2.3	0.2	A	109	12.0	0.4	B	1,801	18.0	9.0	B	-		0.0	
	PM	-		0.0		2,116	77.7	45.7	E	326	6.0	0.5	A	163	165.1	7.5	F	1,688	16.7	7.8	B	-		0.0	
Central Boulevard and PGA Boulevard	AM	43	84.1	1.0	F	48	84.1	1.1	F	186	35.5	1.8	D	558	375.0	58.1	F	55	365.7	5.6	F	1,709	485.9	230.7	F
	PM	53	206.7	3.0	F	60	206.7	3.4	F	178	23.4	1.2	C	454	379.5	47.9	F	62	386.3	6.7	F	1,561	520.1	225.5	F
				142.3				562.1				165.9				451.6				216.4				481.8	
Donald Ross Rd and 64th Dr N-E Pointe Court	AM	1	14.0	0.0	B	-		0.0		16	14.0	0.1	B	60	39.1	0.7	E	-		0.0		5	39.1	0.1	E
	PM	6	15.9	0.0	C	-		0.0		30	15.9	0.1	C	28	70.4	0.5	F	-		0.0		-	70.4	0.0	F
Donald Ross Rd and West Ramp	AM	-		0.0		-		0.0		-		0.0		854	291.7	69.2	F	-		0.0		46	-	0.0	A
	PM	-		0.0		-		0.0		-		0.0		786	222.7	48.6	F	-		0.0		89	0.1	0.0	A
Donald Ross Rd and East Ramp	AM	140	66.4	2.6	E	-		0.0		1,728	98.5	47.3	F	-		0.0		-		0.0		-		0.0	
	PM	371	80.5	8.3	F	-		0.0		1,744	103.7	50.2	F	-		0.0		-		0.0		-		0.0	
Donald Ross Rd and Parkside Drive	AM	405		0.0		110		0.0		568		0.0		84	58.9	1.4	E	174		0.0		808	61.3	13.8	E
	PM	758		0.0		183		0.0		851		0.0		85	53.0	1.3	D	139		0.0		681	56.3	10.7	E
Donald Ross Rd and Central Boulevard	AM	449		0.0		1,107		0.0		127		0.0		622		0.0		1,514		0.0		596		0.0	
	PM	490		0.0		1,830		0.0		166		0.0		376		0.0		1,296		0.0		410		0.0	
Donald Ross Rd and North Military Trail	AM	39	88.0	1.0	F	1,785	47.5	23.6	D	114	8.4	0.3	A	250	96.4	6.7	F	2,212	172.3	105.9	F	590	25.5	4.2	C
	PM	84	89.9	2.1	F	1,798	175.3	87.6	F	206	9.5	0.5	A	451	154.6	19.4	F	1,292	97.7	35.1	F	671	46.7	8.7	D
				14.0				111.1				98.5				147.7				140.9				37.3	
Hood Rd and Eastpointe Boulevard	AM	-		0.0		-		0.0		-		0.0		29	12.6	0.1	B	-		0.0		10	12.6	0.0	B
	PM	-		0.0		-		0.0		-		0.0		44	14.3	0.2	B	-		0.0		5	14.3	0.0	B
Hood Rd and I-95 SB Ramp	AM	-		0.0		-		0.0		-		0.0		-		0.0		-		0.0		-		0.0	
	PM	-		0.0		-		0.0		-		0.0		-		0.0		-		0.0		-		0.0	
Hood Rd and I-95 NB Ramp	AM	-		0.0		-		0.0		-		0.0		-		0.0		-		0.0		-		0.0	
	PM	-		0.0		-		0.0		-		0.0		-		0.0		-		0.0		-		0.0	
Hood Rd and Central Boulevard	AM	185	415.4	21.3	F	1,002	421.5	117.3	F	552	421.5	64.6	F	635	679.4	119.8	F	1,150	144.1	46.0	F	219	144.1	8.8	F
	PM	342	554.1	52.6	F	1,582	513.3	225.6	F	781	513.3	111.4	F	619	653.2	112.3	F	1,137	103.8	32.8	F	356	103.8	10.3	F
Hood Rd and North Military Trail	AM	4	72.2	0.1	E	1,592	194.8	86.1	F	492	285.4	39.0	F	1,680	92.9	43.4	F	543	10.9	1.6	B				
	PM	306	246.2	20.9	F	1,748	177.4	86.1	F	776	140.2	30.2	F	215	244.9	14.6	F	1,510	141.8	59.5	F	575	47.6	7.6	D
				95.0				515.2				244.9				286.1				181.6				28.3	
Northlake Boulevard and Keating Drive	AM	102	262.5	7.4	F	-	269.3	0.0	F	146	10.3	0.4	B	226	289.5	18.2	F	3	289.5	0.2	F	-		0.0	
	PM	52	75.1	1.1	E	3	147.3	0.1	F	254	17.6	1.2	B	109	51.6	1.6	D	2	51.6	0.0	D	-		0.0	
Northlake Boulevard and I-95 West Ramp	AM	-		0.0		-		0.0		-		0.0		1,112	206.6	63.8	F	-		0.0		880	15.3	3.7	B
	PM	-		0.0		-		0.0		-		0.0		780	68.1	14.8	E	-		0.0		1,163	8.6	2.8	A
Northlake Boulevard and I-95 East Ramp	AM	609	57.1	9.7	E	-		0.0		1,079	5.7	1.7	A	-		0.0		-		0.0		-		0.0	
	PM	1,141	225.4	71.4	F	-		0.0		1,354	28.7	10.8	C	-		0.0		-		0.0		-		0.0	
Northlake Boulevard and Roan Lane	AM	-		0.0		-		0.0		-		0.0		-		0.0		-		0.0		176	0.1	0.0	A
	PM	-		0.0		-		0.0		-		0.0		-		0.0		-		0.0		103	0.1	0.0	A
Northlake Boulevard and Sandtree Drive	AM	322	132.9	11.9	F	1	11.8	0.0	B	105	11.2	0.3	B	101	80.6	2.3	F	1	80.6	0.0	F	144	80.6	3.2	F
	PM	419	179.7	20.9	F	1	10.0	0.0	A	135	9.9	0.4	A	52	115.7	1.7	F	1	115.7	0.0	F	162	115.7	5.2	F
				122.4				0.1				14.9				102.2				0.3				15.0	
PGA Boulevard and FL Turnpike	AM	-		0.0		-		0.0		-		0.0		1,480	229.1	94.2	F	-	228.4	0.0	F	165	0.1	0.0	A
	PM	-		0.0		-	269.3	0.0	F	-		0.0		961	400.9	107.0	F	-	412.1	0.0	F	127	446.8	15.8	F
PGA Boulevard and Central Boulevard	AM	43		0.0		48		0.0		186		0.0		558		0.0		55		0.0		1,709		0.0	
	PM	53		0.0		60		0.0		178		0.0		454		0.0		62		0.0		1,561		0.0	
PGA Boulevard and North Military Trail	AM	987		0.0		1,728		0.0		37		0.0		1,807		0.0		1,509		0.0		278		0.0	
	PM	1,743		0.0		2,080		0.0		116		0.0		1,855		0.0		1,305		0.0		321		0.0	
PGA Boulevard and West Ramps	AM	-		0.0		-		0.0		-		0.0		437	744.5	90.4	F	-		0.0		342	0.3	0.0	A
	PM	-		0.0		-		0.0		-		0.0		185	764.7	39.3	F	-		0.0		184	0.2	0.0	A
PGA Boulevard and NB OFF Ramps	AM	-		0.0		-		0.0		2,700	182.2	136.7	F	-		0.0		-		0.0		-		0.0	
	PM	-		0.0		-		0.0		2,510	195.4	136.2	F	-		0.0		-		0.0		-		0.0	
I-95 and PGA Blvd NB On Ramps		132		0.0		-		0.0		-		0.0		-		0.0		-		0.0		1,822		0.0	
		642		0.0		-		0.0		-		0.0		-		0.0		-		0.0		1,926		0.0	
PGA Boulevard and RCA Boulevard	AM	-		0.0		-		0.0		77	16.4	0.4	C	-		0.0		-		0.0		-		0.0	
	PM	-		0.0		-		0.0		565	524.1	82.3	F	-		0.0		-		0.0		-		0.0	
PGA Boulevard and Lake Victoria Gardens	AM	215	109.0	6.5	F	1	108.7	0.0	F	86	20.0	0.5	B	-		0.0		-		0.0		11	0.8	0.0	A
	PM	306	90.6	7.6	F	-		0.0		129	38.3	1.4	D	-		0.0		-		0.0		47	3.6	0.0	A
PGA Passage and Lake Victoria Gardens	AM	-		0.0		349	26.9	2.6	C	-		0.0		-		0.0		11	30.3	0.1	C	61	9.8	0.2	A
	PM	-		0.0		359	114.1	11.4	F	-		0.0		-		0.0		47	77.7	1.0	E	230	15.2	1.0	B
				14.0				14.0				357.3				330.9				1.1				17.0	
North Military Trail and Donald Ross	AM	39		0.0		1,785		0.0		114		0.0		250		0.0		2,212		0.0		590		0.0	
	PM	84		0.0		1,798		0.0		206		0.0		451		0.0		1,292		0.0		671		0.0	
North Military Trail and Hood Road	AM	4		0.0		1,592		0.0		849		0.0		492		0.0		1,680		0.0		543		0.0	
	PM	306		0.0		1,748		0.0		776		0.0		215		0.0		1,510		0.0		575		0.0	
North Military Trail and Kyoto Gardens Drive	AM	37	164.4	1.7	F	2,853	66.5	52.7	E	461	10.5	1.3	B	285	130.8	10.4	F	3,283	33.1	30.2	C	2	-	0.0	A
	PM	31	118.1	1.0	F	3,133	40.8	35.5	D	728	6.0	1.2	A	50	155.4	2.2	F	2,788	25.5	19.7	C	19	-	0.0	A
North Military Trail and PGA Boulevard	AM	987	473.1	129.7	F	1,728	359.7	172.7	F	37	43.3	0.4	D	1,807	478.9	240.4	F	1,509	99.2	41.6	F	278	99.2	7.7	F
	PM	1,743	490.

APPENDIX AJ - DELAY COMPARISON SIX ALTERNATIVES

Intersection	Period	Eastbound												Westbound											
		Left				Thru				Right				Left				Thru				Right			
		Vol.	Avg. Delay/ Veh (sec)	Total Delay Hours	LOS	Vol.	Avg. Delay/ Veh (sec)	Total Delay Hours	LOS	Vol.	Avg. Delay/ Veh (sec)	Total Delay Hours	LOS	Vol.	Avg. Delay/ Veh (sec)	Total Delay Hours	LOS	Vol.	Avg. Delay/ Veh (sec)	Total Delay Hours	LOS	Vol.	Avg. Delay/ Veh (sec)	Total Delay Hours	LOS
Alternative 1																									
Central Boulevard and Donald Ross Road	AM	128	71.7	2.5	E	1,092	76.2	23.1	E	318	28.7	2.5	C	395	129.4	14.2	F	790	52.4	11.5	D	286	17.6	1.4	B
	PM	542	131.2	19.8	F	1,082	69.6	20.9	E	476	36.5	4.8	D	356	105.9	10.5	F	1,198	127.7	42.5	F	381	36.4	3.9	D
Central Boulevard and Hood Road	AM	307	67.0	5.7	E	680	181.6	34.3	F	335	41.1	3.8	D	1,385	97.0	37.3	F	240	37.7	2.5	D	12	0.1	0.0	A
	PM	204	78.3	4.4	E	412	94.8	10.8	F	227	36.3	2.3	D	1,299	103.9	37.5	F	603	48.2	8.1	D	263	15.9	1.2	B
Central Boulevard and Victoria Falls Boulevard	AM	-		0.0		-		0.0		-		0.0		107	88.0	2.6	F	-		0.0		86	16.6	0.4	B
	PM	-		0.0		-		0.0		-		0.0		221	124.0	7.6	F	-		0.0		256	139.1	9.9	F
Central Boulevard and I-95 SB Ramp	AM	-		0.0		1,533	18.4	7.8	B	68	0.8	0.0	A	1,770	46.9	23.1	D	1,368	7.7	2.9	A	-		0.0	
	PM	-		0.0		1,895	20.0	10.5	B	49	0.4	0.0	A	1,686	84.9	39.8	F	1,300	8.3	3.0	A	-		0.0	
Central Boulevard and I-95 NB Ramp	AM	511	83.9	11.9	F	1,152	36.6	11.7	D	-		0.0		-		0.0		3,104	28.0	24.1	C	72	1.1	0.0	A
	PM	535	69.5	10.3	E	1,544	35.1	15.1	D	-		0.0		-		0.0		2,910	36.3	29.3	D	63	0.5	0.0	A
Central Boulevard and 117th Court	AM	-		0.0		-		0.0		-		0.0		252	41.4	2.9	D	-		0.0		190	20.2	1.1	C
	PM	-		0.0		-		0.0		-		0.0		271	55.3	4.2	E	-		0.0		181	19.9	1.0	B
Central Boulevard and PGA Boulevard	AM	1,359	95.7	36.1	F	1,961	27.3	14.9	C	45	27.3	0.3	C	151	96.0	4.0	F	1,376	87.6	33.5	F	256	10.4	0.7	B
	PM	1,629	241.6	109.3	F	1,330	24.3	9.0	C	32	24.3	0.2	C	218	79.9	4.8	E	2,148	189.4	113.0	F	488	38.9	5.3	D
				200.1				**158.2**				**14.1**				**188.5**				**270.5**				**24.8**	
Donald Ross Rd and 64th Dr N-E Pointe Court	AM	3	8.4	0.0	A	961	-	0.0	A	4	-	0.0	A	14	10.6	0.0	B	445	-	0.0	A	19	-	0.0	A
	PM	3	10.2	0.0	B	662	-	0.0	A	-		0.0		39	9.3	0.1	A	855	-	0.0	A	48	-	0.0	A
Donald Ross Rd and West Ramp	AM	-		0.0		523	37.3	5.4	D	371	0.4	0.0	A	1,300	87.8	31.7	F	391	8.8	1.0	A	-		0.0	
	PM	-		0.0		479	34.5	4.6	C	150	0.1	0.0	A	1,366	87.0	33.0	F	831	10.7	2.5	B	-		0.0	
Donald Ross Rd and East Ramp	AM	43	42.1	0.5	D	1,202	112.9	37.7	F	-		0.0		-		0.0		1,548	19.8	8.5	B	331	0.3	0.0	A
	PM	43	39.5	0.5	D	1,139	96.1	30.4	F	-		0.0		-		0.0		1,812	20.4	10.3	C	707	1.1	0.2	A
Donald Ross Rd and Parkside Drive	AM	713	51.7	10.2	D	1,148	6.9	2.2	A	781	-	0.0	n/a	639	-	0.0	n/a	663	36.4	6.7	D	136	8.0	0.3	A
	PM	710	76.2	15.0	E	1,260	8.1	2.8	A	453	-	0.0	n/a	653	-	0.0	n/a	1,178	74.2	24.3	E	180	7.1	0.4	A
Donald Ross Rd and Central Boulevard	AM	128		0.0		1,092		0.0		318		0.0		395		0.0		790		0.0		286		0.0	
	PM	542		0.0		1,082		0.0		476		0.0		356		0.0		1,198		0.0		381		0.0	
Donald Ross Rd and North Military Trail	AM	447	109.2	13.6	F	1,390	161.0	62.2	F	38	0.3	0.0	A	154	367.8	15.7	F	804	89.7	20.0	F	123	1.7	0.1	A
	PM	466	141.9	18.4	F	1,265	78.9	27.7	E	45	0.3	0.0	A	254	133.5	9.4	F	1,358	118.7	44.8	F	301	18.7	1.6	B
				58.2				**173.0**				**0.1**				**90.0**				**118.0**				**2.5**	
Hood Rd and Eastpointe Boulevard	AM	10	0.1	0.0	A	316	0.2	0.0	A	-		0.0		-		0.0		195	-	0.0	A	30	-	0.0	A
	PM	13	0.1	0.0	A	271	0.4	0.0	A	-		0.0		-		0.0		320	-	0.0	A	51	-	0.0	A
Hood Rd and I-95 SB Ramp	AM	-		0.0		-		0.0		-		0.0		-		0.0		-		0.0		-		0.0	
	PM	-		0.0		-		0.0		-		0.0		-		0.0		-		0.0		-		0.0	
Hood Rd and I-95 NB Ramp	AM	-		0.0		-		0.0		-		0.0		-		0.0		-		0.0		-		0.0	
	PM	-		0.0		-		0.0		-		0.0		-		0.0		-		0.0		-		0.0	
Hood Rd and Central Boulevard	AM	307		0.0		680		0.0		335		0.0		1,385		0.0		240		0.0		12		0.0	
	PM	204		0.0		412		0.0		227		0.0		1,299		0.0		603		0.0		263		0.0	
Hood Rd and North Military Trail	AM	633	50.5	8.9	D	1,190	162.4	53.7	F	413	41.9	4.8	D	871	131.6	31.8	F	712	94.6	18.7	F	174	5.6	0.3	A
	PM	478	77.7	10.3	E	1,177	191.8	62.7	F	221	18.3	1.1	B	833	158.8	36.7	F	1,039	94.2	27.2	F	234	18.1	1.2	B
				19.2				**116.4**				**5.9**				**68.6**				**45.9**				**1.4**	
Northlake Boulevard and Keating Drive	AM	-		0.0		2,850	54.0	42.8	D	156	3.7	0.2	A	288	111.0	8.9	F	1,564	7.4	3.2	A	86	0.7	0.0	A
	PM	-		0.0		1,839	26.9	13.7	C	60	0.2	0.0	A	213	20.3	1.2	C	2,543	14.1	10.0	B	189	1.5	0.1	A
Northlake Boulevard and I-95 West Ramp	AM	-		0.0		2,267	41.6	26.2	D	915	1.9	0.5	A	896	207.8	51.7	F	984	8.7	2.4	A	-		0.0	
	PM	-		0.0		1,505	51.7	21.6	D	659	0.9	0.2	A	1,333	94.9	35.1	F	1,716	9.6	4.6	A	-		0.0	
Northlake Boulevard and I-95 East Ramp	AM	1,203	58.1	19.4	E	2,223	11.1	6.9	B	-		0.0		-		0.0		1,305	47.2	17.1	D	531	0.7	0.1	A
	PM	940	111.2	29.0	F	1,449	13.1	5.3	B	-		0.0		-		0.0		2,233	99.7	61.8	F	1,077	3.1	0.9	A
Northlake Boulevard and Roan Lane	AM	118	19.9	0.7	B	3,382	0.9	0.8	A	-		0.0		-		0.0		1,938	6.0	3.2	A	80	0.1	0.0	A
	PM	127	55.8	2.0	E	2,826	0.5	0.4	A	-		0.0		-		0.0		3,422	7.5	7.1	A	91	0.1	0.0	A
Northlake Boulevard and Sandtree Drive	AM	138	107.4	4.1	F	2,738	85.5	65.0	F	355	2.9	0.3	A	115	88.6	2.8	F	1,396	29.9	11.6	C	68	29.9	0.6	C
	PM	192	416.2	22.2	F	2,292	63.5	40.4	E	363	2.2	0.2	A	124	250.5	8.6	F	2,729	97.4	73.8	F	149	97.4	4.0	F
				77.4				**223.1**				**1.3**				**108.4**				**194.9**				**5.7**	
PGA Boulevard and FL Turnpike	AM	86	54.9	1.3	D	1,779	39.7	19.6	D	-		0.0		-		0.0		1,989	36.3	20.1	D	725	6.4	1.3	A
	PM	226	148.2	9.3	F	1,850	24.6	12.6	C	-		0.0		-		0.0		2,277	45.3	28.7	D	1,299	65.7	23.7	E
PGA Boulevard and Central Boulevard	AM	1,359		0.0		1,961		0.0		45		0.0		151		0.0		1,376		0.0		256		0.0	
	PM	1,629		0.0		1,330		0.0		32		0.0		218		0.0		2,148		0.0		488		0.0	
PGA Boulevard and North Military Trail	AM	343		0.0		1,289		0.0		1,068		0.0		770		0.0		633		0.0		962		0.0	
	PM	242		0.0		975		0.0		696		0.0		958		0.0		1,346		0.0		1,006		0.0	
PGA Boulevard and West Ramps	AM	-		0.0		965	1.2	0.3	A	1,846	154.0	79.0	F	-		0.0		2,108	8.6	5.0	A	-		0.0	
	PM	-		0.0		743	0.4	0.1	A	1,760	130.2	63.7	F	-		0.0		3,154	17.4	15.2	B	-		0.0	
PGA Boulevard and NB OFF Ramps	AM	-		0.0		1,571	95.0	41.5	F	-		0.0		-		0.0		2,108	0.3	0.2	A	-		0.0	
	PM	-		0.0		937	75.6	19.7	E	-		0.0		-		0.0		3,154	1.0	0.9	A	-		0.0	
I-95 and PGA Blvd NB On Ramps	AM	6		0.0		3,782		0.0		-		0.0		-		0.0		774		0.0		128		0.0	
	PM	179		0.0		2,913		0.0		-		0.0		-		0.0		1,545		0.0		594		0.0	
PGA Boulevard and RCA Boulevard	AM	-		0.0		2,506	0.6	0.4	A	1,276	0.6	0.2	A	137	40.2	1.5	D	902	0.1	0.0	A	-		0.0	
	PM	-		0.0		1,800	0.3	0.2	A	1,113	0.3	0.1	A	81	10.5	0.2	B	2,139	0.3	0.2	A	-		0.0	
PGA Boulevard and Lake Victoria Gardens	AM	424	25.5	3.0	C	1,789	4.2	2.1	A	368	1.1	0.1	A	-		0.0		1,500	21.8	9.1	C	-		0.0	
	PM	507	160.7	22.6	F	1,436	2.1	0.8	A	373	0.5	0.1	A	-		0.0		3,093	44.6	38.3	D	-		0.0	
				36.3				**97.3**				**143.1**				**1.8**				**117.6**				**25.0**	
North Military Trail and Donald Ross	AM	447		0.0		1,390		0.0		38		0.0		154		0.0		804		0.0		123		0.0	
	PM	466		0.0		1,265		0.0		45		0.0		254		0.0		1,358		0.0		301		0.0	
North Military Trail and Hood Road	AM	633		0.0		1,190		0.0		413		0.0		871		0.0		712		0.0		174		0.0	
	PM	478		0.0		1,177		0.0		221		0.0		833		0.0		1,039		0.0		234		0.0	
North Military Trail and Kyoto Gardens Drive	AM	-		0.0		-		0.0		167	-	0.0	0	271	51.8	3.9	D	93	51.8	1.3	D	80	3.0	0.1	A
	PM	-		0.0		-		0.0		106	-	0.0	0	323	73.0	6.5	E	94	73.0	1.9	E	194	27.8	1.5	C
North Military Trail and PGA Boulevard	AM	343	108.5	10.3	F	1,289	272.5	97.6	F	1,068	61.1	18.1	E	770	307.9	65.9	F	633	57.4	10.1	E	962	23.3	6.2	C
	PM	242	189.1	12.7	F	975	285.9	77.4	F	696	8.0	1.5	A	958	302.1	80.4	F	1,346	182.2	68.1	F	1,006	23.3	6.5	C
				23.0				**175.0**				**19.7**				**156.7**				**81.5**				**14.3**	

Intersection	Period	Northbound												Southbound											
		Left				Thru				Right				Left				Thru				Right			
		Vol.	Avg. Delay/ Veh (sec)	Total Delay Hours	LOS	Vol.	Avg. Delay/ Veh (sec)	Total Delay Hours	LOS	Vol.	Avg. Delay/ Veh (sec)	Total Delay Hours	LOS	Vol.	Avg. Delay/ Veh (sec)	Total Delay Hours	LOS	Vol.	Avg. Delay/ Veh (sec)	Total Delay Hours	LOS	Vol.	Avg. Delay/ Veh (sec)	Total Delay Hours	LOS
Alternative 1																									
Central Boulevard and Donald Ross Road	AM	365	102.1	10.4	F	1,510	77.4	32.5	E	128	3.7	0.1	A	667	105.8	19.6	F	1,842	78.6	40.2	E	249	7.4	0.5	A
	PM	387	73.9	7.9	E	1,970	149.2	81.6	F	105	1.4	0.0	A	599	170.2	28.3	F	1,355	51.6	19.4	D	237	9.0	0.6	A
Central Boulevard and Hood Road	AM	204	87.2	4.9	F	1,385	74.8	28.8	E	1,048	17.3	5.0	B	508	188.2	26.6	F	1,584	59.6	26.2	E	198	10.2	0.6	B
	PM	381	97.4	10.3	F	1,823	92.5	46.8	F	1,173	17.2	5.6	B	291	133.1	10.8	F	1,309	55.3	20.1	E	337	13.5	1.3	B
Central Boulevard and Victoria Falls Boulevard	AM	-		0.0		2,551	21.3	15.1	C	217	21.3	1.3	C	234	78.1	5.1	E	3,069	67.2	57.3	E	-		0.0	
	PM	-		0.0		3,121	27.4	23.8	C	280	27.4	2.1	C	83	64.3	1.5	E	2,752	52.4	40.1	D	-		0.0	
Central Boulevard and I-95 SB Ramp	AM	-		0.0		-		0.0		-		0.0		130	128.6	4.6	F	-		0.0		245	1.3	0.1	A
	PM	-		0.0		-		0.0		-		0.0		184	172.4	8.8	F	-		0.0		520	11.5	1.7	B
Central Boulevard and I-95 NB Ramp	AM	34	33.3	0.3	C	-		0.0		1,616	61.5	27.6	E	-		0.0		-		0.0		-		0.0	
	PM	76	28.4	0.6	C	-		0.0		1,857	56.2	29.0	E	-		0.0		-		0.0		-		0.0	
Central Boulevard and 117th Court	AM	-		0.0		1,331	16.5	6.1	B	273	4.5	0.3	A	135	36.4	1.4	D	1,450	11.0	4.4	B	-		0.0	
	PM	-		0.0		1,714	26.6	12.7	C	285	6.8	0.5	A	196	139.8	7.6	F	1,534	12.1	5.2	B	-		0.0	
Central Boulevard and PGA Boulevard	AM	40	107.5	1.2	F	46	107.5	1.4	F	174	19.3	0.9	B	373	169.3	17.5	F	64	158.1	2.8	F	1,444	33.7	13.5	C
	PM	50	227.1	3.2	F	62	227.1	3.9	F	172	16.6	0.8	B	334	238.0	22.1	F	58	221.7	3.6	F	1,467	67.3	27.4	E
				38.8				**252.6**				**73.4**				**153.9**				**219.3**				**45.6**	
Donald Ross Rd and 64th Dr N-E Pointe Court	AM	1	14.2	0.0	B	-	14.2	0.0	B	16	14.2	0.1	B	60	38.5	0.6	E	-	38.5	0.0	E	5	38.5	0.1	E
	PM	6	15.9	0.0	C	-	15.9	0.0	C	30	15.9	0.1	C	28	69.1	0.5	F	-	69.1	0.0	F	-	69.1	0.0	F
Donald Ross Rd and West Ramp	AM	-		0.0		-		0.0		-		0.0		722	65.1	13.1	E	-		0.0		51	-	0.0	A
	PM	-		0.0		-		0.0		-		0.0		704	64.6	12.6	E	-		0.0		58	0.1	0.0	A
Donald Ross Rd and East Ramp	AM	143	38.9	1.5	D	-		0.0		1,308	9.3	3.4	A	-		0.0		-		0.0		-		0.0	
	PM	385	42.2	4.5	D	-		0.0		1,425	20.5	8.1	C	-		0.0		-		0.0		-		0.0	
Donald Ross Rd and Parkside Drive	AM	416	-	0.0	0	133	-	0.0	0	476	-	0.0	0	82	38.7	0.9	D	185	-	0.0	n/a	609	14.6	2.5	B
	PM	798	-	0.0	0	141	-	0.0	0	818	-	0.0	0	111	45.1	1.4	D	143	-	0.0	n/a	690	24.6	4.7	C
Donald Ross Rd and Central Boulevard	AM	365		0.0		1,510		0.0		128		0.0		667		0.0		1,842		0.0		249		0.0	
	PM	387		0.0		1,970		0.0		105		0.0		599		0.0		1,355		0.0		237		0.0	
Donald Ross Rd and North Military Trail	AM	76	73.2	1.5	E	1,698	48.1	22.7	D	34	0.1	0.0	A	210	72.3	4.2	E	1,884	43.6	22.8	D	605	8.8	1.5	A
	PM	49	72.5	1.0	E	1,790	123.4	61.4	F	195	5.8	0.3	A	193	70.5	3.8	E	1,693	49.1	23.1	D	561	10.0	1.6	B
				8.6				**84.0**				**12.0**				**37.1**				**45.9**				**10.3**	
Hood Rd and Eastpointe Boulevard	AM	-		0.0		-		0.0		-		0.0		29	11.3	0.1	B	-		0.0		10	11.3	0.0	B
	PM	-		0.0		-		0.0		-		0.0		44	13.4	0.2	B	-		0.0		5	13.4	0.0	B
Hood Rd and I-95 SB Ramp	AM	-		0.0		-		0.0		-		0.0		-		0.0		-		0.0		-		0.0	
	PM	-		0.0		-		0.0		-		0.0		-		0.0		-		0.0		-		0.0	
Hood Rd and I-95 NB Ramp	AM	-		0.0		-		0.0		-		0.0		-		0.0		-		0.0		-		0.0	
	PM	-		0.0		-		0.0		-		0.0		-		0.0		-		0.0		-		0.0	
Hood Rd and Central Boulevard	AM	204		0.0		1,385		0.0		1,048		0.0		508		0.0		1,584		0.0		198		0.0	
	PM	381		0.0		1,823		0.0		1,173		0.0		291		0.0		1,309		0.0		337		0.0	
Hood Rd and North Military Trail	AM	26	80.5	0.6	F	1,333	116.9	43.3	F	765	24.4	5.2	C	284	209.2	16.5	F	1,220	50.5	17.1	D	898	41.8	10.4	D
	PM	238	104.4	6.9	F	1,655	141.1	64.9	F	762	24.5	5.2	C	263	222.9	16.3	F	1,133	59.9	18.9	E	887	159.3	39.2	F
				7.5				**108.2**				**10.4**				**33.0**				**36.0**				**49.7**	
Northlake Boulevard and Keating Drive	AM	79	198.6	4.4	F	-	198.6	0.0	F	154	10.5	0.4	B	178	86.5	4.3	F	3	86.5	0.1	F	-	86.5	0.0	F
	PM	61	44.5	0.8	D	3	67.5	0.1	E	251	8.7	0.6	B	73	33.9	0.7	C	2	33.9	0.0	C	-	33.9	0.0	C
Northlake Boulevard and I-95 West Ramp	AM	-		0.0		-		0.0		-		0.0		1,160	69.6	22.4	E	-		0.0		955	3.5	0.9	A
	PM	-		0.0		-		0.0		-		0.0		884	78.8	19.3	E	-		0.0		1,229	48.0	16.4	D
Northlake Boulevard and I-95 East Ramp	AM	575	76.6	12.2	E	-		0.0		1,007	32.9	9.2	C	-		0.0		-		0.0		-		0.0	
	PM	816	96.2	21.8	F	-		0.0		1,397	30.6	11.9	C	-		0.0		-		0.0		-		0.0	
Northlake Boulevard and Roan Lane	AM	-		0.0		-		0.0		-		0.0		-		0.0		-		0.0		176	0.1	0.0	A
	PM	-		0.0		-		0.0		-		0.0		-		0.0		-		0.0		103	0.1	0.0	A
Northlake Boulevard and Sandtree Drive	AM	305	79.1	6.7	E	1	10.7	0.0	B	99	0.4	0.0	A	96	123.7	3.3	F	1	123.7	0.0	F	136	123.7	4.7	F
	PM	421	237.8	27.8	F	1	10.8	0.0	B	120	0.5	0.0	A	47	139.4	1.8	F	1	139.4	0.0	F	161	139.4	6.2	F
				73.7				**0.1**				**22.2**				**51.9**				**0.2**				**28.2**	
PGA Boulevard and FL Turnpike	AM	725	6.4	1.3	A	-		0.0		-		0.0		1,528	103.0	43.7	F	-	107.7	0.0	F	144	0.1	0.0	A
	PM	1,299	65.7	23.7	E	-		0.0		-		0.0		1,016	72.4	20.4	E	-	82.7	0.0	F	117	0.1	0.0	A
PGA Boulevard and Central Boulevard	AM	40		0.0		46		0.0		174		0.0		373		0.0		64		0.0		1,444		0.0	
	PM	50		0.0		62		0.0		172		0.0		334		0.0		58		0.0		1,467		0.0	
PGA Boulevard and North Military Trail	AM	951		0.0		1,594		0.0		50		0.0		1,587		0.0		1,133		0.0		331		0.0	
	PM	1,253		0.0		2,154		0.0		131		0.0		1,483		0.0		1,113		0.0		353		0.0	
PGA Boulevard and West Ramps	AM	-		0.0		-		0.0		-		0.0		607	166.3	28.0	F	-		0.0		288	0.3	0.0	A
	PM	-		0.0		-		0.0		-		0.0		194	94.4	5.1	F	-		0.0		120	0.1	0.0	A
PGA Boulevard and NB OFF Ramps	AM	-		0.0		-		0.0		2,217	77.0	47.4	E	-		0.0		-		0.0		-		0.0	
	PM	-		0.0		-		0.0		2,156	63.6	38.1	E	-		0.0		-		0.0		-		0.0	
I-95 and PGA Blvd NB On Ramps	AM	128		0.0		-		0.0		-		0.0		-		0.0		-		0.0		1,334		0.0	
	PM	594		0.0		-		0.0		-		0.0		-		0.0		-		0.0		1,610		0.0	
PGA Boulevard and RCA Boulevard	AM	-		0.0		-		0.0		76	0.1	0.0	A	-		0.0		-		0.0		-		0.0	
	PM	-		0.0		-		0.0		516	0.6	0.1	A	-		0.0		-		0.0		-		0.0	
PGA Boulevard and Lake Victoria Gardens	AM	215	38.0	2.3	D	1	-	0.0	0	86	2.5	0.1	A	-		0.0		-		0.0		11	0.2	0.0	A
	PM	300	120.6	10.1	F	-		0.0		129	12.0	0.4	B	-		0.0		-		0.0		47	4.3	0.1	A
				12.3				**0.0**				**86.1**				**97.3**				**0.0**				**0.1**	
North Military Trail and Donald Ross	AM	76		0.0		1,698		0.0		34		0.0		210		0.0		1,884		0.0		605		0.0	
	PM	49		0.0		1,790		0.0		195		0.0		193		0.0		1,693		0.0		561		0.0	
North Military Trail and Hood Road	AM	26		0.0		1,333		0.0		765		0.0		284		0.0		1,220		0.0		898		0.0	
	PM	238		0.0		1,655		0.0		762		0.0		263		0.0		1,133		0.0		887		0.0	
North Military Trail and Kyoto Gardens Drive	AM	79	19.4	0.4	B	2,094	31.8	18.5	C	550	3.5	0.5	A	205	105.7	6.0	F	2,697	45.0	33.7	D	3	-	0.0	0
	PM	94	321.4	8.4	F	2,607	25.8	18.7	C	723	3.1	0.6	A	50	128.2	1.8	F	2,305	10.6	6.8	B	17	10.6	0.1	B
North Military Trail and PGA Boulevard	AM	951	95.6	25.3	F	1,594	195.7	86.7	F	50	0.5	0.0	A	1,587	234.9	103.6	F	1,133	84.1	26.5	F	331	84.1	7.7	F
	PM	1,253	122.9	42.8	F	2,154	272.7	163.2	F	131	6.8	0.2	A	1,483	265.6	109.4	F	1,113	110.0	34.0	F	353	110.0	10.8	F
				76.8				**287.0**				**1.4**				**220.8

APPENDIX AJ - DELAY COMPARISON SIX ALTERNATIVES

Intersection	Period	Eastbound												Westbound											
		Left				Thru				Right				Left				Thru				Right			
		Vol.	Avg. Delay/ Veh (sec)	Total Delay Hours	LOS	Vol.	Avg. Delay/ Veh (sec)	Total Delay Hours	LOS	Vol.	Avg. Delay/ Veh (sec)	Total Delay Hours	LOS	Vol.	Avg. Delay/ Veh (sec)	Total Delay Hours	LOS	Vol.	Avg. Delay/ Veh (sec)	Total Delay Hours	LOS	Vol.	Avg. Delay/ Veh (sec)	Total Delay Hours	LOS
Alternative 2																									
Central Boulevard and Donald Ross Road	AM	128	71.7	2.5	E	1,092	76.2	23.1	E	318	28.7	2.5	C	395	129.4	14.2	F	790	52.4	11.5	D	286	17.6	1.4	B
	PM	542	131.2	19.8	F	1,082	69.6	20.9	E	476	36.5	4.8	D	356	105.9	10.5	F	1,198	127.7	42.5	F	381	36.4	3.9	D
Central Boulevard and Hood Road	AM	307	67.0	5.7	E	680	181.6	34.3	F	335	41.1	3.8	D	1,385	97.0	37.3	F	240	37.7	2.5	D	12	0.1	0.0	A
	PM	204	73.5	4.2	E	412	94.8	10.8	F	227	23.4	1.5	C	1,299	94.6	34.1	F	603	48.7	8.2	D	263	19.0	1.4	B
Central Boulevard and Victoria Falls Boulevard	AM	-		0.0		-		0.0		-		0.0		107	88.0	2.6	F	-		0.0		86	16.6	0.4	B
	PM	-		0.0		-		0.0		-		0.0		221	124.0	7.6	F	-		0.0		256	139.1	9.9	F
Central Boulevard and I-95 SB Ramp	AM	-		0.0		1,533	23.2	9.9	C	68	1.7	0.0	A	1,770	44.1	21.7	D	1,368	6.6	2.5	A	-		0.0	
	PM	-		0.0		1,895	32.0	16.8	C	49	1.6	0.0	A	1,686	51.6	24.2	D	1,300	7.0	2.5	A	-		0.0	
Central Boulevard and I-95 NB Ramp	AM	511	69.9	9.9	E	1,152	16.1	5.2	B	-		0.0		-		0.0		3,104	55.4	47.8	E	72	6.4	0.1	A
	PM	535	82.5	12.3	F	1,544	19.4	8.3	B	-		0.0		-		0.0		2,910	41.9	33.9	D	63	7.6	0.1	A
Central Boulevard and 117th Court	AM	-		0.0		-		0.0		-		0.0		252	41.4	2.9	D	-		0.0		190	20.2	1.1	C
	PM	-		0.0		-		0.0		-		0.0		271	55.3	4.2	E	-		0.0		181	19.9	1.0	B
Central Boulevard and PGA Boulevard	AM	1,359	95.7	36.1	F	1,961	27.3	14.9	C	45	27.3	0.3	C	151	96.0	4.0	F	1,376	87.6	33.5	F	256	10.4	0.7	B
	PM	1,629	241.6	109.3	F	1,330	24.3	9.0	C	32	24.3	0.2	C	218	79.9	4.8	E	2,148	189.4	113.0	F	488	38.9	5.3	D
				199.8				**153.2**				**13.3**				**168.1**				**297.8**				**25.3**	
Donald Ross Rd and 64th Dr N-E Pointe Court	AM	3		0.0		961		0.0		4		0.0		14		0.0		445		0.0		19		0.0	
	PM	3		0.0		662		0.0		-		0.0		39		0.0		855		0.0		48		0.0	
Donald Ross Rd and West Ramp	AM	-		0.0		523		0.0		371		0.0		1,300		0.0		391		0.0		-		0.0	
	PM	-		0.0		479		0.0		150		0.0		1,366		0.0		831		0.0		-		0.0	
Donald Ross Rd and East Ramp	AM	43		0.0		1,202		0.0		-		0.0		-		0.0		1,548		0.0		331		0.0	
	PM	43		0.0		1,139		0.0		-		0.0		-		0.0		1,812		0.0		707		0.0	
Donald Ross Rd and Parkside Drive	AM	713		0.0		1,148		0.0		781		0.0		639		0.0		663		0.0		136		0.0	
	PM	710		0.0		1,260		0.0		453		0.0		653		0.0		1,178		0.0		180		0.0	
Donald Ross Rd and Central Boulevard	AM	128		0.0		1,092		0.0		318		0.0		395		0.0		790		0.0		286		0.0	
	PM	542		0.0		1,082		0.0		476		0.0		356		0.0		1,198		0.0		381		0.0	
Donald Ross Rd and North Military Trail	AM	447		0.0		1,390		0.0		38		0.0		154		0.0		804		0.0		123		0.0	
	PM	466		0.0		1,265		0.0		45		0.0		254		0.0		1,358		0.0		301		0.0	
				0.0				**0.0**				**0.0**				**0.0**				**0.0**				**0.0**	
Hood Rd and Eastpointe Boulevard	AM	10		0.0		316		0.0		-		0.0		-		0.0		195		0.0		30		0.0	
	PM	13		0.0		271		0.0		-		0.0		-		0.0		320		0.0		51		0.0	
Hood Rd and I-95 SB Ramp	AM	-		0.0		-		0.0		-		0.0		-		0.0		-		0.0		-		0.0	
	PM	-		0.0		-		0.0		-		0.0		-		0.0		-		0.0		-		0.0	
Hood Rd and I-95 NB Ramp	AM	-		0.0		-		0.0		-		0.0		-		0.0		-		0.0		-		0.0	
	PM	-		0.0		-		0.0		-		0.0		-		0.0		-		0.0		-		0.0	
Hood Rd and Central Boulevard	AM	307		0.0		680		0.0		335		0.0		1,385		0.0		240		0.0		12		0.0	
	PM	204		0.0		412		0.0		227		0.0		1,299		0.0		603		0.0		263		0.0	
Hood Rd and North Military Trail	AM	633		0.0		1,190		0.0		413		0.0		871		0.0		712		0.0		174		0.0	
	PM	478		0.0		1,177		0.0		221		0.0		833		0.0		1,039		0.0		234		0.0	
				0.0				**0.0**				**0.0**				**0.0**				**0.0**				**0.0**	
Northlake Boulevard and Keating Drive	AM	-		0.0		2,850		0.0		156		0.0		288		0.0		1,564		0.0		86		0.0	
	PM	-		0.0		1,839		0.0		60		0.0		213		0.0		2,543		0.0		189		0.0	
Northlake Boulevard and I-95 West Ramp	AM	-		0.0		2,267		0.0		915		0.0		896		0.0		984		0.0		-		0.0	
	PM	-		0.0		1,505		0.0		659		0.0		1,333		0.0		1,716		0.0		-		0.0	
Northlake Boulevard and I-95 East Ramp	AM	1,203		0.0		2,223		0.0		-		0.0		-		0.0		1,305		0.0		531		0.0	
	PM	940		0.0		1,449		0.0		-		0.0		-		0.0		2,233		0.0		1,077		0.0	
Northlake Boulevard and Roan Lane	AM	118		0.0		3,382		0.0		-		0.0		-		0.0		1,938		0.0		80		0.0	
	PM	127		0.0		2,826		0.0		-		0.0		-		0.0		3,422		0.0		91		0.0	
Northlake Boulevard and Sandtree Drive	AM	138		0.0		2,738		0.0		355		0.0		115		0.0		1,396		0.0		68		0.0	
	PM	192		0.0		2,292		0.0		363		0.0		124		0.0		2,729		0.0		149		0.0	
				0.0				**0.0**				**0.0**				**0.0**				**0.0**				**0.0**	
PGA Boulevard and FL Turnpike	AM	86		0.0		1,779		0.0		-		0.0		-		0.0		1,989		0.0		725		0.0	
	PM	226		0.0		1,850		0.0		-		0.0		-		0.0		2,277		0.0		1,299		0.0	
PGA Boulevard and Central Boulevard	AM	1,359		0.0		1,961		0.0		45		0.0		151		0.0		1,376		0.0		256		0.0	
	PM	1,629		0.0		1,330		0.0		32		0.0		218		0.0		2,148		0.0		488		0.0	
PGA Boulevard and North Military Trail	AM	343		0.0		1,289		0.0		1,068		0.0		770		0.0		633		0.0		962		0.0	
	PM	242		0.0		975		0.0		696		0.0		958		0.0		1,346		0.0		1,006		0.0	
PGA Boulevard and West Ramps	AM	-		0.0		965		0.0		1,846		0.0		-		0.0		2,108		0.0		-		0.0	
	PM	-		0.0		743		0.0		1,760		0.0		-		0.0		3,154		0.0		-		0.0	
PGA Boulevard and NB OFF Ramps	AM	-		0.0		1,571		0.0		-		0.0		-		0.0		2,108		0.0		-		0.0	
	PM	-		0.0		937		0.0		-		0.0		-		0.0		3,154		0.0		-		0.0	
PGA Boulevard and RCA Boulevard	AM	-		0.0		2,506		0.0		1,276		0.0		137		0.0		902		0.0		-		0.0	
	PM	-		0.0		1,800		0.0		1,113		0.0		81		0.0		2,139		0.0		-		0.0	
PGA Boulevard and Lake Victoria Gardens	AM	424		0.0		1,789		0.0		368		0.0		-		0.0		1,500		0.0		-		0.0	
	PM	507		0.0		1,436		0.0		373		0.0		-		0.0		3,093		0.0		-		0.0	
PGA Passage and Lake Victoria Gardens	AM	-		0.0		-		0.0		-		0.0		-		0.0		38		0.0		93		0.0	
	PM	-		0.0		-		0.0		-		0.0		-		0.0		17		0.0		236		0.0	
				0.0				**0.0**				**0.0**				**0.0**				**0.0**				**0.0**	
North Military Trail and Donald Ross	AM	447		0.0		1,390		0.0		38		0.0		154		0.0		804		0.0		123		0.0	
	PM	466		0.0		1,265		0.0		45		0.0		254		0.0		1,358		0.0		301		0.0	
North Military Trail and Hood Road	AM	633		0.0		1,190		0.0		413		0.0		871		0.0		712		0.0		174		0.0	
	PM	478		0.0		1,177		0.0		221		0.0		833		0.0		1,039		0.0		234		0.0	
North Military Trail and Kyoto Gardens Drive	AM	-		0.0		-		0.0		167		0.0		271		0.0		93		0.0		80		0.0	
	PM	-		0.0		-		0.0		106		0.0		323		0.0		94		0.0		194		0.0	
North Military Trail and PGA Boulevard	AM	343		0.0		1,289		0.0		1,068		0.0		770		0.0		633		0.0		962		0.0	
	PM	242		0.0		975		0.0		696		0.0		958		0.0		1,346		0.0		1,006		0.0	
				0.0				**0.0**				**0.0**				**0.0**				**0.0**				**0.0**	

Intersection	Period	Northbound												Southbound											
		Left				Thru				Right				Left				Thru				Right			
		Vol.	Avg. Delay/ Veh (sec)	Total Delay Hours	LOS	Vol.	Avg. Delay/ Veh (sec)	Total Delay Hours	LOS	Vol.	Avg. Delay/ Veh (sec)	Total Delay Hours	LOS	Vol.	Avg. Delay/ Veh (sec)	Total Delay Hours	LOS	Vol.	Avg. Delay/ Veh (sec)	Total Delay Hours	LOS	Vol.	Avg. Delay/ Veh (sec)	Total Delay Hours	LOS
Central Boulevard and Donald Ross Road	AM	365	102.1	10.4	F	1,510	77.4	32.5	E	128	3.7	0.1	A	667	105.8	19.6	F	1,842	78.6	40.2	E	249	7.4	0.5	A
	PM	387	73.9	7.9	E	1,970	149.2	81.6	F	105	1.4	0.0	A	599	170.2	28.3	F	1,355	51.6	19.4	D	237	9.0	0.6	A
Central Boulevard and Hood Road	AM	204	87.2	4.9	F	1,385	74.8	28.8	E	1,048	17.3	5.0	B	508	188.2	26.6	F	1,584	59.6	26.2	E	198	10.2	0.6	B
	PM	381	64.0	6.8	E	1,823	67.6	34.2	E	1,173	14.0	4.6	B	291	126.2	10.2	F	1,309	51.4	18.7	D	337	12.3	1.2	B
Central Boulevard and Victoria Falls Boulevard	AM	-		0.0		2,551	21.3	15.1	C	217	21.3	1.3	C	234	78.1	5.1	E	3,069	67.2	57.3	E	-		0.0	
	PM	-		0.0		3,121	27.4	23.8	C	280	27.4	2.1	C	83	64.3	1.5	E	2,752	52.4	40.1	D	-		0.0	
Central Boulevard and I-95 SB Ramp	AM	-		0.0		-		0.0		-		0.0		130	121.3	4.4	F	-		0.0		245	19.0	1.3	B
	PM	-		0.0		-		0.0		-		0.0		184	129.7	6.6	F	-		0.0		520	215.7	31.2	F
Central Boulevard and I-95 NB Ramp	AM	-		0.0		-		0.0		-		0.0		1,616	71.4	32.1	E	-		0.0		34	20.1	0.2	C
	PM	-		0.0		-		0.0		-		0.0		1,857	96.9	50.0	F	-		0.0		76	21.7	0.5	C
Central Boulevard and 117th Court	AM	-		0.0		1,331	16.5	6.1	B	273	4.5	0.3	A	135	36.4	1.4	D	1,450	11.0	4.4	B	-		0.0	
	PM	-		0.0		1,714	26.6	12.7	C	285	6.8	0.5	A	196	139.8	7.6	F	1,534	12.1	5.2	B	-		0.0	
Central Boulevard and PGA Boulevard	AM	40	107.5	1.2	F	46	107.5	1.4	F	174	19.3	0.9	B	373	169.3	17.5	F	64	158.1	2.8	F	1,444	33.7	13.5	C
	PM	50	227.1	3.2	F	62	227.1	3.9	F	172	16.6	0.8	B	334	238.0	22.1	F	58	221.7	3.6	F	1,467	63.1	25.7	E
				34.4				**240.0**				**15.8**				**232.9**				**217.9**				**75.1**	
Donald Ross Rd and 64th Dr N-E Pointe Court	AM	1		0.0		-		0.0		16		0.0		60		0.0		-		0.0		5		0.0	
	PM	6		0.0		-		0.0		30		0.0		28		0.0		-		0.0		-		0.0	
Donald Ross Rd and West Ramp	AM	-		0.0		-		0.0		-		0.0		722		0.0		-		0.0		51		0.0	
	PM	-		0.0		-		0.0		-		0.0		704		0.0		-		0.0		58		0.0	
Donald Ross Rd and East Ramp	AM	143		0.0		-		0.0		1,308		0.0		-		0.0		-		0.0		-		0.0	
	PM	385		0.0		-		0.0		1,425		0.0		-		0.0		-		0.0		-		0.0	
Donald Ross Rd and Parkside Drive	AM	416		0.0		133		0.0		476		0.0		82		0.0		185		0.0		609		0.0	
	PM	798		0.0		141		0.0		818		0.0		111		0.0		143		0.0		690		0.0	
Donald Ross Rd and Central Boulevard	AM	365		0.0		1,510		0.0		128		0.0		667		0.0		1,842		0.0		249		0.0	
	PM	387		0.0		1,970		0.0		105		0.0		599		0.0		1,355		0.0		237		0.0	
Donald Ross Rd and North Military Trail	AM	76		0.0		1,698		0.0		34		0.0		210		0.0		1,884		0.0		605		0.0	
	PM	49		0.0		1,790		0.0		195		0.0		193		0.0		1,693		0.0		561		0.0	
				0.0				**0.0**				**0.0**				**0.0**				**0.0**				**0.0**	
Hood Rd and Eastpointe Boulevard	AM	-		0.0		-		0.0		-		0.0		29		0.0		-		0.0		10		0.0	
	PM	-		0.0		-		0.0		-		0.0		44		0.0		-		0.0		5		0.0	
Hood Rd and I-95 SB Ramp	AM	-		0.0		-		0.0		-		0.0		-		0.0		-		0.0		-		0.0	
	PM	-		0.0		-		0.0		-		0.0		-		0.0		-		0.0		-		0.0	
Hood Rd and I-95 NB Ramp	AM	-		0.0		-		0.0		-		0.0		-		0.0		-		0.0		-		0.0	
	PM	-		0.0		-		0.0		-		0.0		-		0.0		-		0.0		-		0.0	
Hood Rd and Central Boulevard	AM	204		0.0		1,385		0.0		1,048		0.0		508		0.0		1,584		0.0		198		0.0	
	PM	381		0.0		1,823		0.0		1,173		0.0		291		0.0		1,309		0.0		337		0.0	
Hood Rd and North Military Trail	AM	26		0.0		1,333		0.0		765		0.0		284		0.0		1,220		0.0		898		0.0	
	PM	238		0.0		1,655		0.0		762		0.0		263		0.0		1,133		0.0		887		0.0	
				0.0				**0.0**				**0.0**				**0.0**				**0.0**				**0.0**	
Northlake Boulevard and Keating Drive	AM	79		0.0		-		0.0		154		0.0		178		0.0		3		0.0		-		0.0	
	PM	61		0.0		3		0.0		251		0.0		73		0.0		2		0.0		-		0.0	
Northlake Boulevard and I-95 West Ramp	AM	-		0.0		-		0.0		-		0.0		1,160		0.0		-		0.0		955		0.0	
	PM	-		0.0		-		0.0		-		0.0		884		0.0		-		0.0		1,229		0.0	
Northlake Boulevard and I-95 East Ramp	AM	575		0.0		-		0.0		1,007		0.0		-		0.0		-		0.0		-		0.0	
	PM	816		0.0		-		0.0		1,397		0.0		-		0.0		-		0.0		-		0.0	
Northlake Boulevard and Roan Lane	AM	-		0.0		-		0.0		-		0.0		-		0.0		-		0.0		176		0.0	
	PM	-		0.0		-		0.0		-		0.0		-		0.0		-		0.0		103		0.0	
Northlake Boulevard and Sandtree Drive	AM	305		0.0		1		0.0		99		0.0		96		0.0		1		0.0		136		0.0	
	PM	421		0.0		1		0.0		120		0.0		47		0.0		1		0.0		161		0.0	
				0.0				**0.0**				**0.0**				**0.0**				**0.0**				**0.0**	
PGA Boulevard and FL Turnpike	AM	-		0.0		-		0.0		-		0.0		1,528		0.0		-		0.0		144		0.0	
	PM	-		0.0		-		0.0		-		0.0		1,016		0.0		-		0.0		117		0.0	
PGA Boulevard and Central Boulevard	AM	40		0.0		46		0.0		174		0.0		373		0.0		64		0.0		1,444		0.0	
	PM	50		0.0		62		0.0		172		0.0		334		0.0		58		0.0		1,467		0.0	
PGA Boulevard and North Military Trail	AM	951		0.0		1,594		0.0		50		0.0		1,587		0.0		1,133		0.0		331		0.0	
	PM	1,253		0.0		2,154		0.0		131		0.0		1,483		0.0		1,113		0.0		353		0.0	
PGA Boulevard and West Ramps	AM	-		0.0		-		0.0		-		0.0		607		0.0		-		0.0		288		0.0	
	PM	-		0.0		-		0.0		-		0.0		194		0.0		-		0.0		120		0.0	
PGA Boulevard and NB OFF Ramps	AM	-		0.0		-		0.0		2,217		0.0		-		0.0		-		0.0		-		0.0	
	PM	-		0.0		-		0.0		2,156		0.0		-		0.0		-		0.0		-		0.0	
PGA Boulevard and RCA Boulevard	AM	-		0.0		-		0.0		76		0.0		-		0.0		-		0.0		-		0.0	
	PM	-		0.0		-		0.0		516		0.0		-		0.0		-		0.0		-		0.0	
PGA Boulevard and Lake Victoria Gardens	AM	215		0.0		1		0.0		86		0.0		-		0.0		-		0.0		11		0.0	
	PM	300		0.0		-		0.0		129		0.0		-		0.0		-		0.0		47		0.0	
PGA Passage and Lake Victoria Gardens	AM	-		0.0		349		0.0		-		0.0		-		0.0		11		0.0		61		0.0	
	PM	-		0.0		359		0.0		-		0.0		-		0.0		47		0.0		230		0.0	
				0.0				**0.0**				**0.0**				**0.0**				**0.0**				**0.0**	
North Military Trail and Donald Ross	AM	76		0.0		1,698		0.0		34		0.0		210		0.0		1,884		0.0		605		0.0	
	PM	49		0.0		1,790		0.0		195		0.0		193		0.0		1,693		0.0		561		0.0	
North Military Trail and Hood Road	AM	26		0.0		1,333		0.0		765		0.0		284		0.0		1,220		0.0		898		0.0	
	PM	238		0.0		1,655		0.0		762		0.0		263		0.0		1,133		0.0		887		0.0	
North Military Trail and Kyoto Gardens Drive	AM	79		0.0		2,094		0.0		550		0.0		205		0.0		2,697		0.0		3		0.0	
	PM	94		0.0		2,607		0.0		723		0.0		50		0.0		2,305		0.0		17		0.0	
North Military Trail and PGA Boulevard	AM	951		0.0		1,594		0.0		50		0.0		1,587		0.0		1,133		0.0		331		0.0	
	PM	1,253		0.0		2,154		0.0		131		0.0		1,483		0.0		1,113		0.0		353		0.0	
				0.0				**0.0**				**0.0**				**0.0**				**0.0**				**0.0**	

APPENDIX AJ - DELAY COMPARISON SIX ALTERNATIVES

Intersection	Period	Eastbound												Westbound											
		Left				Thru				Right				Left				Thru				Right			
		Vol.	Avg. Delay/ Veh (sec)	Total Delay Hours	LOS	Vol.	Avg. Delay/ Veh (sec)	Total Delay Hours	LOS	Vol.	Avg. Delay/ Veh (sec)	Total Delay Hours	LOS	Vol.	Avg. Delay/ Veh (sec)	Total Delay Hours	LOS	Vol.	Avg. Delay/ Veh (sec)	Total Delay Hours	LOS	Vol.	Avg. Delay/ Veh (sec)	Total Delay Hours	LOS
Alternative 3																									
Central Boulevard and Donald Ross Road	AM	128	71.7	2.5	E	1,092	76.2	23.1	E	318	28.7	2.5	C	395	129.4	14.2	F	790	52.4	11.5	D	286	17.6	1.4	B
	PM	542	131.2	19.8	F	1,082	69.6	20.9	E	476	36.5	4.8	D	356	105.9	10.5	F	1,198	127.7	42.5	F	381	36.4	3.9	D
Central Boulevard and Hood Road	AM	307	67.0	5.7	E	680	181.6	34.3	F	335	41.1	3.8	D	1,385	97.0	37.3	F	240	37.7	2.5	D	12	0.1	0.0	A
	PM	204	78.3	4.4	E	412	94.8	10.8	F	227	36.3	2.3	D	1,299	103.9	37.5	F	603	48.2	8.1	D	263	15.9	1.2	B
Central Boulevard and Victoria Falls Boulevard	AM	-		0.0		-		0.0		-		0.0		107	88.0	2.6	F	-		0.0		86	16.6	0.4	B
	PM	-		0.0		-		0.0		-		0.0		221	124.0	7.6	F	-		0.0		256	139.1	9.9	F
Central Boulevard and I-95 SB Ramp	AM	-		0.0		1,533	18.4	7.8	B	68	0.8	0.0	A	1,770	46.9	23.1	D	1,368	7.7	2.9	A	-		0.0	
	PM	-		0.0		1,895	20.0	10.5	B	49	0.4	0.0	A	1,686	84.9	39.8	F	1,300	8.3	3.0	A	-		0.0	
Central Boulevard and I-95 NB Ramp	AM	511	83.9	11.9	F	1,152	36.6	11.7	D	-		0.0		-		0.0		3,104	28.0	24.1	C	72	1.1	0.0	A
	PM	535	69.5	10.3	E	1,544	35.1	15.1	D	-		0.0		-		0.0		2,910	36.3	29.3	D	63	0.5	0.0	A
Central Boulevard and 117th Court	AM	-		0.0		-		0.0		-		0.0		252	41.4	2.9	D	-		0.0		190	20.2	1.1	C
	PM	-		0.0		-		0.0		-		0.0		271	55.3	4.2	E	-		0.0		181	19.9	1.0	B
Central Boulevard and PGA Boulevard	AM	1,359	95.7	36.1	F	1,961	27.3	14.9	C	45	27.3	0.3	C	151	96.0	4.0	F	1,376	87.6	33.5	F	256	10.4	0.7	B
	PM	1,629	241.6	109.3	F	1,330	24.3	9.0	C	32	24.3	0.2	C	218	79.9	4.8	E	2,148	189.4	113.0	F	488	38.9	5.3	D
				200.1				**158.2**				**14.1**				**188.5**				**270.5**				**24.8**	
Donald Ross Rd and 64th Dr N-E Pointe Court	AM	3	8.4	0.0	A	961	-	0.0	A	4	-	0.0	A	14	10.6	0.0	B	445	-	0.0	A	19	-	0.0	A
	PM	3	10.2	0.0	B	662	-	0.0	A	-		0.0		39	9.3	0.1	A	855	-	0.0	A	48	-	0.0	A
Donald Ross Rd and West Ramp	AM	-		0.0		523	37.3	5.4	D	371	0.4	0.0	A	1,300	87.8	31.7	F	391	8.8	1.0	A	-		0.0	
	PM	-		0.0		479	34.5	4.6	C	150	0.1	0.0	A	1,366	87.0	33.0	F	831	10.7	2.5	B	-		0.0	
Donald Ross Rd and East Ramp	AM	43	42.1	0.5	D	1,202	112.9	37.7	F	-		0.0		-		0.0		1,548	19.8	8.5	B	331	0.3	0.0	A
	PM	43	39.5	0.5	D	1,139	96.1	30.4	F	-		0.0		-		0.0		1,812	20.4	10.3	C	707	1.1	0.2	A
Donald Ross Rd and Parkside Drive	AM	713	51.7	10.2	D	1,148	6.9	2.2	A	781	-	0.0	0	639	-	0.0	0	663	36.4	6.7	D	136	8.0	0.3	A
	PM	710	76.2	15.0	E	1,260	8.1	2.8	A	453	-	0.0	0	653	-	0.0	0	1,178	74.2	24.3	E	180	7.1	0.4	A
Donald Ross Rd and Central Boulevard	AM	128		0.0		1,092		0.0		318		0.0		395		0.0		790		0.0		286		0.0	
	PM	542		0.0		1,082		0.0		476		0.0		356		0.0		1,198		0.0		381		0.0	
Donald Ross Rd and North Military Trail	AM	447	109.2	13.6	F	1,390	161.0	62.2	F	38	0.3	0.0	A	154	367.8	15.7	F	804	89.7	20.0	F	123	1.7	0.1	A
	PM	466	141.9	18.4	F	1,265	78.9	27.7	E	45	0.3	0.0	A	254	133.5	9.4	F	1,358	118.7	44.8	F	301	18.7	1.6	B
				58.2				**173.0**				**0.1**				**90.0**				**118.0**				**2.5**	
Hood Rd and Eastpointe Boulevard	AM	10	0.1	0.0	A	316	0.2	0.0	A	-		0.0		-		0.0		195	-	0.0	A	30	-	0.0	A
	PM	13	0.1	0.0	A	271	0.4	0.0	A	-		0.0		-		0.0		320	-	0.0	A	51	-	0.0	A
Hood Rd and I-95 SB Ramp	AM	-		0.0		-		0.0		-		0.0		-		0.0		-		0.0		-		0.0	
	PM	-		0.0		-		0.0		-		0.0		-		0.0		-		0.0		-		0.0	
Hood Rd and I-95 NB Ramp	AM	-		0.0		-		0.0		-		0.0		-		0.0		-		0.0		-		0.0	
	PM	-		0.0		-		0.0		-		0.0		-		0.0		-		0.0		-		0.0	
Hood Rd and Central Boulevard	AM	307		0.0		680		0.0		335		0.0		1,385		0.0		240		0.0		12		0.0	
	PM	204		0.0		412		0.0		227		0.0		1,299		0.0		603		0.0		263		0.0	
Hood Rd and North Military Trail	AM	633	50.5	8.9	D	1,190	162.4	53.7	F	413	41.9	4.8	D	871	131.6	31.8	F	712	94.6	18.7	F	174	5.6	0.3	A
	PM	478	77.7	10.3	E	1,177	191.8	62.7	F	221	18.3	1.1	B	833	158.8	36.7	F	1,039	94.2	27.2	F	234	18.1	1.2	B
				19.2				**116.4**				**5.9**				**68.6**				**45.9**				**1.4**	
Northlake Boulevard and Keating Drive	AM	-		0.0		2,850	54.0	42.8	D	156	3.7	0.2	A	288	111.0	8.9	F	1,564	7.4	3.2	A	86	0.7	0.0	A
	PM	-		0.0		1,839	26.9	13.7	C	60	0.2	0.0	A	213	20.3	1.2	C	2,543	14.1	10.0	B	189	1.5	0.1	A
Northlake Boulevard and I-95 West Ramp	AM	-		0.0		2,267	41.6	26.2	D	915	1.9	0.5	A	896	207.8	51.7	F	984	8.7	2.4	A	-		0.0	
	PM	-		0.0		1,505	51.7	21.6	D	659	0.9	0.2	A	1,333	94.9	35.1	F	1,716	9.6	4.6	A	-		0.0	
Northlake Boulevard and I-95 East Ramp	AM	1,203	58.1	19.4	E	2,223	11.1	6.9	B	-		0.0		-		0.0		1,305	47.2	17.1	D	531	0.7	0.1	A
	PM	940	111.2	29.0	F	1,449	13.1	5.3	B	-		0.0		-		0.0		2,233	99.7	61.8	F	1,077	3.1	0.9	A
Northlake Boulevard and Roan Lane	AM	118	19.9	0.7	B	3,382	0.9	0.8	A	-		0.0		-		0.0		1,938	6.0	3.2	A	80	0.1	0.0	A
	PM	127	55.8	2.0	E	2,826	0.5	0.4	A	-		0.0		-		0.0		3,422	7.5	7.1	A	91	0.1	0.0	A
Northlake Boulevard and Sandtree Drive	AM	138	107.4	4.1	F	2,738	85.5	65.0	F	355	2.9	0.3	A	115	88.6	2.8	F	1,396	29.9	11.6	C	68	29.9	0.6	C
	PM	192	416.2	22.2	F	2,292	63.5	40.4	E	363	2.2	0.2	A	124	250.5	8.6	F	2,729	97.4	73.8	F	149	97.4	4.0	F
				77.4				**223.1**				**1.3**				**108.4**				**194.9**				**5.7**	
PGA Boulevard and FL Turnpike	AM	86	54.9	1.3	D	1,779	39.7	19.6	D	-		0.0		-		0.0		1,989	36.3	20.1	D	725	6.4	1.3	A
	PM	226	148.2	9.3	F	1,850	24.6	12.6	C	-		0.0		-		0.0		2,277	45.3	28.7	D	1,299	65.7	23.7	E
PGA Boulevard and Central Boulevard	AM	1,359		0.0		1,961		0.0		45		0.0		151		0.0		1,376		0.0		256		0.0	
	PM	1,629		0.0		1,330		0.0		32		0.0		218		0.0		2,148		0.0		488		0.0	
PGA Boulevard and North Military Trail	AM	343		0.0		1,289		0.0		1,068		0.0		770		0.0		633		0.0		962		0.0	
	PM	242		0.0		975		0.0		696		0.0		958		0.0		1,346		0.0		1,006		0.0	
PGA Boulevard and West Ramps	AM	-		0.0		965	1.2	0.3	A	1,846	154.0	79.0	F	-		0.0		2,108	8.6	5.0	A	-		0.0	
	PM	-		0.0		743	0.4	0.1	A	1,760	130.2	63.7	F	-		0.0		3,154	17.4	15.2	B	-		0.0	
PGA Boulevard and NB OFF Ramps	AM	-		0.0		1,571	95.0	41.5	F	-		0.0		-		0.0		2,108	0.3	0.2	A	-		0.0	
	PM	-		0.0		937	75.6	19.7	E	-		0.0		-		0.0		3,154	1.0	0.9	A	-		0.0	
I-95 and PGA Blvd NB On Ramps	AM	6		0.0		3,782		0.0		-		0.0		-		0.0		774		0.0		128		0.0	
	PM	179		0.0		2,913		0.0		-		0.0		-		0.0		1,545		0.0		594		0.0	
PGA Boulevard and RCA Boulevard	AM	-		0.0		2,506	0.6	0.4	A	1,276	0.6	0.2	A	137	40.2	1.5	D	902	0.1	0.0	A	-		0.0	
	PM	-		0.0		1,800	0.3	0.2	A	1,113	0.3	0.1	A	81	10.5	0.2	B	2,139	0.3	0.2	A	-		0.0	
PGA Boulevard and Lake Victoria Gardens	AM	424	25.5	3.0	C	1,789	4.2	2.1	A	368	1.1	0.1	A	-		0.0		1,500	21.8	9.1	C	-		0.0	
	PM	507	160.7	22.6	F	1,436	2.1	0.8	A	373	0.5	0.1	A	-		0.0		3,093	44.6	38.3	D	-		0.0	
				36.3				**97.3**				**143.1**				**1.8**				**117.6**				**25.0**	
North Military Trail and Donald Ross	AM	447		0.0		1,390		0.0		38		0.0		154		0.0		804		0.0		123		0.0	
	PM	466		0.0		1,265		0.0		45		0.0		254		0.0		1,358		0.0		301		0.0	
North Military Trail and Hood Road	AM	633		0.0		1,190		0.0		413		0.0		871		0.0		712		0.0		174		0.0	
	PM	478		0.0		1,177		0.0		221		0.0		833		0.0		1,039		0.0		234		0.0	
North Military Trail and Kyoto Gardens Drive	AM	-		0.0		-		0.0		167	-	0.0	0	271	51.8	3.9	D	93	51.8	1.3	D	80	3.0	0.1	A
	PM	-		0.0		-		0.0		106	-	0.0	0	323	73.0	6.5	E	94	73.0	1.9	E	194	27.8	1.5	C
North Military Trail and PGA Boulevard	AM	343	108.5	10.3	F	1,289	272.5	97.6	F	1,068	61.1	18.1	E	770	307.9	65.9	F	633	57.4	10.1	E	962	23.3	6.2	C
	PM	242	189.1	12.7	F	975	285.9	77.4	F	696	8.0	1.5	A	958	302.1	80.4	F	1,346	182.2	68.1	F	1,006	23.3	6.5	C
				23.0				**175.0**				**19.7**				**156.7**				**81.5**				**14.3**	

Intersection	Period	Northbound												Southbound											
		Left				Thru				Right				Left				Thru				Right			
		Vol.	Avg. Delay/ Veh (sec)	Total Delay Hours	LOS	Vol.	Avg. Delay/ Veh (sec)	Total Delay Hours	LOS	Vol.	Avg. Delay/ Veh (sec)	Total Delay Hours	LOS	Vol.	Avg. Delay/ Veh (sec)	Total Delay Hours	LOS	Vol.	Avg. Delay/ Veh (sec)	Total Delay Hours	LOS	Vol.	Avg. Delay/ Veh (sec)	Total Delay Hours	LOS
Alternative 3																									
Central Boulevard and Donald Ross Road	AM	365	102.1	10.4	F	1,510	77.4	32.5	E	128	3.7	0.1	A	667	105.8	19.6	F	1,842	78.6	40.2	E	249	7.4	0.5	A
	PM	387	73.9	7.9	E	1,970	149.2	81.6	F	105	1.4	0.0	A	599	170.2	28.3	F	1,355	51.6	19.4	D	237	9.0	0.6	A
Central Boulevard and Hood Road	AM	204	87.2	4.9	F	1,385	74.8	28.8	E	1,048	17.3	5.0	B	508	188.2	26.6	F	1,584	59.6	26.2	E	198	10.2	0.6	B
	PM	381	97.4	10.3	F	1,823	92.5	46.8	F	1,173	17.2	5.6	B	291	133.1	10.8	F	1,309	55.3	20.1	E	337	13.5	1.3	B
Central Boulevard and Victoria Falls Boulevard	AM	-		0.0		2,551	21.3	15.1	C	217	21.3	1.3	C	234	78.1	5.1	E	3,069	67.2	57.3	E	-		0.0	
	PM	-		0.0		3,121	27.4	23.8	C	280	27.4	2.1	C	83	64.3	1.5	E	2,752	52.4	40.1	D	-		0.0	
Central Boulevard and I-95 SB Ramp	AM	-		0.0		-		0.0		-		0.0		130	128.6	4.6	F	-		0.0		245	1.3	0.1	A
	PM	-		0.0		-		0.0		-		0.0		184	172.4	8.8	F	-		0.0		520	11.5	1.7	B
Central Boulevard and I-95 NB Ramp	AM	34	33.3	0.3	C	-		0.0		1,616	61.5	27.6	E	-		0.0		-		0.0		-		0.0	
	PM	76	28.4	0.6	C	-		0.0		1,857	56.2	29.0	E	-		0.0		-		0.0		-		0.0	
Central Boulevard and 117th Court	AM	-		0.0		1,331	16.5	6.1	B	273	4.5	0.3	A	135	36.4	1.4	D	1,450	11.0	4.4	B	-		0.0	
	PM	-		0.0		1,714	26.6	12.7	C	285	6.8	0.5	A	196	139.8	7.6	F	1,534	12.1	5.2	B	-		0.0	
Central Boulevard and PGA Boulevard	AM	40	107.5	1.2	F	46	107.5	1.4	F	174	19.3	0.9	B	373	169.3	17.5	F	64	158.1	2.8	F	1,444	33.7	13.5	C
	PM	50	227.1	3.2	F	62	227.1	3.9	F	172	16.6	0.8	B	334	238.0	22.1	F	58	221.7	3.6	F	1,467	67.3	27.4	E
				38.8				**252.6**				**73.4**				**153.9**				**219.3**				**45.6**	
Donald Ross Rd and 64th Dr N-E Pointe Court	AM	1	14.2	0.0	B	-	14.2	0.0	B	16	14.2	0.1	B	60	38.5	0.6	E	-	38.5	0.0	E	5	38.5	0.1	E
	PM	6	15.9	0.0	C	-	15.9	0.0	C	30	15.9	0.1	C	28	69.1	0.5	F	-	69.1	0.0	F	-	69.1	0.0	F
Donald Ross Rd and West Ramp	AM	-		0.0		-		0.0		-		0.0		722	65.1	13.1	E	-		0.0		51	-	0.0	A
	PM	-		0.0		-		0.0		-		0.0		704	64.6	12.6	E	-		0.0		58	0.1	0.0	A
Donald Ross Rd and East Ramp	AM	143	38.9	1.5	D	-		0.0		1,308	9.3	3.4	A	-		0.0		-		0.0		-		0.0	
	PM	385	42.2	4.5	D	-		0.0		1,425	20.5	8.1	C	-		0.0		-		0.0		-		0.0	
Donald Ross Rd and Parkside Drive	AM	416	-	0.0	0	133	-	0.0	0	476	-	0.0	0	82	38.7	0.9	D	185	-	0.0	0	609	14.6	2.5	B
	PM	798	-	0.0	0	141	-	0.0	0	818	-	0.0	0	111	45.1	1.4	D	143	-	0.0	0	690	24.6	4.7	C
Donald Ross Rd and Central Boulevard	AM	365		0.0		1,510		0.0		128		0.0		667		0.0		1,842		0.0		249		0.0	
	PM	387		0.0		1,970		0.0		105		0.0		599		0.0		1,355		0.0		237		0.0	
Donald Ross Rd and North Military Trail	AM	76	73.2	1.5	E	1,698	48.1	22.7	D	34	0.1	0.0	A	210	72.3	4.2	E	1,884	43.6	22.8	D	605	8.8	1.5	A
	PM	49	72.5	1.0	E	1,790	123.4	61.4	F	195	5.8	0.3	A	193	70.5	3.8	E	1,693	49.1	23.1	D	561	10.0	1.6	B
				8.6				**84.0**				**12.0**				**37.1**				**45.9**				**10.3**	
Hood Rd and Eastpointe Boulevard	AM	-		0.0		-		0.0		-		0.0		29	11.3	0.1	B	-		0.0		10	11.3	0.0	B
	PM	-		0.0		-		0.0		-		0.0		44	13.4	0.2	B	-		0.0		5	13.4	0.0	B
Hood Rd and I-95 SB Ramp	AM	-		0.0		-		0.0		-		0.0		-		0.0		-		0.0		-		0.0	
	PM	-		0.0		-		0.0		-		0.0		-		0.0		-		0.0		-		0.0	
Hood Rd and I-95 NB Ramp	AM	-		0.0		-		0.0		-		0.0		-		0.0		-		0.0		-		0.0	
	PM	-		0.0		-		0.0		-		0.0		-		0.0		-		0.0		-		0.0	
Hood Rd and Central Boulevard	AM	204		0.0		1,385		0.0		1,048		0.0		508		0.0		1,584		0.0		198		0.0	
	PM	381		0.0		1,823		0.0		1,173		0.0		291		0.0		1,309		0.0		337		0.0	
Hood Rd and North Military Trail	AM	26	80.5	0.6	F	1,333	116.9	43.3	F	765	24.4	5.2	C	284	209.2	16.5	F	1,220	50.5	17.1	D	898	41.8	10.4	D
	PM	238	104.4	6.9	F	1,655	141.1	64.9	F	762	24.5	5.2	C	263	222.9	16.3	F	1,133	59.9	18.9	E	887	159.3	39.2	F
				7.5				**108.2**				**10.4**				**33.0**				**36.0**				**49.7**	
Northlake Boulevard and Keating Drive	AM	79	198.6	4.4	F	-	198.6	0.0	F	154	10.5	0.4	B	178	86.5	4.3	F	3	86.5	0.1	F	-	86.5	0.0	F
	PM	61	44.5	0.8	D	3	67.5	0.1	E	251	8.7	0.6	B	73	33.9	0.7	C	2	33.9	0.0	C	-	33.9	0.0	C
Northlake Boulevard and I-95 West Ramp	AM	-		0.0		-		0.0		-		0.0		1,160	69.6	22.4	E	-		0.0		955	3.5	0.9	A
	PM	-		0.0		-		0.0		-		0.0		884	78.8	19.3	E	-		0.0		1,229	48.0	16.4	D
Northlake Boulevard and I-95 East Ramp	AM	575	76.6	12.2	E	-		0.0		1,007	32.9	9.2	C	-		0.0		-		0.0		-		0.0	
	PM	816	96.2	21.8	F	-		0.0		1,397	30.6	11.9	C	-		0.0		-		0.0		-		0.0	
Northlake Boulevard and Roan Lane	AM	-		0.0		-		0.0		-		0.0		-		0.0		-		0.0		176	0.1	0.0	A
	PM	-		0.0		-		0.0		-		0.0		-		0.0		-		0.0		103	0.1	0.0	A
Northlake Boulevard and Sandtree Drive	AM	305	79.1	6.7	E	1	10.7	0.0	B	99	0.4	0.0	A	96	123.7	3.3	F	1	123.7	0.0	F	136	123.7	4.7	F
	PM	421	237.8	27.8	F	1	10.8	0.0	B	120	0.5	0.0	A	47	139.4	1.8	F	1	139.4	0.0	F	161	139.4	6.2	F
				73.7				**0.1**				**22.2**				**51.9**				**0.2**				**28.2**	
PGA Boulevard and FL Turnpike	AM	-		0.0		-		0.0		-		0.0		1,528	103.0	43.7	F	-	107.7	0.0	F	144	0.1	0.0	A
	PM	-		0.0		-		0.0		-		0.0		1,016	72.4	20.4	E	-	82.7	0.0	F	117	0.1	0.0	A
PGA Boulevard and Central Boulevard	AM	40		0.0		46		0.0		174		0.0		373		0.0		64		0.0		1,444		0.0	
	PM	50		0.0		62		0.0		172		0.0		334		0.0		58		0.0		1,467		0.0	
PGA Boulevard and North Military Trail	AM	951		0.0		1,594		0.0		50		0.0		1,587		0.0		1,133		0.0		331		0.0	
	PM	1,253		0.0		2,154		0.0		131		0.0		1,483		0.0		1,113		0.0		353		0.0	
PGA Boulevard and West Ramps	AM	-		0.0		-		0.0		-		0.0		607	166.3	28.0	F	-		0.0		288	0.3	0.0	A
	PM	-		0.0		-		0.0		-		0.0		194	94.4	5.1	F	-		0.0		120	0.1	0.0	A
PGA Boulevard and NB OFF Ramps	AM	-		0.0		-		0.0		2,217	77.0	47.4	E	-		0.0		-		0.0		-		0.0	
	PM	-		0.0		-		0.0		2,156	63.6	38.1	E	-		0.0		-		0.0		-		0.0	
I-95 and PGA Blvd NB On Ramps	AM	-		0.0		-		0.0		-		0.0		-		0.0		-		0.0		1,334		0.0	
	PM	-		0.0		-		0.0		-		0.0		-		0.0		-		0.0		1,610		0.0	
PGA Boulevard and RCA Boulevard	AM	-		0.0		-		0.0		76	0.1	0.0	A	-		0.0		-		0.0		-		0.0	
	PM	-		0.0		-		0.0		516	0.6	0.1	A	-		0.0		-		0.0		-		0.0	
PGA Boulevard and Lake Victoria Gardens	AM	215	38.0	2.3	D	1	-	0.0	0	86	2.5	0.1	A	-		0.0		-		0.0		11	0.2	0.0	A
	PM	300	120.6	10.1	F	-		0.0		129	12.0	0.4	B	-		0.0		-		0.0		47	4.3	0.1	A
				12.3				**0.0**				**86.1**				**97.3**				**0.0**				**0.1**	
North Military Trail and Donald Ross	AM	76		0.0		1,698		0.0		34		0.0		210		0.0		1,884		0.0		605		0.0	
	PM	49		0.0		1,790		0.0		195		0.0		193		0.0		1,693		0.0		561		0.0	
North Military Trail and Hood Road	AM	26		0.0		1,333		0.0		765		0.0		284		0.0		1,220		0.0		898		0.0	
	PM	238		0.0		1,655		0.0		762		0.0		263		0.0		1,133		0.0		887		0.0	
North Military Trail and Kyoto Gardens Drive	AM	79	19.4	0.4	B	2,094	31.8	18.5	C	550	3.5	0.5	A	205	105.7	6.0	F	2,697	45.0	33.7	D	3	-	0.0	0
	PM	94	321.4	8.4	F	2,607	25.8	18.7	C	723	3.1	0.6	A	50	128.2	1.8	F	2,305	10.6	6.8	B	17	10.6	0.1	B
North Military Trail and PGA Boulevard	AM	951	95.6	25.3	F	1,594	195.7	86.7	F	50	0.5	0.0	A	1,587	234.9	103.6	F	1,133	84.1	26.5	F	331	84.1	7.7	F
	PM	1,253	122.9	42.8	F	2,154	272.7	163.2	F	131	6.8	0.2	A	1,483	265.6	109.4	F	1,113	110.0	34.0	F	353	110.0	10.8	F
				76.8				**287.0**				**1.4**				**220.8**				**101.0**				**18.6**	

APPENDIX AL

HCS REPORTS

ALTERNATIVE 2

APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Northbound
Agency or Company		Junction	NLake NB On Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	AM	Analysis Year	2020

Project Description: Alt 2: I-95 NB Merge at Nlake On-Ramp (N1 - N2)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 5	☐ Yes ☐ On
☑ No ☐ Off	Ramp Number of Lanes, N: 1	☑ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A: 400	L_{down} = ft
V_u = veh/h	Deceleration Lane Length L_D:	V_D = veh/h
	Freeway Volume, V_F: 5291	
	Ramp Volume, V_R: 1259	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 50.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	5291	0.95	Level	4	0	0.980	1.00	5681
Ramp	1259	0.92	Level	3	0	0.985	1.00	1389
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 0.044 using Equation (Exhibit 13-6)

V_{12} = 191 pc/h

V_3 or V_{av34} = 2063 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes, V_{12a} = 1727 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	5707	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	3116	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = 26.6 (pc/mi/ln)

LOS = C (Exhibit 13-2)

Speed Determination

M_S = 0.369 (Exibit 13-11)

S_R = 59.7 mph (Exhibit 13-11)

S_0 = 67.1 mph (Exhibit 13-11)

S = 62.8 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R = mph (Exhibit 13-12)

S_0 = mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Northbound
Agency or Company		Junction	NLake NB On Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	PM	Analysis Year	2020

Project Description: Alt 2: I-95 NB Merge at Nlake On-Ramp (N1 - N2)

Inputs

Upstream Adj Ramp		Freeway/Ramp		Downstream Adj Ramp	
☐ Yes	☐ On	Freeway Number of Lanes, N	5	☐ Yes	☐ On
☑ No	☐ Off	Ramp Number of Lanes, N	1	☑ No	☐ Off
L_{up} =	ft	Acceleration Lane Length, L_A	400	L_{down} =	ft
V_u =	veh/h	Deceleration Lane Length L_D		V_D =	veh/h
		Freeway Volume, V_F	4737		
		Ramp Volume, V_R	1392		
		Freeway Free-Flow Speed, S_{FF}	70.0		
		Ramp Free-Flow Speed, S_{FR}	50.0		

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	4737	0.95	Level	4	0	0.980	1.00	5086
Ramp	1392	0.92	Level	3	0	0.985	1.00	1536
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 0.026 using Equation (Exhibit 13-6)

V_{12} = 102 pc/h

V_3 or V_{av34} = 1933 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes, V_{12a} = 1587 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	5504	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	3123	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = 26.6 (pc/mi/ln)

LOS = C (Exhibit 13-2)

Speed Determination

M_S = 0.370 (Exibit 13-11)

S_R = 59.7 mph (Exhibit 13-11)

S_0 = 67.5 mph (Exhibit 13-11)

S = 62.8 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R = mph (Exhibit 13-12)

S_0 = mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*AM Peak*

Site Information

Highway/Direction of Travel	*I-95 Northbound*
From/To	*NLake On-Rmp to PGA Off-Rmp*
Jurisdiction	*FDOT D4*
Analysis Year	*2020*

Project Description *Alt 2: I-95 NB Basic Nlake-On to PGA-Off (N2 - N3)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*6550*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1407*	pc/h/ln
S	*69.5*	mph
D = v_p / S	*20.2*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information		Site Information	
Analyst	*LRCB*	Highway/Direction of Travel	*I-95 Northbound*
Agency or Company		From/To	*NLake On-Rmp to PGA Off-Rmp*
Date Performed	*3/26/2015*	Jurisdiction	*FDOT D4*
Analysis Time Period	*PM Peak*	Analysis Year	*2020*

Project Description *Alt 2: I-95 NB Basic Nlake-On to PGA-Off (N2 - N3)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*6129*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1316*	pc/h/ln
S	*69.8*	mph
D = v_p / S	*18.8*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Northbound
Agency or Company		Junction	EB PGA Off-Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	AM Peak	Analysis Year	2020

Project Description: Alt 2: I-95 NB Diverge at EB PGA Off-Ramp (N3 - N4)

Inputs

Upstream Adj Ramp		Freeway Number of Lanes, N	5	Downstream Adj Ramp	
☐ Yes	☐ On	Ramp Number of Lanes, N	2	☐ Yes	☐ On
☑ No	☐ Off	Acceleration Lane Length, L_A		☑ No	☐ Off
L_{up} =	ft	Deceleration Lane Length L_D	500	L_{down} =	ft
V_u =	veh/h	Freeway Volume, V_F	6550	V_D =	veh/h
		Ramp Volume, V_R	2146		
		Freeway Free-Flow Speed, S_{FF}	70.0		
		Ramp Free-Flow Speed, S_{FR}	55.0		

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	$v = V/PHF \times f_{HV} \times f_p$
Freeway	6550	0.95	Level	4	0	0.980	1.00	7033
Ramp	2146	0.92	Level	3	0	0.985	1.00	2368
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.260 using Equation (Exhibit 13-7)

V_{12} = 3215 pc/h

V_3 or V_{av34} 1206 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	5627	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	3259	Exhibit 13-8	9600	No
V_R	2368	Exhibit 13-10	4400	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	3215	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 18.4 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination

D_s = 0.381 (Exhibit 13-12)

S_R = 59.3 mph (Exhibit 13-12)

S_0 = 76.0 mph (Exhibit 13-12)

S = 65.5 mph (Exhibit 13-13)

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Northbound
Agency or Company		Junction	EB PGA Off-Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	PM Peak	Analysis Year	2020

Project Description: Alt 2: I-95 NB Diverge at EB PGA Off-Ramp (N3 - N4)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 5	☐ Yes ☐ On
☑ No ☐ Off	Ramp Number of Lanes, N: 2	☑ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A:	L_{down} = ft
V_u = veh/h	Deceleration Lane Length L_D: 500	V_D = veh/h
	Freeway Volume, V_F: 6129	
	Ramp Volume, V_R: 1094	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 55.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	6129	0.95	Level	4	0	0.980	1.00	6581
Ramp	1094	0.92	Level	3	0	0.985	1.00	1207
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.260 using Equation (Exhibit 13-7)

V_{12} = 2348 pc/h

V_3 or V_{av34} 1623 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	5594	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	4387	Exhibit 13-8	9600	No
V_R	1207	Exhibit 13-10	4400	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	2348	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 10.9 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination

D_s = 0.277 (Exhibit 13-12)

S_R = 62.3 mph (Exhibit 13-12)

S_0 = 74.4 mph (Exhibit 13-12)

S = 68.7 mph (Exhibit 13-13)

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information		Site Information	
Analyst	*LRCB*	Highway/Direction of Travel	*I-95 Northbound*
Agency or Company		From/To	*PGA EB Off to PGA WB Off*
Date Performed	*3/26/2015*	Jurisdiction	*FDOT D4*
Analysis Time Period	*PM Peak*	Analysis Year	*2020*

Project Description *Alt 2: I-95 NB Basic EB PGA Off to WB PGA (N4 - N5)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*5035*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1081*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*15.4*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information		Site Information	
Analyst	*LRCB*	Highway/Direction of Travel	*I-95 Northbound*
Agency or Company		From/To	*PGA EB Off to PGA WB Off*
Date Performed	*3/26/2015*	Jurisdiction	*FDOT D4*
Analysis Time Period	*AM Peak*	Analysis Year	*2020*

Project Description *Alt 2: I-95 NB Basic EB PGA Off to WB PGA (N4 - N5)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4404*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*946*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*13.5*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Northbound
Agency or Company		Junction	WB PGA Off-Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	AM Peak	Analysis Year	2020

Project Description: Alt 2: I-95 NB Diverge at WB PGA Off-Ramp (N5 - N6)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 5	☐ Yes ☐ On
☑ No ☐ Off	Ramp Number of Lanes, N: 1	☑ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A:	L_{down} = ft
V_u = veh/h	Deceleration Lane Length L_D: 500	V_D = veh/h
	Freeway Volume, V_F: 4404	
	Ramp Volume, V_R: 764	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	$v = V/PHF \times f_{HV} \times f_p$
Freeway	4404	0.95	Level	4	0	0.980	1.00	4729
Ramp	764	0.92	Level	3	0	0.985	1.00	843
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.436 using Equation (Exhibit 13-7)

V_{12} = 2332 pc/h

V_3 or V_{av34} 962 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	4257	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	3414	Exhibit 13-8	9600	No
V_R	843	Exhibit 13-10	2000	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	2332	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 19.8 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination

D_s = 0.504 (Exhibit 13-12)

S_R = 55.9 mph (Exhibit 13-12)

S_0 = 76.8 mph (Exhibit 13-12)

S = 63.7 mph (Exhibit 13-13)

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Northbound
Agency or Company		Junction	WB PGA Off-Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	PM Peak	Analysis Year	2020

Project Description: Alt 2: I-95 NB Diverge at WB PGA Off-Ramp (N5 - N6)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 5	☐ Yes ☐ On
☑ No ☐ Off	Ramp Number of Lanes, N: 1	☑ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A:	L_{down} = ft
V_u = veh/h	Deceleration Lane Length L_D: 500	V_D = veh/h
	Freeway Volume, V_F: 5035	
	Ramp Volume, V_R: 749	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	$v = V/PHF \times f_{HV} \times f_p$
Freeway	5035	0.95	Level	4	0	0.980	1.00	5406
Ramp	749	0.92	Level	3	0	0.985	1.00	826
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.436 using Equation (Exhibit 13-7)

V_{12} = 2587 pc/h

V_3 or V_{av34} 1139 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	4866	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	4040	Exhibit 13-8	9600	No
V_R	826	Exhibit 13-10	2000	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	2587	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 22.0 (pc/mi/ln)

LOS = C (Exhibit 13-2)

Speed Determination

D_s = 0.502 (Exhibit 13-12)

S_R = 55.9 mph (Exhibit 13-12)

S_0 = 76.2 mph (Exhibit 13-12)

S = 63.9 mph (Exhibit 13-13)

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*AM Peak*

Site Information

Highway/Direction of Travel	*I-95 Northbound*
From/To	*WB PGA Off to EB PGA On*
Jurisdiction	*FDOT D4*
Analysis Year	*2020*

Project Description *Alt 2: I-95 NB WB PGA Off to EB PGA On (N6 - N7)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3640*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*782*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*11.2*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*PM Peak*

Site Information

Highway/Direction of Travel	*I-95 Northbound*
From/To	*WB PGA Off to EB PGA On*
Jurisdiction	*FDOT D4*
Analysis Year	*2020*

Project Description *Alt 2: I-95 NB WB PGA Off to EB PGA On (N6 - N7)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4286*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*920*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*13.1*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

FREEWAY WEAVING WORKSHEET

General Information

Analyst	LRCB
Agency/Company	
Date Performed	8/22/15
Analysis Time Period	AM

Site Information

Freeway/Dir of Travel	Northbound
Weaving Segment Location	PGA-On to Central-CD-Off
Analysis Year	2020

Project Description Alt 2: I-95 PGA Blvd - NB PGA-On to Central-CD-Off - N7 to N8

Inputs

Weaving configuration	One-Sided	Segment type	Freeway
Weaving number of lanes, N	6	Freeway minimum speed, S_{MIN}	15
Weaving segment length, L_S	2000ft	Freeway maximum capacity, C_{IFL}	2350
Freeway free-flow speed, FFS	70 mph	Terrain type	Level

Conversions to pc/h Under Base Conditions

	V (veh/h)	PHF	Truck (%)	RV (%)	E_T	E_R	f_{HV}	f_p	v (pc/h)
V_{FF}	2626	0.95	4	0	1.5	1.2	0.980	1.00	2819
V_{RF}	140	0.92	3	0	1.5	1.2	0.985	1.00	154
V_{FR}	1014	0.92	3	0	1.5	1.2	0.985	1.00	1119
V_{RR}	0	0.94	0	0	1.5	1.2	1.000	1.00	0
V_{NW}	2819							V =	4092
V_W	1273								
VR	0.311								

Configuration Characteristics

Minimum maneuver lanes, N_{WL}	3 lc	Minimum weaving lane changes, LC_{MIN}	154 lc/h
Interchange density, ID	0.8 int/mi	Weaving lane changes, LC_W	1080 lc/h
Minimum RF lane changes, LC_{RF}	1 lc/pc	Non-weaving lane changes, LC_{NW}	509 lc/h
Minimum FR lane changes, LC_{FR}	0 lc/pc	Total lane changes, LC_{ALL}	1589 lc/h
Minimum RR lane changes, LC_{RR}	lc/pc	Non-weaving vehicle index, I_{NW}	451

Weaving Segment Speed, Density, Level of Service, and Capacity

Weaving segment flow rate, v	4019 veh/h	Weaving intensity factor, W	0.188
Weaving segment capacity, c_w	11030 veh/h	Weaving segment speed, S	64.2 mph
Weaving segment v/c ratio	0.364	Average weaving speed, S_W	61.3 mph
Weaving segment density, D	10.6 pc/mi/ln	Average non-weaving speed, S_{NW}	65.6 mph
Level of Service, LOS	B	Maximum weaving length, L_{MAX}	4137 ft

Notes

a. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments".
b. For volumes that exceed the weaving segment capacity, the level of service is "F".

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

FREEWAY WEAVING WORKSHEET

General Information

Analyst	LRCB
Agency/Company	
Date Performed	8/22/15
Analysis Time Period	PM

Site Information

Freeway/Dir of Travel	Northbound
Weaving Segment Location	PGA-On to Central-CD-Off
Analysis Year	2020

Project Description Alt 3: I-95 PGA Blvd - NB PGA-On to Central-CD-Off - N7 to N8

Inputs

Weaving configuration	One-Sided	Segment type	Freeway
Weaving number of lanes, N	6	Freeway minimum speed, S_{MIN}	15
Weaving segment length, L_S	2000ft	Freeway maximum capacity, C_{IFL}	2350
Freeway free-flow speed, FFS	70 mph	Terrain type	Level

Conversions to pc/h Under Base Conditions

	V (veh/h)	PHF	Truck (%)	RV (%)	E_T	E_R	f_{HV}	f_p	v (pc/h)
V_{FF}	3186	0.95	4	0	1.5	1.2	0.980	1.00	3421
V_{RF}	667	0.92	3	0	1.5	1.2	0.985	1.00	736
V_{FR}	1100	0.92	3	0	1.5	1.2	0.985	1.00	1214
V_{RR}	0	0.94	0	0	1.5	1.2	1.000	1.00	0
V_{NW}	3421							V =	5371
V_W	1950								
VR	0.363								

Configuration Characteristics

Minimum maneuver lanes, N_{WL}	3 lc	Minimum weaving lane changes, LC_{MIN}	736 lc/h
Interchange density, ID	0.8 int/mi	Weaving lane changes, LC_W	1662 lc/h
Minimum RF lane changes, LC_{RF}	1 lc/pc	Non-weaving lane changes, LC_{NW}	633 lc/h
Minimum FR lane changes, LC_{FR}	0 lc/pc	Total lane changes, LC_{ALL}	2295 lc/h
Minimum RR lane changes, LC_{RR}	lc/pc	Non-weaving vehicle index, I_{NW}	547

Weaving Segment Speed, Density, Level of Service, and Capacity

Weaving segment flow rate, v	5275 veh/h	Weaving intensity factor, W	0.252
Weaving segment capacity, c_w	9451 veh/h	Weaving segment speed, S	59.9 mph
Weaving segment v/c ratio	0.558	Average weaving speed, S_W	58.9 mph
Weaving segment density, D	15.0 pc/mi/ln	Average non-weaving speed, S_{NW}	60.4 mph
Level of Service, LOS	B	Maximum weaving length, L_{MAX}	4704 ft

Notes

a. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments".
b. For volumes that exceed the weaving segment capacity, the level of service is "F".

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*4/2/2015*
Analysis Time Period	*AM Peak*

Site Information

Highway/Direction of Travel	*I-95 Northbound*
From/To	*Central-CD_Off_to_MT-CD-On*
Jurisdiction	*FDOT D4*
Analysis Year	*2020*

Project Description *Alt 2: I-95 PGA Blvd - Central-CD_Off_to_MT-CD-On N8 to N9*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*2766*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*594*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*8.5*	pc/mi/ln
LOS	*A*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*4/2/2015*
Analysis Time Period	*PM Peak*

Site Information

Highway/Direction of Travel	*I-95 Northbound*
From/To	*Central-CD_Off_to_MT-CD-On*
Jurisdiction	*FDOT D4*
Analysis Year	*2020*

Project Description *Alt 2: I-95 PGA Blvd - Central-CD_Off_to_MT-CD-On N8 to N9*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3853*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*827*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*11.8*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Northbound
Agency or Company		Junction	at MT/CD On-Ramp
Date Performed	4/2/2015	Jurisdiction	FDOT D4
Analysis Time Period	AM	Analysis Year	2020

Project Description: Alt 2: I-95 NB Merge at MT/CD On-Ramp (N9 - N10)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 5	☐ Yes ☐ On
☑ No ☐ Off	Ramp Number of Lanes, N: 1	☑ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A: 400	L_{down} = ft
V_u = veh/h	Deceleration Lane Length L_D:	V_D = veh/h
	Freeway Volume, V_F: 2766	
	Ramp Volume, V_R: 143	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 50.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	2766	0.95	Level	4	0	0.980	1.00	2970
Ramp	143	0.92	Level	3	0	0.985	1.00	158
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 0.287 using Equation (Exhibit 13-6)

V_{12} = 666 pc/h

V_3 or V_{av34} = 825 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes, V_{12a} = 926 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	2475	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	1084	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = 11.3 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination

M_S = 0.293 (Exibit 13-11)

S_R = 61.8 mph (Exhibit 13-11)

S_0 = 69.3 mph (Exhibit 13-11)

S = 65.8 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R = mph (Exhibit 13-12)

S_0 = mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	1082	Freeway/Dir of Travel	I-95 Northbound
Agency or Company		Junction	at MT/CD On-Ramp
Date Performed	4/2/2015	Jurisdiction	FDOT D4
Analysis Time Period	PM	Analysis Year	2020

Project Description: Alt 2: I-95 NB Merge at MT/CD On-Ramp (N9 - N10)

Inputs

Upstream Adj Ramp		Freeway / Ramp		Downstream Adj Ramp	
☐ Yes	☐ On	Freeway Number of Lanes, N	5	☐ Yes	☐ On
☑ No	☐ Off	Ramp Number of Lanes, N	1	☑ No	☐ Off
L_{up} =	ft	Acceleration Lane Length, L_A	400	L_{down} =	ft
V_u =	veh/h	Deceleration Lane Length L_D		V_D =	veh/h
		Freeway Volume, V_F	3853		
		Ramp Volume, V_R	893		
		Freeway Free-Flow Speed, S_{FF}	70.0		
		Ramp Free-Flow Speed, S_{FR}	50.0		

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	3853	0.95	Level	4	0	0.980	1.00	4137
Ramp	893	0.92	Level	3	0	0.985	1.00	985
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 0.184 using Equation (Exhibit 13-6)

V_{12} = 593 pc/h

V_3 or V_{av34} = 1317 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes, V_{12a} = 1290 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	4212	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	2275	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = 20.3 (pc/mi/ln)

LOS = C (Exhibit 13-2)

Speed Determination

M_S = 0.319 (Exibit 13-11)

S_R = 61.1 mph (Exhibit 13-11)

S_0 = 68.3 mph (Exhibit 13-11)

S = 64.2 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R = mph (Exhibit 13-12)

S_0 = mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

FREEWAY WEAVING WORKSHEET

General Information

Analyst	LRCB
Agency/Company	
Date Performed	8/22/15
Analysis Time Period	AM

Site Information

Freeway/Dir of Travel	Nortbound
Weaving Segment Location	Central to DRoss
Analysis Year	2020

Project Description Alt 2: I-95 PGA Blvd - NB Central to DRoss - N11 to N12

Inputs

Weaving configuration	One-Sided	Segment type	Freeway
Weaving number of lanes, N	6	Freeway minimum speed, S_{MIN}	15
Weaving segment length, L_S	2450ft	Freeway maximum capacity, C_{IFL}	2350
Freeway free-flow speed, FFS	70 mph	Terrain type	Level

Conversions to pc/h Under Base Conditions

	V (veh/h)	PHF	Truck (%)	RV (%)	E_T	E_R	f_{HV}	f_p	v (pc/h)
V_{FF}	1983	0.95	4	0	1.5	1.2	0.980	1.00	2129
V_{RF}	310	0.92	3	0	1.5	1.2	0.985	1.00	342
V_{FR}	926	0.92	3	0	1.5	1.2	0.985	1.00	1022
V_{RR}	0	0.94	0	0	1.5	1.2	1.000	1.00	0
V_{NW}	2129							V =	3493
V_W	1364								
VR	0.390								

Configuration Characteristics

Minimum maneuver lanes, N_{WL}	3 lc	Minimum weaving lane changes, LC_{MIN}	342 lc/h
Interchange density, ID	0.8 int/mi	Weaving lane changes, LC_W	1384 lc/h
Minimum RF lane changes, LC_{RF}	1 lc/pc	Non-weaving lane changes, LC_{NW}	611 lc/h
Minimum FR lane changes, LC_{FR}	0 lc/pc	Total lane changes, LC_{ALL}	1995 lc/h
Minimum RR lane changes, LC_{RR}	lc/pc	Non-weaving vehicle index, I_{NW}	417

Weaving Segment Speed, Density, Level of Service, and Capacity

Weaving segment flow rate, v	3431 veh/h	Weaving intensity factor, W	0.192
Weaving segment capacity, c_w	8787 veh/h	Weaving segment speed, S	63.3 mph
Weaving segment v/c ratio	0.390	Average weaving speed, S_W	61.1 mph
Weaving segment density, D	9.2 pc/mi/ln	Average non-weaving speed, S_{NW}	64.7 mph
Level of Service, LOS	A	Maximum weaving length, L_{MAX}	5009 ft

Notes

a. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments".
b. For volumes that exceed the weaving segment capacity, the level of service is "F".

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

FREEWAY WEAVING WORKSHEET

General Information

Analyst	LRCB
Agency/Company	
Date Performed	8/22/15
Analysis Time Period	PM

Site Information

Freeway/Dir of Travel	Nortbound
Weaving Segment Location	Central to DRoss
Analysis Year	2020

Project Description Alt 2: I-95 PGA Blvd - NB Central to DRoss - N11 to N12

Inputs

Weaving configuration	One-Sided	Segment type	Freeway
Weaving number of lanes, N	6	Freeway minimum speed, S_{MIN}	15
Weaving segment length, L_S	2450ft	Freeway maximum capacity, C_{IFL}	2350
Freeway free-flow speed, FFS	70 mph	Terrain type	Level

Conversions to pc/h Under Base Conditions

	V (veh/h)	PHF	Truck (%)	RV (%)	E_T	E_R	f_{HV}	f_p	v (pc/h)
V_{FF}	3367	0.95	4	0	1.5	1.2	0.980	1.00	3615
V_{RF}	347	0.92	3	0	1.5	1.2	0.985	1.00	383
V_{FR}	1379	0.92	3	0	1.5	1.2	0.985	1.00	1521
V_{RR}	0	0.94	0	0	1.5	1.2	1.000	1.00	0
V_{NW}	3615							V =	5519
V_W	1904								
VR	0.345								

Configuration Characteristics

Minimum maneuver lanes, N_{WL}	3 lc	Minimum weaving lane changes, LC_{MIN}	383 lc/h
Interchange density, ID	0.8 int/mi	Weaving lane changes, LC_W	1425 lc/h
Minimum RF lane changes, LC_{RF}	1 lc/pc	Non-weaving lane changes, LC_{NW}	917 lc/h
Minimum FR lane changes, LC_{FR}	0 lc/pc	Total lane changes, LC_{ALL}	2342 lc/h
Minimum RR lane changes, LC_{RR}	lc/pc	Non-weaving vehicle index, I_{NW}	709

Weaving Segment Speed, Density, Level of Service, and Capacity

Weaving segment flow rate, v	5421 veh/h	Weaving intensity factor, W	0.218
Weaving segment capacity, c_w	9946 veh/h	Weaving segment speed, S	61.9 mph
Weaving segment v/c ratio	0.545	Average weaving speed, S_W	60.2 mph
Weaving segment density, D	14.9 pc/mi/ln	Average non-weaving speed, S_{NW}	62.8 mph
Level of Service, LOS	B	Maximum weaving length, L_{MAX}	4506 ft

Notes

a. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments".
b. For volumes that exceed the weaving segment capacity, the level of service is "F".

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

FREEWAY WEAVING WORKSHEET

General Information

Analyst	LRCB
Agency/Company	
Date Performed	4/2/2015
Analysis Time Period	AM

Site Information

Freeway/Dir of Travel	Northbound
Weaving Segment Location	NB CD Road
Analysis Year	2020

Project Description Alt 2: 95 PGA - NB CD Road (Central Blvd. Off Ramp) btw On-Ramp from MT and I95

Inputs

Weaving configuration	One-Sided	Segment type	C-D Roadway/ Multilane Highways
Weaving number of lanes, N	2		
Weaving segment length, L_S	2000ft	Freeway minimum speed, S_{MIN}	15
Freeway free-flow speed, FFS	50 mph	Freeway maximum capacity, C_{IFL}	2250
		Terrain type	Level

Conversions to pc/h Under Base Conditions

	V (veh/h)	PHF	Truck (%)	RV (%)	E_T	E_R	f_{HV}	f_p	v (pc/h)
V_{FF}	1014	0.92	3	0	1.5	1.2	0.985	1.00	1119
V_{RF}	0	0.92	3	0	1.5	1.2	0.985	1.00	0
V_{FR}	0	0.92	3	0	1.5	1.2	0.985	1.00	0
V_{RR}	143	0.92	3	0	1.5	1.2	0.985	1.00	158
V_{NW}	1277							V =	1277
V_W	0								
VR	0.000								

Configuration Characteristics

Minimum maneuver lanes, N_{WL}	2 lc	Minimum weaving lane changes, LC_{MIN}	0 lc/h
Interchange density, ID	0.8 int/mi	Weaving lane changes, LC_W	103 lc/h
Minimum RF lane changes, LC_{RF}	0 lc/pc	Non-weaving lane changes, LC_{NW}	962 lc/h
Minimum FR lane changes, LC_{FR}	0 lc/pc	Total lane changes, LC_{ALL}	1065 lc/h
Minimum RR lane changes, LC_{RR}	lc/pc	Non-weaving vehicle index, I_{NW}	204

Weaving Segment Speed, Density, Level of Service, and Capacity

Weaving segment flow rate, v	1258 veh/h	Weaving intensity factor, W	0.137
Weaving segment capacity, c_w	4343 veh/h	Weaving segment speed, S	46.9 mph
Weaving segment v/c ratio	0.290	Average weaving speed, S_W	45.8 mph
Weaving segment density, D	13.6 pc/mi/ln	Average non-weaving speed, S_{NW}	46.9 mph
Level of Service, LOS	B	Maximum weaving length, L_{MAX}	2596 ft

Notes

a. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments".
b. For volumes that exceed the weaving segment capacity, the level of service is "F".

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

FREEWAY WEAVING WORKSHEET

General Information

Analyst	LRCB
Agency/Company	
Date Performed	4/2/2015
Analysis Time Period	PM

Site Information

Freeway/Dir of Travel	Northbound
Weaving Segment Location	NB CD Road
Analysis Year	2020

Project Description Alt 2: 95 PGA - NB CD Road (Central Blvd. Off Ramp) btw On-Ramp from MT and I95

Inputs

Weaving configuration	One-Sided	Segment type	C-D Roadway/ Multilane Highways
Weaving number of lanes, N	2		
Weaving segment length, L_S	2000ft	Freeway minimum speed, S_{MIN}	15
Freeway free-flow speed, FFS	50 mph	Freeway maximum capacity, C_{IFL}	2250
		Terrain type	Level

Conversions to pc/h Under Base Conditions

	V (veh/h)	PHF	Truck (%)	RV (%)	E_T	E_R	f_{HV}	f_p	v (pc/h)
V_{FF}	1100	0.92	3	0	1.5	1.2	0.985	1.00	1214
V_{RF}	0	0.92	3	0	1.5	1.2	0.985	1.00	0
V_{FR}	0	0.92	3	0	1.5	1.2	0.985	1.00	0
V_{RR}	893	0.92	3	0	1.5	1.2	0.985	1.00	985
V_{NW}	2199							V =	2199
V_W	0								
VR	0.000								

Configuration Characteristics

Minimum maneuver lanes, N_{WL}	2 lc	Minimum weaving lane changes, LC_{MIN}	0 lc/h
Interchange density, ID	0.8 int/mi	Weaving lane changes, LC_W	103 lc/h
Minimum RF lane changes, LC_{RF}	0 lc/pc	Non-weaving lane changes, LC_{NW}	1152 lc/h
Minimum FR lane changes, LC_{FR}	0 lc/pc	Total lane changes, LC_{ALL}	1255 lc/h
Minimum RR lane changes, LC_{RR}	lc/pc	Non-weaving vehicle index, I_{NW}	352

Weaving Segment Speed, Density, Level of Service, and Capacity

Weaving segment flow rate, v	2167 veh/h	Weaving intensity factor, W	0.156
Weaving segment capacity, c_w	4343 veh/h	Weaving segment speed, S	44.7 mph
Weaving segment v/c ratio	0.499	Average weaving speed, S_W	45.3 mph
Weaving segment density, D	24.6 pc/mi/ln	Average non-weaving speed, S_{NW}	44.7 mph
Level of Service, LOS	C	Maximum weaving length, L_{MAX}	2596 ft

Notes

a. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments".
b. For volumes that exceed the weaving segment capacity, the level of service is "F".

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

FREEWAY WEAVING WORKSHEET

General Information

Analyst	LRCB
Agency/Company	
Date Performed	8/22/15
Analysis Time Period	AM

Site Information

Freeway/Dir of Travel	Southbound
Weaving Segment Location	DRoss to Central
Analysis Year	2020

Project Description Alt 2: I-95 PGA Boulevard - SB DRoss to Central - S1-S2

Inputs

Weaving configuration	One-Sided	Segment type	Freeway
Weaving number of lanes, N	6	Freeway minimum speed, S_{MIN}	15
Weaving segment length, L_S	2450ft	Freeway maximum capacity, C_{IFL}	2350
Freeway free-flow speed, FFS	70 mph	Terrain type	Level

Conversions to pc/h Under Base Conditions

	V (veh/h)	PHF	Truck (%)	RV (%)	E_T	E_R	f_{HV}	f_p	v (pc/h)
V_{FF}	3530	0.95	4	0	1.5	1.2	0.980	1.00	3790
V_{RF}	1317	0.92	3	0	1.5	1.2	0.985	1.00	1453
V_{FR}	199	0.92	3	0	1.5	1.2	0.985	1.00	220
V_{RR}	0	0.94	0	0	1.5	1.2	1.000	1.00	0
V_{NW}	3790							V =	5463
V_W	1673								
VR	0.306								

Configuration Characteristics

Minimum maneuver lanes, N_{WL}	3 lc	Minimum weaving lane changes, LC_{MIN}	220 lc/h
Interchange density, ID	0.8 int/mi	Weaving lane changes, LC_W	1262 lc/h
Minimum RF lane changes, LC_{RF}	0 lc/pc	Non-weaving lane changes, LC_{NW}	953 lc/h
Minimum FR lane changes, LC_{FR}	1 lc/pc	Total lane changes, LC_{ALL}	2215 lc/h
Minimum RR lane changes, LC_{RR}	lc/pc	Non-weaving vehicle index, I_{NW}	743

Weaving Segment Speed, Density, Level of Service, and Capacity

Weaving segment flow rate, v	5364 veh/h	Weaving intensity factor, W	0.209
Weaving segment capacity, c_w	11205 veh/h	Weaving segment speed, S	62.9 mph
Weaving segment v/c ratio	0.479	Average weaving speed, S_W	60.5 mph
Weaving segment density, D	14.5 pc/mi/ln	Average non-weaving speed, S_{NW}	64.0 mph
Level of Service, LOS	B	Maximum weaving length, L_{MAX}	4085 ft

Notes

a. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments".
b. For volumes that exceed the weaving segment capacity, the level of service is "F".

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

FREEWAY WEAVING WORKSHEET

General Information

Analyst	LRCB
Agency/Company	
Date Performed	8/22/15
Analysis Time Period	PM

Site Information

Freeway/Dir of Travel	Southbound
Weaving Segment Location	DRoss to Central
Analysis Year	2020

Project Description Alt 2: I-95 PGA Boulevard - SB DRoss to Central - S1-S2

Inputs

Weaving configuration	One-Sided	Segment type	Freeway
Weaving number of lanes, N	6	Freeway minimum speed, S_{MIN}	15
Weaving segment length, L_S	2450ft	Freeway maximum capacity, C_{IFL}	2350
Freeway free-flow speed, FFS	70 mph	Terrain type	Level

Conversions to pc/h Under Base Conditions

	V (veh/h)	PHF	Truck (%)	RV (%)	E_T	E_R	f_{HV}	f_p	v (pc/h)
V_{FF}	2215	0.95	4	0	1.5	1.2	0.980	1.00	2378
V_{RF}	908	0.92	3	0	1.5	1.2	0.985	1.00	1002
V_{FR}	417	0.92	3	0	1.5	1.2	0.985	1.00	460
V_{RR}	0	0.94	0	0	1.5	1.2	1.000	1.00	0
V_{NW}	2378							V =	3840
V_W	1462								
VR	0.381								

Configuration Characteristics

Minimum maneuver lanes, N_{WL}	3 lc	Minimum weaving lane changes, LC_{MIN}	460 lc/h
Interchange density, ID	0.8 int/mi	Weaving lane changes, LC_W	1502 lc/h
Minimum RF lane changes, LC_{RF}	0 lc/pc	Non-weaving lane changes, LC_{NW}	662 lc/h
Minimum FR lane changes, LC_{FR}	1 lc/pc	Total lane changes, LC_{ALL}	2164 lc/h
Minimum RR lane changes, LC_{RR}	lc/pc	Non-weaving vehicle index, I_{NW}	466

Weaving Segment Speed, Density, Level of Service, and Capacity

Weaving segment flow rate, v	3772 veh/h	Weaving intensity factor, W	0.205
Weaving segment capacity, c_w	9013 veh/h	Weaving segment speed, S	62.5 mph
Weaving segment v/c ratio	0.418	Average weaving speed, S_W	60.6 mph
Weaving segment density, D	10.2 pc/mi/ln	Average non-weaving speed, S_{NW}	63.6 mph
Level of Service, LOS	B	Maximum weaving length, L_{MAX}	4900 ft

Notes

a. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments".
b. For volumes that exceed the weaving segment capacity, the level of service is "F".

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*AM Peak*

Site Information

Highway/Direction of Travel	*I-95 Southbound*
From/To	*Central-Off to MT_CD*
Jurisdiction	*FDOT D4*
Analysis Year	*2020*

Project Description *Alt 2: I-95 PGA Boulevard - SB Central-Off to MT_CD S2 to S3*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4847*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1041*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*14.9*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 10-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*PM Peak*

Site Information

Highway/Direction of Travel	*I-95 Southbound*
From/To	*Central-Off to MT_CD*
Jurisdiction	*FDOT D4*
Analysis Year	*2020*

Project Description *Alt 2: I-95 PGA Boulevard - SB Central-Off to MT_CD S2 to S3*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3123*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*671*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*9.6*	pc/mi/ln
LOS	*A*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Southbound
Agency or Company		Junction	PGA Off Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	AM Peak	Analysis Year	2020

Project Description: Alt 2: I-95 PGA Boulevard - Military CD Rd-Off S3 to S4

Inputs

Upstream Adj Ramp		Freeway Number of Lanes, N	5	Downstream Adj Ramp	
☐ Yes	☐ On	Ramp Number of Lanes, N	1	☐ Yes	☐ On
☑ No	☐ Off	Acceleration Lane Length, L_A		☑ No	☐ Off
L_{up} =	ft	Deceleration Lane Length L_D	500	L_{down} =	ft
V_u =	veh/h	Freeway Volume, V_F	4847	V_D =	veh/h
		Ramp Volume, V_R	768		
		Freeway Free-Flow Speed, S_{FF}	70.0		
		Ramp Free-Flow Speed, S_{FR}	50.0		

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	4847	0.95	Level	4	0	0.980	1.00	5204
Ramp	768	0.92	Level	3	0	0.985	1.00	847
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.436 using Equation (Exhibit 13-7)

V_{12} = 2520 pc/h

V_3 or V_{av34} 1082 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	4684	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	3837	Exhibit 13-8	9600	No
V_R	847	Exhibit 13-10	2100	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	2520	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 21.4 (pc/mi/ln)

LOS = C (Exhibit 13-2)

Speed Determination

D_s = 0.309 (Exhibit 13-12)

S_R = 61.3 mph (Exhibit 13-12)

S_0 = 76.5 mph (Exhibit 13-12)

S = 67.5 mph (Exhibit 13-13)

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Southbound
Agency or Company		Junction	PGA Off Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	PM Peak	Analysis Year	2020

Project Description: Alt 2: I-95 PGA Boulevard - Military CD Rd-Off S3 to S4

Inputs

Upstream Adj Ramp		Freeway Number of Lanes, N	5	Downstream Adj Ramp	
☐ Yes	☐ On	Ramp Number of Lanes, N	1	☐ Yes	☐ On
☑ No	☐ Off	Acceleration Lane Length, L_A		☑ No	☐ Off
L_{up} =	ft	Deceleration Lane Length L_D	500	L_{down} =	ft
V_u =	veh/h	Freeway Volume, V_F	3123	V_D =	veh/h
		Ramp Volume, V_R	255		
		Freeway Free-Flow Speed, S_{FF}	70.0		
		Ramp Free-Flow Speed, S_{FR}	50.0		

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	3123	0.95	Level	4	0	0.980	1.00	3353
Ramp	255	0.92	Level	3	0	0.985	1.00	281
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.436 using Equation (Exhibit 13-7)

V_{12} = 1620 pc/h

V_3 or V_{av34} 866 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	3353	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	3072	Exhibit 13-8	9600	No
V_R	281	Exhibit 13-10	2100	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	1620	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 13.7 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination

D_s = 0.258 (Exhibit 13-12)

S_R = 62.8 mph (Exhibit 13-12)

S_0 = 76.8 mph (Exhibit 13-12)

S = 69.3 mph (Exhibit 13-13)

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*AM Peak*

Site Information

Highway/Direction of Travel	*I-95 Southbound*
From/To	*MT-CD_Off to Central-CD-On*
Jurisdiction	*FDOT D4*
Analysis Year	*2020*

Project Description *Alt 2: I-95 PGA Blvd -SB MT-CD_Off to Central-CD-On S4 to S5*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4079*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*876*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*12.5*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*PM Peak*

Site Information

Highway/Direction of Travel	*I-95 Southbound*
From/To	*MT-CD_Off to Central-CD-On*
Jurisdiction	*FDOT D4*
Analysis Year	*2020*

Project Description *Alt 2: I-95 PGA BLVD -SB MT-CD_Off to Central-CD-On S4 to S5*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*2868*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*616*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*8.8*	pc/mi/ln
LOS	*A*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

FREEWAY WEAVING WORKSHEET

General Information

Analyst	LRCB
Agency/Company	
Date Performed	8/22/15
Analysis Time Period	AM

Site Information

Freeway/Dir of Travel	Southbound
Weaving Segment Location	Central-CD_to_PGA Off Ramp
Analysis Year	2020

Project Description Alt 2: I-95 PGA Blvd - Central-CD_to_PGA Off Ramp - S5-S6

Inputs

Weaving configuration	One-Sided	Segment type	Freeway
Weaving number of lanes, N	6	Freeway minimum speed, S_{MIN}	15
Weaving segment length, L_S	2000ft	Freeway maximum capacity, C_{IFL}	2350
Freeway free-flow speed, FFS	70 mph	Terrain type	Level

Conversions to pc/h Under Base Conditions

	V (veh/h)	PHF	Truck (%)	RV (%)	E_T	E_R	f_{HV}	f_p	v (pc/h)
V_{FF}	3205	0.95	4	0	1.5	1.2	0.980	1.00	3441
V_{RF}	1115	0.92	3	0	1.5	1.2	0.985	1.00	1230
V_{FR}	874	0.92	3	0	1.5	1.2	0.985	1.00	964
V_{RR}	0	0.94	0	0	1.5	1.2	1.000	1.00	0
V_{NW}	3441							V =	5635
V_W	2194								
VR	0.389								

Configuration Characteristics

Minimum maneuver lanes, N_{WL}	3 lc	Minimum weaving lane changes, LC_{MIN}	0 lc/h
Interchange density, ID	0.8 int/mi	Weaving lane changes, LC_W	926 lc/h
Minimum RF lane changes, LC_{RF}	0 lc/pc	Non-weaving lane changes, LC_{NW}	637 lc/h
Minimum FR lane changes, LC_{FR}	0 lc/pc	Total lane changes, LC_{ALL}	1563 lc/h
Minimum RR lane changes, LC_{RR}	lc/pc	Non-weaving vehicle index, I_{NW}	551

Weaving Segment Speed, Density, Level of Service, and Capacity

Weaving segment flow rate, v	5536 veh/h	Weaving intensity factor, W	0.186
Weaving segment capacity, c_w	8813 veh/h	Weaving segment speed, S	63.8 mph
Weaving segment v/c ratio	0.628	Average weaving speed, S_W	61.4 mph
Weaving segment density, D	14.7 pc/mi/ln	Average non-weaving speed, S_{NW}	65.5 mph
Level of Service, LOS	B	Maximum weaving length, L_{MAX}	4996 ft

Notes

a. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments".
b. For volumes that exceed the weaving segment capacity, the level of service is "F".

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

FREEWAY WEAVING WORKSHEET

General Information

Analyst	LRCB
Agency/Company	
Date Performed	8/22/15
Analysis Time Period	PM

Site Information

Freeway/Dir of Travel	Southbound
Weaving Segment Location	Central-CD_to_PGA Off Ramp
Analysis Year	2020

Project Description Alt 2: I-95 PGA Blvd - Central-CD_to_PGA Off Ramp - S5-S6

Inputs

Weaving configuration	One-Sided	Segment type	Freeway
Weaving number of lanes, N	6	Freeway minimum speed, S_{MIN}	15
Weaving segment length, L_S	2000ft	Freeway maximum capacity, C_{IFL}	2350
Freeway free-flow speed, FFS	70 mph	Terrain type	Level

Conversions to pc/h Under Base Conditions

	V (veh/h)	PHF	Truck (%)	RV (%)	E_T	E_R	f_{HV}	f_p	v (pc/h)
V_{FF}	2641	0.95	4	0	1.5	1.2	0.980	1.00	2836
V_{RF}	1006	0.92	3	0	1.5	1.2	0.985	1.00	1110
V_{FR}	227	0.92	3	0	1.5	1.2	0.985	1.00	250
V_{RR}	0	0.94	0	0	1.5	1.2	1.000	1.00	0
V_{NW}	2836							V =	4196
V_W	1360								
VR	0.324								

Configuration Characteristics

Minimum maneuver lanes, N_{WL}	3 lc	Minimum weaving lane changes, LC_{MIN}	0 lc/h
Interchange density, ID	0.8 int/mi	Weaving lane changes, LC_W	926 lc/h
Minimum RF lane changes, LC_{RF}	0 lc/pc	Non-weaving lane changes, LC_{NW}	513 lc/h
Minimum FR lane changes, LC_{FR}	0 lc/pc	Total lane changes, LC_{ALL}	1439 lc/h
Minimum RR lane changes, LC_{RR}	lc/pc	Non-weaving vehicle index, I_{NW}	454

Weaving Segment Speed, Density, Level of Service, and Capacity

Weaving segment flow rate, v	4121 veh/h	Weaving intensity factor, W	0.174
Weaving segment capacity, c_w	10587 veh/h	Weaving segment speed, S	65.0 mph
Weaving segment v/c ratio	0.389	Average weaving speed, S_W	61.8 mph
Weaving segment density, D	10.8 pc/mi/ln	Average non-weaving speed, S_{NW}	66.6 mph
Level of Service, LOS	B	Maximum weaving length, L_{MAX}	4278 ft

Notes

a. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments".
b. For volumes that exceed the weaving segment capacity, the level of service is "F".

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*AM Peak*

Site Information

Highway/Direction of Travel	*I-95 Southbound*
From/To	*PGA-Off to WB_PGA On*
Jurisdiction	*FDOT D4*
Analysis Year	*2020*

Project Description *Alt 2: I-95 SB Basic PGA-Off to WB PGA-On (S6 - S7)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4320*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*928*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*13.3*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*PM Peak*

Site Information

Highway/Direction of Travel	*I-95 Southbound*
From/To	*PGA-Off to WB_PGA On*
Jurisdiction	*FDOT D4*
Analysis Year	*2020*

Project Description *Alt 2: I-95 SB Basic PGA-Off to WB PGA-On (S6 - S7)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3646*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*783*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*11.2*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Southbound
Agency or Company		Junction	WB PGA SB On Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	AM	Analysis Year	2020

Project Description: Alt 2: I-95 SB Merge at WB PGA On-Ramp (S7 - S8)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 5	☐ Yes ☐ On
☑ No ☐ Off	Ramp Number of Lanes, N: 1	☑ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A: 400	L_{down} = ft
V_u = veh/h	Deceleration Lane Length L_D:	V_D = veh/h
	Freeway Volume, V_F: 4320	
	Ramp Volume, V_R: 1148	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 40.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	4320	0.95	Level	4	0	0.980	1.00	4638
Ramp	1148	0.92	Level	3	0	0.985	1.00	1267
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 0.059 using Equation (Exhibit 13-6)

V_{12} = 215 pc/h

V_3 or V_{av34} = 1701 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes, V_{12a} = 1447 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	4885	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	2714	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = 23.6 (pc/mi/ln)

LOS = C (Exhibit 13-2)

Speed Determination

M_S = 0.348 (Exibit 13-11)

S_R = 60.3 mph (Exhibit 13-11)

S_0 = 67.9 mph (Exhibit 13-11)

S = 63.4 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R = mph (Exhibit 13-12)

S_0 = mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Southbound
Agency or Company		Junction	WB PGA SB On Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	PM	Analysis Year	2020

Project Description: Alt 2: I-95 SB Merge at WB PGA On-Ramp (S7 - S8)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 5	☐ Yes ☐ On
☑ No ☐ Off	Ramp Number of Lanes, N: 1	☑ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A: 400	L_{down} = ft
V_u = veh/h	Deceleration Lane Length L_D:	V_D = veh/h
	Freeway Volume, V_F: 3646	
	Ramp Volume, V_R: 2094	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 40.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	$v = V/PHF \times f_{HV} \times f_p$
Freeway	3646	0.95	Level	4	0	0.980	1.00	3915
Ramp	2094	0.92	Level	3	0	0.985	1.00	2310
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = -0.071 using Equation (Exhibit 13-6)

V_{12} = -216 pc/h

V_3 or V_{av34} = 1635 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes, V_{12a} = 1221 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	5364	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	3531	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = 29.4 (pc/mi/ln)

LOS = D (Exhibit 13-2)

Speed Determination

M_S = 0.422 (Exibit 13-11)

S_R = 58.2 mph (Exhibit 13-11)

S_0 = 68.5 mph (Exhibit 13-11)

S = 61.3 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R = mph (Exhibit 13-12)

S_0 = mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information		Site Information	
Analyst	*LRCB*	Highway/Direction of Travel	*I-95 Southbound*
Agency or Company		From/To	*WB PGA On to EB PGA On*
Date Performed	*3/26/2015*	Jurisdiction	*FDOT D4*
Analysis Time Period	*AM Peak*	Analysis Year	*2020*

Project Description *Alt 2: I-95 SB Basic WB PGA On to EB PGA On (S8 - S9)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*5468*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs			Calc Speed Adj and FFS		
Lane Width		ft			
Rt-Side Lat. Clearance		ft	f_{LW}		mph
Number of Lanes, N	*5*		f_{LC}		mph
Total Ramp Density, TRD		ramps/mi	TRD Adjustment		mph
FFS (measured)	*70.0*	mph	FFS	*70.0*	mph
Base free-flow Speed, BFFS		mph			

LOS and Performance Measures			Design (N)	
Operational (LOS)			Design (N)	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1174*	pc/h/ln	Design LOS	
S	*70.0*	mph	v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
D = v_p / S	*16.8*	pc/mi/ln	S	mph
LOS	*B*		D = v_p / S	pc/mi/ln
			Required Number of Lanes, N	

Glossary		Factor Location	
N - Number of lanes	S - Speed	E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
V - Hourly volume	D - Density	E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
v_p - Flow rate	FFS - Free-flow speed	f_p - Page 11-18	TRD - Page 11-11
LOS - Level of service	BFFS - Base free-flow speed	LOS, S, FFS, v_p - Exhibits 11-2, 11-3	
DDHV - Directional design hour volume			

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information		Site Information	
Analyst	*LRCB*	Highway/Direction of Travel	*I-95 Southbound*
Agency or Company		From/To	*WB PGA On to EB PGA On*
Date Performed	*3/26/2015*	Jurisdiction	*FDOT D4*
Analysis Time Period	*PM Peak*	Analysis Year	*2020*

Project Description *Alt 2: I-95 SB Basic WB PGA On to EB PGA On (S8 - S9)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*5740*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1233*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*17.6*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Southbound
Agency or Company		Junction	EB PGA SB On Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	AM	Analysis Year	2020

Project Description: Alt 2: I-95 SB Merge at WB PGA On-Ramp (S9 - S10)

Inputs

Upstream Adj Ramp		Freeway / Ramp		Downstream Adj Ramp	
☐ Yes	☐ On	Freeway Number of Lanes, N	5	☐ Yes	☐ On
☑ No	☐ Off	Ramp Number of Lanes, N	1	☑ No	☐ Off
L_{up} =	ft	Acceleration Lane Length, L_A	400	L_{down} =	ft
V_u =	veh/h	Deceleration Lane Length L_D		V_D =	veh/h
		Freeway Volume, V_F	5468		
		Ramp Volume, V_R	1193		
		Freeway Free-Flow Speed, S_{FF}	70.0		
		Ramp Free-Flow Speed, S_{FR}	50.0		

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	5468	0.95	Level	4	0	0.980	1.00	5871
Ramp	1193	0.92	Level	3	0	0.985	1.00	1316
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 0.053 using Equation (Exhibit 13-6)

V_{12} = 238 pc/h

V_3 or V_{av34} = 2112 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes, V_{12a} = 1784 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	5778	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	3100	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = 26.5 (pc/mi/ln)

LOS = C (Exhibit 13-2)

Speed Determination

M_S = 0.368 (Exibit 13-11)

S_R = 59.7 mph (Exhibit 13-11)

S_0 = 67.0 mph (Exhibit 13-11)

S = 62.9 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R = mph (Exhibit 13-12)

S_0 = mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Southbound
Agency or Company		Junction	EB PGA SB On Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	PM	Analysis Year	2020

Project Description: Alt 2: I-95 SB Merge at WB PGA On-Ramp (S9 - S10)

Inputs

Upstream Adj Ramp		Freeway Number of Lanes, N	5	Downstream Adj Ramp	
☐ Yes	☐ On	Ramp Number of Lanes, N	1	☐ Yes	☐ On
☑ No	☐ Off	Acceleration Lane Length, L_A	400	☑ No	☐ Off
L_{up} =	ft	Deceleration Lane Length L_D		L_{down} =	ft
V_u =	veh/h	Freeway Volume, V_F	5740	V_D =	veh/h
		Ramp Volume, V_R	1400		
		Freeway Free-Flow Speed, S_{FF}	70.0		
		Ramp Free-Flow Speed, S_{FR}	50.0		

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	5740	0.95	Level	4	0	0.980	1.00	6163
Ramp	1400	0.92	Level	3	0	0.985	1.00	1545
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 0.025 using Equation (Exhibit 13-6)

V_{12} = 116 pc/h

V_3 or V_{av34} = 2284 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes, V_{12a} = 1873 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	6229	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	3418	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = 28.9 (pc/mi/ln)

LOS = D (Exhibit 13-2)

Speed Determination

M_S = 0.400 (Exibit 13-11)

S_R = 58.8 mph (Exhibit 13-11)

S_0 = 66.7 mph (Exhibit 13-11)

S = 62.1 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R = mph (Exhibit 13-12)

S_0 = mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*AM Peak*

Site Information

Highway/Direction of Travel	*I-95 Southbound*
From/To	*EB PGA On to NLake Off*
Jurisdiction	*FDOT D4*
Analysis Year	*2020*

Project Description *Alt 2: I-95 SB - EB-PGA_On_to_NLake_SB_Off (S10 - S11)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*6661*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1430*	pc/h/ln
S	*69.4*	mph
D = v_p / S	*20.6*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 10-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*PM Peak*

Site Information

Highway/Direction of Travel	*I-95 Southbound*
From/To	*EB PGA On to NLake Off*
Jurisdiction	*FDOT D4*
Analysis Year	*2020*

Project Description *Alt 2: I-95 SB - EB-PGA_On_to_NLake_SB_Off (S10 - S11)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*7140*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1533*	pc/h/ln
S	*68.7*	mph
D = v_p / S	*22.3*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 10-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Southbound
Agency or Company		Junction	Nlake Off Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	AM Peak	Analysis Year	2020

Project Description: Alt 2: I-95 SB Diverge at Nlake Off-Ramp (S11 - S12)

Inputs

Upstream Adj Ramp		Freeway Number of Lanes, N	5	Downstream Adj Ramp	
☐ Yes	☐ On	Ramp Number of Lanes, N	2	☐ Yes	☐ On
☑ No	☐ Off	Acceleration Lane Length, L_A		☑ No	☐ Off
L_{up} =	ft	Deceleration Lane Length L_D	500	L_{down} =	ft
V_u =	veh/h	Freeway Volume, V_F	6661	V_D =	veh/h
		Ramp Volume, V_R	1088		
		Freeway Free-Flow Speed, S_{FF}	70.0		
		Ramp Free-Flow Speed, S_{FR}	50.0		

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	6661	0.95	Level	4	0	0.980	1.00	7152
Ramp	1088	0.92	Level	3	0	0.985	1.00	1200
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.260 using Equation (Exhibit 13-7)

V_{12} = 2376 pc/h

V_3 or V_{av34} 1673 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	5722	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	4522	Exhibit 13-8	9600	No
V_R	1200	Exhibit 13-10	4200	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	2376	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 11.2 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination

D_s = 0.341 (Exhibit 13-12)

S_R = 60.5 mph (Exhibit 13-12)

S_0 = 74.2 mph (Exhibit 13-12)

S = 67.8 mph (Exhibit 13-13)

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Southbound
Agency or Company		Junction	Nlake Off Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	PM Peak	Analysis Year	2020

Project Description: Alt 2: I-95 SB Diverge at Nlake Off-Ramp (S11 - S12)

Inputs

Upstream Adj Ramp		Freeway Number of Lanes, N	5	Downstream Adj Ramp	
☐ Yes	☐ On	Ramp Number of Lanes, N	2	☐ Yes	☐ On
☑ No	☐ Off	Acceleration Lane Length, L_A		☑ No	☐ Off
L_{up} =	ft	Deceleration Lane Length L_D	500	L_{down} =	ft
V_u =	veh/h	Freeway Volume, V_F	7140	V_D =	veh/h
		Ramp Volume, V_R	1208		
		Freeway Free-Flow Speed, S_{FF}	70.0		
		Ramp Free-Flow Speed, S_{FR}	50.0		

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	7140	0.95	Level	4	0	0.980	1.00	7666
Ramp	1208	0.92	Level	3	0	0.985	1.00	1333
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.260 using Equation (Exhibit 13-7)

V_{12} = 2581 pc/h

V_3 or V_{av34} 1776 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	6133	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	4800	Exhibit 13-8	9600	No
V_R	1333	Exhibit 13-10	4200	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	2581	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 12.9 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination

D_s = 0.353 (Exhibit 13-12)

S_R = 60.1 mph (Exhibit 13-12)

S_0 = 73.8 mph (Exhibit 13-12)

S = 67.3 mph (Exhibit 13-13)

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

FREEWAY WEAVING WORKSHEET

General Information

Analyst	LRCB
Agency/Company	
Date Performed	4/2/2015
Analysis Time Period	AM

Site Information

Freeway/Dir of Travel	Southbound
Weaving Segment Location	Central Blvd CD
Analysis Year	2020

Project Description Alt 2: I-95 PGA - SB CD Road (Central Blvd. On Ramp) btw MT Off-Ramp

Inputs

Weaving configuration	One-Sided	Segment type	C-D Roadway/ Multilane Highways
Weaving number of lanes, N	2		
Weaving segment length, L_S	2000ft	Freeway minimum speed, S_{MIN}	15
Freeway free-flow speed, FFS	50 mph	Freeway maximum capacity, C_{IFL}	2250
		Terrain type	Level

Conversions to pc/h Under Base Conditions

	V (veh/h)	PHF	Truck (%)	RV (%)	E_T	E_R	f_{HV}	f_p	v (pc/h)
V_{FF}	1115	0.92	3	0	1.5	1.2	0.985	1.00	1230
V_{RF}	0	0.92	3	0	1.5	1.2	0.985	1.00	0
V_{FR}	0	0.92	3	0	1.5	1.2	0.985	1.00	0
V_{RR}	768	0.92	3	0	1.5	1.2	0.985	1.00	847
V_{NW}	2077							V =	2077
V_W	0								
VR	0.000								

Configuration Characteristics

Minimum maneuver lanes, N_{WL}	2 lc	Minimum weaving lane changes, LC_{MIN}	0 lc/h
Interchange density, ID	0.8 int/mi	Weaving lane changes, LC_W	103 lc/h
Minimum RF lane changes, LC_{RF}	0 lc/pc	Non-weaving lane changes, LC_{NW}	1127 lc/h
Minimum FR lane changes, LC_{FR}	0 lc/pc	Total lane changes, LC_{ALL}	1230 lc/h
Minimum RR lane changes, LC_{RR}	lc/pc	Non-weaving vehicle index, I_{NW}	332

Weaving Segment Speed, Density, Level of Service, and Capacity

Weaving segment flow rate, v	2047 veh/h	Weaving intensity factor, W	0.154
Weaving segment capacity, c_w	4343 veh/h	Weaving segment speed, S	45.0 mph
Weaving segment v/c ratio	0.471	Average weaving speed, S_W	45.3 mph
Weaving segment density, D	23.1 pc/mi/ln	Average non-weaving speed, S_{NW}	45.0 mph
Level of Service, LOS	B	Maximum weaving length, L_{MAX}	2596 ft

Notes

a. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments".
b. For volumes that exceed the weaving segment capacity, the level of service is "F".

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

FREEWAY WEAVING WORKSHEET

General Information

Analyst	LRCB
Agency/Company	
Date Performed	4/2/2015
Analysis Time Period	PM

Site Information

Freeway/Dir of Travel	Southbound
Weaving Segment Location	Central Blvd CD
Analysis Year	2020

Project Description Alt 2: I-95 PGA - SB CD Road (Central Blvd. On Ramp) btw MT Off-Ramp

Inputs

Weaving configuration	One-Sided	Segment type	C-D Roadway/ Multilane Highways
Weaving number of lanes, N	2		
Weaving segment length, L_S	2000ft	Freeway minimum speed, S_{MIN}	15
Freeway free-flow speed, FFS	50 mph	Freeway maximum capacity, C_{IFL}	2250
		Terrain type	Level

Conversions to pc/h Under Base Conditions

	V (veh/h)	PHF	Truck (%)	RV (%)	E_T	E_R	f_{HV}	f_p	v (pc/h)
V_{FF}	1006	0.92	3	0	1.5	1.2	0.985	1.00	1110
V_{RF}	0	0.92	3	0	1.5	1.2	0.985	1.00	0
V_{FR}	0	0.92	3	0	1.5	1.2	0.985	1.00	0
V_{RR}	255	0.92	3	0	1.5	1.2	0.985	1.00	281
V_{NW}	1391							V =	1391
V_W	0								
VR	0.000								

Configuration Characteristics

Minimum maneuver lanes, N_{WL}	2 lc	Minimum weaving lane changes, LC_{MIN}	0 lc/h
Interchange density, ID	0.8 int/mi	Weaving lane changes, LC_W	103 lc/h
Minimum RF lane changes, LC_{RF}	0 lc/pc	Non-weaving lane changes, LC_{NW}	985 lc/h
Minimum FR lane changes, LC_{FR}	0 lc/pc	Total lane changes, LC_{ALL}	1088 lc/h
Minimum RR lane changes, LC_{RR}	lc/pc	Non-weaving vehicle index, I_{NW}	223

Weaving Segment Speed, Density, Level of Service, and Capacity

Weaving segment flow rate, v	1371 veh/h	Weaving intensity factor, W	0.140
Weaving segment capacity, c_w	4343 veh/h	Weaving segment speed, S	46.7 mph
Weaving segment v/c ratio	0.316	Average weaving speed, S_W	45.7 mph
Weaving segment density, D	14.9 pc/mi/ln	Average non-weaving speed, S_{NW}	46.7 mph
Level of Service, LOS	B	Maximum weaving length, L_{MAX}	2596 ft

Notes

a. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments".
b. For volumes that exceed the weaving segment capacity, the level of service is "F".

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Northbound
Agency or Company		Junction	NLake NB On Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	AM	Analysis Year	2030

Project Description: Alt 2: I-95 NB Merge at Nlake On-Ramp (N1 - N2)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 5	☐ Yes ☐ On
☑ No ☐ Off	Ramp Number of Lanes, N: 1	☑ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A: 400	L_{down} = ft
V_u = veh/h	Deceleration Lane Length L_D:	V_D = veh/h
	Freeway Volume, V_F: 5917	
	Ramp Volume, V_R: 1407	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 50.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	5917	0.95	Level	4	0	0.980	1.00	6353
Ramp	1407	0.92	Level	3	0	0.985	1.00	1552
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 0.024 using Equation (Exhibit 13-6)

V_{12} = 115 pc/h

V_3 or V_{av34} = 2357 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes, V_{12a} = 1931 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	6381	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	3483	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = 29.4 (pc/mi/ln)

LOS = D (Exhibit 13-2)

Speed Determination

M_S = 0.408 (Exibit 13-11)

S_R = 58.6 mph (Exhibit 13-11)

S_0 = 66.6 mph (Exhibit 13-11)

S = 62.0 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R = mph (Exhibit 13-12)

S_0 = mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Northbound
Agency or Company		Junction	NLake NB On Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	PM	Analysis Year	2030

Project Description: Alt 2: I-95 NB Merge at Nlake On-Ramp (N1 - N2)

Inputs

Upstream Adj Ramp		Freeway / Ramp		Downstream Adj Ramp	
☐ Yes	☐ On	Freeway Number of Lanes, N	5	☐ Yes	☐ On
☑ No	☐ Off	Ramp Number of Lanes, N	1	☑ No	☐ Off
L_{up} =	ft	Acceleration Lane Length, L_A	400	L_{down} =	ft
V_u =	veh/h	Deceleration Lane Length L_D		V_D =	veh/h
		Freeway Volume, V_F	5263		
		Ramp Volume, V_R	1548		
		Freeway Free-Flow Speed, S_{FF}	70.0		
		Ramp Free-Flow Speed, S_{FR}	50.0		

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	5263	0.95	Level	4	0	0.980	1.00	5651
Ramp	1548	0.92	Level	3	0	0.985	1.00	1708
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 0.004 using Equation (Exhibit 13-6)

V_{12} = 18 pc/h

V_3 or V_{av34} = 2138 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes, V_{12a} = 1718 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	6003	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	3426	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = 28.9 (pc/mi/ln)

LOS = D (Exhibit 13-2)

Speed Determination

M_S = 0.401 (Exibit 13-11)

S_R = 58.8 mph (Exhibit 13-11)

S_0 = 67.2 mph (Exhibit 13-11)

S = 62.1 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R = mph (Exhibit 13-12)

S_0 = mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*AM Peak*

Site Information

Highway/Direction of Travel	*I-95 Northbound*
From/To	*NLake On-Rmp to PGA Off-Rmp*
Jurisdiction	*FDOT D4*
Analysis Year	*2030*

Project Description *Alt 2: I-95 NB Basic Nlake-On to PGA-Off (N2 - N3)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*7324*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1573*	pc/h/ln
S	*68.4*	mph
D = v_p / S	*23.0*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*PM Peak*

Site Information

Highway/Direction of Travel	*I-95 Northbound*
From/To	*NLake On-Rmp to PGA Off-Rmp*
Jurisdiction	*FDOT D4*
Analysis Year	*2030*

Project Description *Alt 2: I-95 NB Basic Nlake-On to PGA-Off (N2 - N3)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*6811*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1463*	pc/h/ln
S	*69.2*	mph
D = v_p / S	*21.1*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Northbound
Agency or Company		Junction	EB PGA Off-Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	AM Peak	Analysis Year	2030

Project Description: Alt 2: I-95 NB Diverge at EB PGA Off-Ramp (N3 - N4)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 5	☐ Yes ☐ On
☑ No ☐ Off	Ramp Number of Lanes, N: 2	☑ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A:	L_{down} = ft
V_u = veh/h	Deceleration Lane Length L_D: 500	V_D = veh/h
	Freeway Volume, V_F: 7324	
	Ramp Volume, V_R: 2400	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 55.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	7324	0.95	Level	4	0	0.980	1.00	7864
Ramp	2400	0.92	Level	3	0	0.985	1.00	2648
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.260 using Equation (Exhibit 13-7)

V_{12} = 3595 pc/h

V_3 or V_{av34} 1348 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	6292	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	3644	Exhibit 13-8	9600	No
V_R	2648	Exhibit 13-10	4400	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	3595	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 21.7 (pc/mi/ln)

LOS = C (Exhibit 13-2)

Speed Determination

D_s = 0.406 (Exhibit 13-12)

S_R = 58.6 mph (Exhibit 13-12)

S_0 = 75.4 mph (Exhibit 13-12)

S = 64.8 mph (Exhibit 13-13)

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Northbound
Agency or Company		Junction	EB PGA Off-Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	PM Peak	Analysis Year	2030

Project Description: Alt 2: I-95 NB Diverge at EB PGA Off-Ramp (N3 - N4)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 5	☐ Yes ☐ On
☑ No ☐ Off	Ramp Number of Lanes, N: 2	☑ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A:	L_{down} = ft
V_u = veh/h	Deceleration Lane Length L_D: 500	V_D = veh/h
	Freeway Volume, V_F: 6811	
	Ramp Volume, V_R: 1216	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 55.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	6811	0.95	Level	4	0	0.980	1.00	7313
Ramp	1216	0.92	Level	3	0	0.985	1.00	1342
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.260 using Equation (Exhibit 13-7)

V_{12} = 2514 pc/h

V_3 or V_{av34} 1668 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	5851	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	4509	Exhibit 13-8	9600	No
V_R	1342	Exhibit 13-10	4400	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	2514	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 12.4 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination

D_s = 0.289 (Exhibit 13-12)

S_R = 61.9 mph (Exhibit 13-12)

S_0 = 74.2 mph (Exhibit 13-12)

S = 68.4 mph (Exhibit 13-13)

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information		Site Information	
Analyst	*LRCB*	Highway/Direction of Travel	*I-95 Northbound*
Agency or Company		From/To	*PGA EB Off to PGA WB Off*
Date Performed	*3/26/2015*	Jurisdiction	*FDOT D4*
Analysis Time Period	*AM Peak*	Analysis Year	*2030*

Project Description *Alt 2: I-95 NB Basic EB PGA Off to WB PGA (N4 - N5)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4924*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1057*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*15.1*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*PM Peak*

Site Information

Highway/Direction of Travel	*I-95 Northbound*
From/To	*PGA EB Off to PGA WB Off*
Jurisdiction	*FDOT D4*
Analysis Year	*2030*

Project Description *Alt 2: I-95 NB Basic EB PGA Off to WB PGA (N4 - N5)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*5595*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1201*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*17.2*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Northbound
Agency or Company		Junction	WB PGA Off-Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	AM Peak	Analysis Year	2030

Project Description: Alt 2: I-95 NB Diverge at WB PGA Off-Ramp (N5 - N6)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 5	☐ Yes ☐ On
☑ No ☐ Off	Ramp Number of Lanes, N: 1	☑ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A:	L_{down} = ft
V_u = veh/h	Deceleration Lane Length L_D: 500	V_D = veh/h
	Freeway Volume, V_F: 4924	
	Ramp Volume, V_R: 854	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	$v = V/PHF \times f_{HV} \times f_p$
Freeway	4924	0.95	Level	4	0	0.980	1.00	5287
Ramp	854	0.92	Level	3	0	0.985	1.00	942
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.436 using Equation (Exhibit 13-7)

V_{12} = 2606 pc/h

V_3 or V_{av34} 1076 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	4759	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	3817	Exhibit 13-8	9600	No
V_R	942	Exhibit 13-10	2000	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	2606	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 22.2 (pc/mi/ln)

LOS = C (Exhibit 13-2)

Speed Determination

D_s = 0.513 (Exhibit 13-12)

S_R = 55.6 mph (Exhibit 13-12)

S_0 = 76.5 mph (Exhibit 13-12)

S = 63.5 mph (Exhibit 13-13)

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Northbound
Agency or Company		Junction	WB PGA Off-Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	PM Peak	Analysis Year	2030

Project Description: Alt 2: I-95 NB Diverge at WB PGA Off-Ramp (N5 - N6)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 5	☐ Yes ☐ On
☑ No ☐ Off	Ramp Number of Lanes, N: 1	☑ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A:	L_{down} = ft
V_u = veh/h	Deceleration Lane Length L_D: 500	V_D = veh/h
	Freeway Volume, V_F: 5595	
	Ramp Volume, V_R: 833	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	5595	0.95	Level	4	0	0.980	1.00	6007
Ramp	833	0.92	Level	3	0	0.985	1.00	919
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.436 using Equation (Exhibit 13-7)

V_{12} = 2745 pc/h

V_3 or V_{av34} 1180 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	5106	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	4187	Exhibit 13-8	9600	No
V_R	919	Exhibit 13-10	2000	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	2745	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 23.4 (pc/mi/ln)

LOS = C (Exhibit 13-2)

Speed Determination

D_s = 0.511 (Exhibit 13-12)

S_R = 55.7 mph (Exhibit 13-12)

S_0 = 76.1 mph (Exhibit 13-12)

S = 63.6 mph (Exhibit 13-13)

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*AM Peak*

Site Information

Highway/Direction of Travel	*I-95 Northbound*
From/To	*WB PGA Off to EB PGA On*
Jurisdiction	*FDOT D4*
Analysis Year	*2030*

Project Description *Alt 2: I-95 NB WB PGA Off to EB PGA On (N6 - N7)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4070*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*874*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*12.5*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information		Site Information	
Analyst	*LRCB*	Highway/Direction of Travel	*I-95 Northbound*
Agency or Company		From/To	*WB PGA Off to EB PGA On*
Date Performed	*3/26/2015*	Jurisdiction	*FDOT D4*
Analysis Time Period	*PM Peak*	Analysis Year	*2030*

Project Description *Alt 2: I-95 NB WB PGA Off to EB PGA On (N6 - N7)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4762*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1023*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*14.6*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

FREEWAY WEAVING WORKSHEET

General Information

Analyst	LRCB
Agency/Company	
Date Performed	8/22/15
Analysis Time Period	AM

Site Information

Freeway/Dir of Travel	Northbound
Weaving Segment Location	PGA-On to Central-CD-Off
Analysis Year	2030

Project Description Alt 2: I-95 PGA Blvd - NB PGA-On to Central-CD-Off - N7 to N8

Inputs

Weaving configuration	One-Sided	Segment type	Freeway
Weaving number of lanes, N	6	Freeway minimum speed, S_{MIN}	15
Weaving segment length, L_S	2000ft	Freeway maximum capacity, C_{IFL}	2350
Freeway free-flow speed, FFS	70 mph	Terrain type	Level

Conversions to pc/h Under Base Conditions

	V (veh/h)	PHF	Truck (%)	RV (%)	E_T	E_R	f_{HV}	f_p	v (pc/h)
V_{FF}	2955	0.95	4	0	1.5	1.2	0.980	1.00	3173
V_{RF}	155	0.92	3	0	1.5	1.2	0.985	1.00	171
V_{FR}	1115	0.92	3	0	1.5	1.2	0.985	1.00	1230
V_{RR}	0	0.94	0	0	1.5	1.2	1.000	1.00	0
V_{NW}	3173							V =	4574
V_W	1401								
VR	0.306								

Configuration Characteristics

Minimum maneuver lanes, N_{WL}	3 lc	Minimum weaving lane changes, LC_{MIN}	171 lc/h
Interchange density, ID	0.8 int/mi	Weaving lane changes, LC_W	1097 lc/h
Minimum RF lane changes, LC_{RF}	1 lc/pc	Non-weaving lane changes, LC_{NW}	582 lc/h
Minimum FR lane changes, LC_{FR}	0 lc/pc	Total lane changes, LC_{ALL}	1679 lc/h
Minimum RR lane changes, LC_{RR}	lc/pc	Non-weaving vehicle index, I_{NW}	508

Weaving Segment Speed, Density, Level of Service, and Capacity

Weaving segment flow rate, v	4491 veh/h	Weaving intensity factor, W	0.197
Weaving segment capacity, c_w	11203 veh/h	Weaving segment speed, S	63.8 mph
Weaving segment v/c ratio	0.401	Average weaving speed, S_W	61.0 mph
Weaving segment density, D	12.0 pc/mi/ln	Average non-weaving speed, S_{NW}	65.1 mph
Level of Service, LOS	B	Maximum weaving length, L_{MAX}	4086 ft

Notes

a. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments".
b. For volumes that exceed the weaving segment capacity, the level of service is "F".

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

FREEWAY WEAVING WORKSHEET

General Information

Analyst	LRCB
Agency/Company	
Date Performed	4/2/15
Analysis Time Period	PM

Site Information

Freeway/Dir of Travel	Northbound
Weaving Segment Location	PGA-On to Central-CD-Off
Analysis Year	2030

Project Description Alt 2: I-95 PGA Blvd - NB PGA-On to Central-CD-Off - N7 to N8

Inputs

Weaving configuration	One-Sided	Segment type	Freeway
Weaving number of lanes, N	6	Freeway minimum speed, S_{MIN}	15
Weaving segment length, L_S	2000ft	Freeway maximum capacity, C_{IFL}	2350
Freeway free-flow speed, FFS	70 mph	Terrain type	Level

Conversions to pc/h Under Base Conditions

	V (veh/h)	PHF	Truck (%)	RV (%)	E_T	E_R	f_{HV}	f_p	v (pc/h)
V_{FF}	3535	0.95	4	0	1.5	1.2	0.980	1.00	3795
V_{RF}	741	0.92	3	0	1.5	1.2	0.985	1.00	818
V_{FR}	1227	0.92	3	0	1.5	1.2	0.985	1.00	1354
V_{RR}	0	0.94	0	0	1.5	1.2	1.000	1.00	0
V_{NW}	3795							V =	5967
V_W	2172								
VR	0.364								

Configuration Characteristics

Minimum maneuver lanes, N_{WL}	3 lc	Minimum weaving lane changes, LC_{MIN}	818 lc/h
Interchange density, ID	0.8 int/mi	Weaving lane changes, LC_W	1744 lc/h
Minimum RF lane changes, LC_{RF}	1 lc/pc	Non-weaving lane changes, LC_{NW}	710 lc/h
Minimum FR lane changes, LC_{FR}	0 lc/pc	Total lane changes, LC_{ALL}	2454 lc/h
Minimum RR lane changes, LC_{RR}	lc/pc	Non-weaving vehicle index, I_{NW}	607

Weaving Segment Speed, Density, Level of Service, and Capacity

Weaving segment flow rate, v	5861 veh/h	Weaving intensity factor, W	0.266
Weaving segment capacity, c_w	9427 veh/h	Weaving segment speed, S	59.0 mph
Weaving segment v/c ratio	0.622	Average weaving speed, S_W	58.5 mph
Weaving segment density, D	16.9 pc/mi/ln	Average non-weaving speed, S_{NW}	59.3 mph
Level of Service, LOS	B	Maximum weaving length, L_{MAX}	4715 ft

Notes

a. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments".
b. For volumes that exceed the weaving segment capacity, the level of service is "F".

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*4/2/2015*
Analysis Time Period	*AM Peak*

Site Information

Highway/Direction of Travel	*I-95 Northbound*
From/To	*Central-CD_Off_to_MT-CD-On*
Jurisdiction	*FDOT D4*
Analysis Year	*2030*

Project Description *Alt 2: I-95 PGA Blvd - Central-CD_Off_to_MT-CD-On N8 to N9*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3110*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*668*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*9.5*	pc/mi/ln
LOS	*A*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*4/2/2015*
Analysis Time Period	*PM Peak*

Site Information

Highway/Direction of Travel	*I-95 Northbound*
From/To	*Central-CD_Off_to_MT-CD-On*
Jurisdiction	*FDOT D4*
Analysis Year	*2030*

Project Description *Alt 2: I-95 PGA Blvd - Central-CD_Off_to_MT-CD-On N8 to N9*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4276*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*918*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*13.1*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Northbound
Agency or Company		Junction	at MT/CD On-Ramp
Date Performed	4/2/2015	Jurisdiction	FDOT D4
Analysis Time Period	AM	Analysis Year	2030

Project Description: Alt 2: I-95 NB Merge at MT/CD On-Ramp (N9 - N10)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 5	☐ Yes ☐ On
☑ No ☐ Off	Ramp Number of Lanes, N: 1	☑ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A: 400	L_{down} = ft
V_u = veh/h	Deceleration Lane Length L_D:	V_D = veh/h
	Freeway Volume, V_F: 3110	
	Ramp Volume, V_R: 159	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 50.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	3110	0.95	Level	4	0	0.980	1.00	3339
Ramp	159	0.92	Level	3	0	0.985	1.00	175
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 0.285 using Equation (Exhibit 13-6)

V_{12} = 743 pc/h

V_3 or V_{av34} = 931 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes, V_{12a} = 1042 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	2780	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	1217	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = 12.4 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination

M_S = 0.294 (Exibit 13-11)

S_R = 61.8 mph (Exhibit 13-11)

S_0 = 69.0 mph (Exhibit 13-11)

S = 65.6 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R = mph (Exhibit 13-12)

S_0 = mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	1082	Freeway/Dir of Travel	I-95 Northbound
Agency or Company		Junction	at MT/CD On-Ramp
Date Performed	4/2/2015	Jurisdiction	FDOT D4
Analysis Time Period	PM	Analysis Year	2030

Project Description: Alt 2: I-95 NB Merge at MT/CD On-Ramp (N9 - N10)

Inputs

Upstream Adj Ramp		Freeway/Ramp		Downstream Adj Ramp	
☐ Yes	☐ On	Freeway Number of Lanes, N	5	☐ Yes	☐ On
☑ No	☐ Off	Ramp Number of Lanes, N	1	☑ No	☐ Off
L_{up} =	ft	Acceleration Lane Length, L_A	400	L_{down} =	ft
V_u =	veh/h	Deceleration Lane Length L_D		V_D =	veh/h
		Freeway Volume, V_F	4276		
		Ramp Volume, V_R	992		
		Freeway Free-Flow Speed, S_{FF}	70.0		
		Ramp Free-Flow Speed, S_{FR}	50.0		

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	4276	0.95	Level	4	0	0.980	1.00	4591
Ramp	992	0.92	Level	3	0	0.985	1.00	1094
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 0.170 using Equation (Exhibit 13-6)

V_{12} = 610 pc/h

V_3 or V_{av34} = 1485 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes, V_{12a} = 1432 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	4675	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	2526	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = 22.2 (pc/mi/ln)

LOS = C (Exhibit 13-2)

Speed Determination

M_S = 0.330 (Exibit 13-11)

S_R = 60.8 mph (Exhibit 13-11)

S_0 = 67.9 mph (Exhibit 13-11)

S = 63.9 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R = mph (Exhibit 13-12)

S_0 = mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*4/2/2015*
Analysis Time Period	*AM Peak*

Site Information

Highway/Direction of Travel	*I-95 Northbound*
From/To	*Military_Tr_On_to_Central_On*
Jurisdiction	*FDOT D4*
Analysis Year	*2030*

Project Description *Alt 2: I-95 PGA Boulevard - Military_Tr_On_to_Central_On*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3269*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*702*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*10.0*	pc/mi/ln
LOS	*A*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 10-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*4/2/2015*
Analysis Time Period	*PM Peak*

Site Information

Highway/Direction of Travel	*I-95 Northbound*
From/To	*Military_Tr_On_to_Central_On*
Jurisdiction	*FDOT D4*
Analysis Year	*2030*

Project Description *Alt 2: I-95 PGA Boulevard - Military_Tr_On_to_Central_On*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*5268*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1131*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*16.2*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

FREEWAY WEAVING WORKSHEET

General Information

Analyst	LRCB
Agency/Company	
Date Performed	8/22/15
Analysis Time Period	AM

Site Information

Freeway/Dir of Travel	Nortbound
Weaving Segment Location	Central to DRoss
Analysis Year	2030

Project Description Alt 2: I-95 PGA Blvd - NB Central to DRoss - N11 to N12

Inputs

Weaving configuration	One-Sided	Segment type	Freeway
Weaving number of lanes, N	6	Freeway minimum speed, S_{MIN}	15
Weaving segment length, L_S	2450ft	Freeway maximum capacity, C_{IFL}	2350
Freeway free-flow speed, FFS	70 mph	Terrain type	Level

Conversions to pc/h Under Base Conditions

	V (veh/h)	PHF	Truck (%)	RV (%)	E_T	E_R	f_{HV}	f_p	v (pc/h)
V_{FF}	2234	0.95	4	0	1.5	1.2	0.980	1.00	2399
V_{RF}	341	0.92	3	0	1.5	1.2	0.985	1.00	376
V_{FR}	1035	0.92	3	0	1.5	1.2	0.985	1.00	1142
V_{RR}	0	0.94	0	0	1.5	1.2	1.000	1.00	0
V_{NW}	2399							V =	3917
V_W	1518								
VR	0.388								

Configuration Characteristics

Minimum maneuver lanes, N_{WL}	3 lc	Minimum weaving lane changes, LC_{MIN}	376 lc/h
Interchange density, ID	0.8 int/mi	Weaving lane changes, LC_W	1418 lc/h
Minimum RF lane changes, LC_{RF}	1 lc/pc	Non-weaving lane changes, LC_{NW}	666 lc/h
Minimum FR lane changes, LC_{FR}	0 lc/pc	Total lane changes, LC_{ALL}	2084 lc/h
Minimum RR lane changes, LC_{RR}	lc/pc	Non-weaving vehicle index, I_{NW}	470

Weaving Segment Speed, Density, Level of Service, and Capacity

Weaving segment flow rate, v	3848 veh/h	Weaving intensity factor, W	0.199
Weaving segment capacity, c_w	8854 veh/h	Weaving segment speed, S	62.8 mph
Weaving segment v/c ratio	0.435	Average weaving speed, S_W	60.9 mph
Weaving segment density, D	10.4 pc/mi/ln	Average non-weaving speed, S_{NW}	64.2 mph
Level of Service, LOS	B	Maximum weaving length, L_{MAX}	4976 ft

Notes

a. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments".
b. For volumes that exceed the weaving segment capacity, the level of service is "F".

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

FREEWAY WEAVING WORKSHEET

General Information

Analyst	LRCB
Agency/Company	
Date Performed	8/22/15
Analysis Time Period	PM

Site Information

Freeway/Dir of Travel	Nortbound
Weaving Segment Location	Central to DRoss
Analysis Year	2030

Project Description Alt 2: I-95 PGA Blvd - NB Central to DRoss - N11 to N12

Inputs

Weaving configuration	One-Sided	Segment type	Freeway
Weaving number of lanes, N	6	Freeway minimum speed, S_{MIN}	15
Weaving segment length, L_S	2450ft	Freeway maximum capacity, C_{IFL}	2350
Freeway free-flow speed, FFS	70 mph	Terrain type	Level

Conversions to pc/h Under Base Conditions

	V (veh/h)	PHF	Truck (%)	RV (%)	E_T	E_R	f_{HV}	f_p	v (pc/h)
V_{FF}	3736	0.95	4	0	1.5	1.2	0.980	1.00	4011
V_{RF}	387	0.92	3	0	1.5	1.2	0.985	1.00	427
V_{FR}	1532	0.92	3	0	1.5	1.2	0.985	1.00	1690
V_{RR}	0	0.94	0	0	1.5	1.2	1.000	1.00	0
V_{NW}	4011							V =	6128
V_W	2117								
VR	0.345								

Configuration Characteristics

Minimum maneuver lanes, N_{WL}	3 lc	Minimum weaving lane changes, LC_{MIN}	427 lc/h
Interchange density, ID	0.8 int/mi	Weaving lane changes, LC_W	1469 lc/h
Minimum RF lane changes, LC_{RF}	1 lc/pc	Non-weaving lane changes, LC_{NW}	999 lc/h
Minimum FR lane changes, LC_{FR}	0 lc/pc	Total lane changes, LC_{ALL}	2468 lc/h
Minimum RR lane changes, LC_{RR}	lc/pc	Non-weaving vehicle index, I_{NW}	786

Weaving Segment Speed, Density, Level of Service, and Capacity

Weaving segment flow rate, v	6019 veh/h	Weaving intensity factor, W	0.227
Weaving segment capacity, c_w	9933 veh/h	Weaving segment speed, S	61.2 mph
Weaving segment v/c ratio	0.606	Average weaving speed, S_W	59.8 mph
Weaving segment density, D	16.7 pc/mi/ln	Average non-weaving speed, S_{NW}	62.0 mph
Level of Service, LOS	B	Maximum weaving length, L_{MAX}	4511 ft

Notes

a. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments".
b. For volumes that exceed the weaving segment capacity, the level of service is "F".

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

FREEWAY WEAVING WORKSHEET

General Information

Analyst	LRCB
Agency/Company	
Date Performed	4/2/2015
Analysis Time Period	AM

Site Information

Freeway/Dir of Travel	Northbound
Weaving Segment Location	NB CD Road
Analysis Year	2030

Project Description Alt 2: 95 PGA - NB CD Road (Central Blvd. Off Ramp) btw On-Ramp from MT and I95

Inputs

Weaving configuration	One-Sided	Segment type	C-D Roadway/ Multilane Highways
Weaving number of lanes, N	2		
Weaving segment length, L_S	2000ft	Freeway minimum speed, S_{MIN}	15
Freeway free-flow speed, FFS	50 mph	Freeway maximum capacity, C_{IFL}	2250
		Terrain type	Level

Conversions to pc/h Under Base Conditions

	V (veh/h)	PHF	Truck (%)	RV (%)	E_T	E_R	f_{HV}	f_p	v (pc/h)
V_{FF}	1115	0.92	3	0	1.5	1.2	0.985	1.00	1230
V_{RF}	0	0.92	3	0	1.5	1.2	0.985	1.00	0
V_{FR}	0	0.92	3	0	1.5	1.2	0.985	1.00	0
V_{RR}	159	0.92	3	0	1.5	1.2	0.985	1.00	175
V_{NW}	1405							V =	1405
V_W	0								
VR	0.000								

Configuration Characteristics

Minimum maneuver lanes, N_{WL}	2 lc	Minimum weaving lane changes, LC_{MIN}	0 lc/h
Interchange density, ID	0.8 int/mi	Weaving lane changes, LC_W	103 lc/h
Minimum RF lane changes, LC_{RF}	0 lc/pc	Non-weaving lane changes, LC_{NW}	988 lc/h
Minimum FR lane changes, LC_{FR}	0 lc/pc	Total lane changes, LC_{ALL}	1091 lc/h
Minimum RR lane changes, LC_{RR}	lc/pc	Non-weaving vehicle index, I_{NW}	225

Weaving Segment Speed, Density, Level of Service, and Capacity

Weaving segment flow rate, v	1385 veh/h	Weaving intensity factor, W	0.140
Weaving segment capacity, c_w	4343 veh/h	Weaving segment speed, S	46.6 mph
Weaving segment v/c ratio	0.319	Average weaving speed, S_W	45.7 mph
Weaving segment density, D	15.1 pc/mi/ln	Average non-weaving speed, S_{NW}	46.6 mph
Level of Service, LOS	B	Maximum weaving length, L_{MAX}	2596 ft

Notes

a. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments".
b. For volumes that exceed the weaving segment capacity, the level of service is "F".

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

FREEWAY WEAVING WORKSHEET

General Information

Analyst	LRCB
Agency/Company	
Date Performed	4/2/2015
Analysis Time Period	PM

Site Information

Freeway/Dir of Travel	Northbound
Weaving Segment Location	NB CD Road
Analysis Year	2030

Project Description Alt 2: 95 PGA - NB CD Road (Central Blvd. Off Ramp) btw On-Ramp from MT and I95

Inputs

Weaving configuration	One-Sided	Segment type	C-D Roadway/ Multilane Highways
Weaving number of lanes, N	2		
Weaving segment length, L_S	2000ft	Freeway minimum speed, S_{MIN}	15
Freeway free-flow speed, FFS	50 mph	Freeway maximum capacity, C_{IFL}	2250
		Terrain type	Level

Conversions to pc/h Under Base Conditions

	V (veh/h)	PHF	Truck (%)	RV (%)	E_T	E_R	f_{HV}	f_p	v (pc/h)
V_{FF}	1227	0.92	3	0	1.5	1.2	0.985	1.00	1354
V_{RF}	0	0.92	3	0	1.5	1.2	0.985	1.00	0
V_{FR}	0	0.92	3	0	1.5	1.2	0.985	1.00	0
V_{RR}	992	0.92	3	0	1.5	1.2	0.985	1.00	1094
V_{NW}	2448							V =	2448
V_W	0								
VR	0.000								

Configuration Characteristics

Minimum maneuver lanes, N_{WL}	2 lc	Minimum weaving lane changes, LC_{MIN}	0 lc/h
Interchange density, ID	0.8 int/mi	Weaving lane changes, LC_W	103 lc/h
Minimum RF lane changes, LC_{RF}	0 lc/pc	Non-weaving lane changes, LC_{NW}	1203 lc/h
Minimum FR lane changes, LC_{FR}	0 lc/pc	Total lane changes, LC_{ALL}	1306 lc/h
Minimum RR lane changes, LC_{RR}	lc/pc	Non-weaving vehicle index, I_{NW}	392

Weaving Segment Speed, Density, Level of Service, and Capacity

Weaving segment flow rate, v	2412 veh/h	Weaving intensity factor, W	0.161
Weaving segment capacity, c_w	4343 veh/h	Weaving segment speed, S	44.1 mph
Weaving segment v/c ratio	0.555	Average weaving speed, S_W	45.1 mph
Weaving segment density, D	27.7 pc/mi/ln	Average non-weaving speed, S_{NW}	44.1 mph
Level of Service, LOS	C	Maximum weaving length, L_{MAX}	2596 ft

Notes

a. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments".
b. For volumes that exceed the weaving segment capacity, the level of service is "F".

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

FREEWAY WEAVING WORKSHEET

General Information

Analyst	LRCB
Agency/Company	
Date Performed	8/22/15
Analysis Time Period	AM

Site Information

Freeway/Dir of Travel	Southbound
Weaving Segment Location	DRoss to Central
Analysis Year	2030

Project Description Alt 2: I-95 PGA Boulevard - SB DRoss to Central - S1-S2

Inputs

Weaving configuration	One-Sided	Segment type	Freeway
Weaving number of lanes, N	6	Freeway minimum speed, S_{MIN}	15
Weaving segment length, L_S	2450ft	Freeway maximum capacity, C_{IFL}	2350
Freeway free-flow speed, FFS	70 mph	Terrain type	Level

Conversions to pc/h Under Base Conditions

	V (veh/h)	PHF	Truck (%)	RV (%)	E_T	E_R	f_{HV}	f_p	v (pc/h)
V_{FF}	3823	0.95	4	0	1.5	1.2	0.980	1.00	4105
V_{RF}	1428	0.92	3	0	1.5	1.2	0.985	1.00	1575
V_{FR}	219	0.92	3	0	1.5	1.2	0.985	1.00	242
V_{RR}	0	0.94	0	0	1.5	1.2	1.000	1.00	0
V_{NW}	4105							V =	5922
V_W	1817								
VR	0.307								

Configuration Characteristics

Minimum maneuver lanes, N_{WL}	3 lc	Minimum weaving lane changes, LC_{MIN}	242 lc/h
Interchange density, ID	0.8 int/mi	Weaving lane changes, LC_W	1284 lc/h
Minimum RF lane changes, LC_{RF}	0 lc/pc	Non-weaving lane changes, LC_{NW}	1018 lc/h
Minimum FR lane changes, LC_{FR}	1 lc/pc	Total lane changes, LC_{ALL}	2302 lc/h
Minimum RR lane changes, LC_{RR}	lc/pc	Non-weaving vehicle index, I_{NW}	805

Weaving Segment Speed, Density, Level of Service, and Capacity

Weaving segment flow rate, v	5815 veh/h	Weaving intensity factor, W	0.215
Weaving segment capacity, c_w	11184 veh/h	Weaving segment speed, S	62.5 mph
Weaving segment v/c ratio	0.520	Average weaving speed, S_W	60.3 mph
Weaving segment density, D	15.8 pc/mi/ln	Average non-weaving speed, S_{NW}	63.5 mph
Level of Service, LOS	B	Maximum weaving length, L_{MAX}	4091 ft

Notes

a. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments".
b. For volumes that exceed the weaving segment capacity, the level of service is "F".

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

FREEWAY WEAVING WORKSHEET

General Information

Analyst	LRCB
Agency/Company	
Date Performed	8/22/15
Analysis Time Period	PM

Site Information

Freeway/Dir of Travel	Southbound
Weaving Segment Location	DRoss to Central
Analysis Year	2030

Project Description Alt 2: I-95 PGA Boulevard - SB DRoss to Central - S1-S2

Inputs

Weaving configuration	One-Sided	Segment type	Freeway
Weaving number of lanes, N	6	Freeway minimum speed, S_{MIN}	15
Weaving segment length, L_S	2450ft	Freeway maximum capacity, C_{IFL}	2350
Freeway free-flow speed, FFS	70 mph	Terrain type	Level

Conversions to pc/h Under Base Conditions

	V (veh/h)	PHF	Truck (%)	RV (%)	E_T	E_R	f_{HV}	f_p	v (pc/h)
V_{FF}	2481	0.95	4	0	1.5	1.2	0.980	1.00	2664
V_{RF}	1017	0.92	3	0	1.5	1.2	0.985	1.00	1122
V_{FR}	465	0.92	3	0	1.5	1.2	0.985	1.00	513
V_{RR}	0	0.94	0	0	1.5	1.2	1.000	1.00	0
V_{NW}	2664							V =	4299
V_W	1635								
VR	0.380								

Configuration Characteristics

Minimum maneuver lanes, N_{WL}	3 lc	Minimum weaving lane changes, LC_{MIN}	513 lc/h
Interchange density, ID	0.8 int/mi	Weaving lane changes, LC_W	1555 lc/h
Minimum RF lane changes, LC_{RF}	0 lc/pc	Non-weaving lane changes, LC_{NW}	721 lc/h
Minimum FR lane changes, LC_{FR}	1 lc/pc	Total lane changes, LC_{ALL}	2276 lc/h
Minimum RR lane changes, LC_{RR}	lc/pc	Non-weaving vehicle index, I_{NW}	522

Weaving Segment Speed, Density, Level of Service, and Capacity

Weaving segment flow rate, v	4223 veh/h	Weaving intensity factor, W	0.213
Weaving segment capacity, c_w	9022 veh/h	Weaving segment speed, S	61.9 mph
Weaving segment v/c ratio	0.468	Average weaving speed, S_W	60.3 mph
Weaving segment density, D	11.6 pc/mi/ln	Average non-weaving speed, S_{NW}	62.9 mph
Level of Service, LOS	B	Maximum weaving length, L_{MAX}	4895 ft

Notes

a. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments".
b. For volumes that exceed the weaving segment capacity, the level of service is "F".

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*AM Peak*

Site Information

Highway/Direction of Travel	*I-95 Southbound*
From/To	*Central-Off to MT_CD*
Jurisdiction	*FDOT D4*
Analysis Year	*2030*

Project Description *Alt 2: I-95 PGA Boulevard - SB Central-Off to MT_CD S2 to S3*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*5251*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1128*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*16.1*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*PM Peak*

Site Information

Highway/Direction of Travel	*I-95 Southbound*
From/To	*Central-Off to MT_CD*
Jurisdiction	*FDOT D4*
Analysis Year	*2030*

Project Description *Alt 2: I-95 PGA Boulevard - SB Central-Off to MT_CD S2 to S3*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3498*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*751*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*10.7*	pc/mi/ln
LOS	*A*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Southbound
Agency or Company		Junction	PGA Off Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	AM Peak	Analysis Year	2030

Project Description: Alt 2: I-95 PGA Boulevard - Military CD Rd-Off S3 to S4

Inputs

Upstream Adj Ramp		Freeway Number of Lanes, N	5	Downstream Adj Ramp	
☐ Yes	☐ On	Ramp Number of Lanes, N	1	☐ Yes	☐ On
☑ No	☐ Off	Acceleration Lane Length, L_A		☑ No	☐ Off
L_{up} =	ft	Deceleration Lane Length L_D	500	L_{down} =	ft
V_u =	veh/h	Freeway Volume, V_F	5251	V_D =	veh/h
		Ramp Volume, V_R	832		
		Freeway Free-Flow Speed, S_{FF}	70.0		
		Ramp Free-Flow Speed, S_{FR}	50.0		

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	$v = V/PHF \times f_{HV} \times f_p$
Freeway	5251	0.95	Level	4	0	0.980	1.00	5638
Ramp	832	0.92	Level	3	0	0.985	1.00	918
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.436 using Equation (Exhibit 13-7)

V_{12} = 2607 pc/h

V_3 or V_{av34} 1093 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	4793	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	3875	Exhibit 13-8	9600	No
V_R	918	Exhibit 13-10	2100	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	2607	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 22.2 (pc/mi/ln)

LOS = C (Exhibit 13-2)

Speed Determination

D_s = 0.316 (Exhibit 13-12)

S_R = 61.2 mph (Exhibit 13-12)

S_0 = 76.4 mph (Exhibit 13-12)

S = 67.3 mph (Exhibit 13-13)

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Southbound
Agency or Company		Junction	PGA Off Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	PM Peak	Analysis Year	2030

Project Description: Alt 2: I-95 PGA Boulevard - Military CD Rd-Off S3 to S4

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 5	☐ Yes ☐ On
☑ No ☐ Off	Ramp Number of Lanes, N: 1	☑ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A:	L_{down} = ft
V_u = veh/h	Deceleration Lane Length L_D: 500	V_D = veh/h
	Freeway Volume, V_F: 3498	
	Ramp Volume, V_R: 286	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 50.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	$v = V/PHF \times f_{HV} \times f_p$
Freeway	3498	0.95	Level	4	0	0.980	1.00	3756
Ramp	286	0.92	Level	3	0	0.985	1.00	316
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.436 using Equation (Exhibit 13-7)

V_{12} = 1816 pc/h

V_3 or V_{av34} 970 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	3756	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	3440	Exhibit 13-8	9600	No
V_R	316	Exhibit 13-10	2100	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	1816	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 15.4 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination

D_s = 0.261 (Exhibit 13-12)

S_R = 62.7 mph (Exhibit 13-12)

S_0 = 76.8 mph (Exhibit 13-12)

S = 69.3 mph (Exhibit 13-13)

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*AM Peak*

Site Information

Highway/Direction of Travel	*I-95 Southbound*
From/To	*MT-CD_Off to Central-CD-On*
Jurisdiction	*FDOT D4*
Analysis Year	*2030*

Project Description *Alt 2: I-95 PGA Blvd -SB MT-CD_Off to Central-CD-On S4 to S5*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4419*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*949*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*13.6*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*PM Peak*

Site Information

Highway/Direction of Travel	*I-95 Southbound*
From/To	*MT-CD_Off to Central-CD-On*
Jurisdiction	*FDOT D4*
Analysis Year	*2030*

Project Description *Alt 2: I-95 PGA BLVD -SB MT-CD_Off to Central-CD-On S4 to S5*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3212*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*690*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*9.9*	pc/mi/ln
LOS	*A*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

FREEWAY WEAVING WORKSHEET

General Information

Analyst	LRCB
Agency/Company	
Date Performed	8/22/15
Analysis Time Period	AM

Site Information

Freeway/Dir of Travel	Southbound
Weaving Segment Location	Central-CD_to_PGA Off Ramp
Analysis Year	2030

Project Description Alt 2: I-95 PGA Blvd - Central-CD_to_PGA Off Ramp - S5-S6

Inputs

Weaving configuration	One-Sided	Segment type	Freeway
Weaving number of lanes, N	6	Freeway minimum speed, S_{MIN}	15
Weaving segment length, L_S	2000ft	Freeway maximum capacity, C_{IFL}	2350
Freeway free-flow speed, FFS	70 mph	Terrain type	Level

Conversions to pc/h Under Base Conditions

	V (veh/h)	PHF	Truck (%)	RV (%)	E_T	E_R	f_{HV}	f_p	v (pc/h)
V_{FF}	3472	0.95	4	0	1.5	1.2	0.980	1.00	3728
V_{RF}	1226	0.92	3	0	1.5	1.2	0.985	1.00	1353
V_{FR}	947	0.92	3	0	1.5	1.2	0.985	1.00	1045
V_{RR}	0	0.94	0	0	1.5	1.2	1.000	1.00	0
V_{NW}	3728							V =	6126
V_W	2398								
VR	0.391								

Configuration Characteristics

Minimum maneuver lanes, N_{WL}	3 lc	Minimum weaving lane changes, LC_{MIN}	0 lc/h
Interchange density, ID	0.8 int/mi	Weaving lane changes, LC_W	926 lc/h
Minimum RF lane changes, LC_{RF}	0 lc/pc	Non-weaving lane changes, LC_{NW}	696 lc/h
Minimum FR lane changes, LC_{FR}	0 lc/pc	Total lane changes, LC_{ALL}	1622 lc/h
Minimum RR lane changes, LC_{RR}	lc/pc	Non-weaving vehicle index, I_{NW}	596

Weaving Segment Speed, Density, Level of Service, and Capacity

Weaving segment flow rate, v	6017 veh/h	Weaving intensity factor, W	0.192
Weaving segment capacity, c_w	8766 veh/h	Weaving segment speed, S	63.5 mph
Weaving segment v/c ratio	0.686	Average weaving speed, S_W	61.2 mph
Weaving segment density, D	16.1 pc/mi/ln	Average non-weaving speed, S_{NW}	65.1 mph
Level of Service, LOS	B	Maximum weaving length, L_{MAX}	5019 ft

Notes

a. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments".
b. For volumes that exceed the weaving segment capacity, the level of service is "F".

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

FREEWAY WEAVING WORKSHEET

General Information

Analyst	LRCB
Agency/Company	
Date Performed	8/22/15
Analysis Time Period	PM

Site Information

Freeway/Dir of Travel	Southbound
Weaving Segment Location	Central-CD_to_PGA Off Ramp
Analysis Year	2030

Project Description Alt 2: I-95 PGA Blvd - Central-CD_to_PGA Off Ramp - S5-S6

Inputs

Weaving configuration	One-Sided	Segment type	Freeway
Weaving number of lanes, N	6	Freeway minimum speed, S_{MIN}	15
Weaving segment length, L_S	2000ft	Freeway maximum capacity, C_{IFL}	2350
Freeway free-flow speed, FFS	70 mph	Terrain type	Level

Conversions to pc/h Under Base Conditions

	V (veh/h)	PHF	Truck (%)	RV (%)	E_T	E_R	f_{HV}	f_p	v (pc/h)
V_{FF}	2958	0.95	4	0	1.5	1.2	0.980	1.00	3176
V_{RF}	1121	0.92	3	0	1.5	1.2	0.985	1.00	1237
V_{FR}	254	0.92	3	0	1.5	1.2	0.985	1.00	280
V_{RR}	0	0.94	0	0	1.5	1.2	1.000	1.00	0
V_{NW}	3176							V =	4693
V_W	1517								
VR	0.323								

Configuration Characteristics

Minimum maneuver lanes, N_{WL}	3 lc	Minimum weaving lane changes, LC_{MIN}	0 lc/h
Interchange density, ID	0.8 int/mi	Weaving lane changes, LC_W	926 lc/h
Minimum RF lane changes, LC_{RF}	0 lc/pc	Non-weaving lane changes, LC_{NW}	583 lc/h
Minimum FR lane changes, LC_{FR}	0 lc/pc	Total lane changes, LC_{ALL}	1509 lc/h
Minimum RR lane changes, LC_{RR}	lc/pc	Non-weaving vehicle index, I_{NW}	508

Weaving Segment Speed, Density, Level of Service, and Capacity

Weaving segment flow rate, v	4609 veh/h	Weaving intensity factor, W	0.181
Weaving segment capacity, c_w	10615 veh/h	Weaving segment speed, S	64.7 mph
Weaving segment v/c ratio	0.434	Average weaving speed, S_W	61.6 mph
Weaving segment density, D	12.1 pc/mi/ln	Average non-weaving speed, S_{NW}	66.2 mph
Level of Service, LOS	B	Maximum weaving length, L_{MAX}	4269 ft

Notes

a. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments".
b. For volumes that exceed the weaving segment capacity, the level of service is "F".

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*AM Peak*

Site Information

Highway/Direction of Travel	*I-95 Southbound*
From/To	*PGA-Off to WB_PGA On*
Jurisdiction	*FDOT D4*
Analysis Year	*2030*

Project Description *Alt 2: I-95 SB Basic PGA-Off to WB PGA-On (S6 - S7)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4699*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1009*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*14.4*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*PM Peak*

Site Information

Highway/Direction of Travel	*I-95 Southbound*
From/To	*PGA-Off to WB_PGA On*
Jurisdiction	*FDOT D4*
Analysis Year	*2030*

Project Description *Alt 2: I-95 SB Basic PGA-Off to WB PGA-On (S6 - S7)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4079*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*876*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*12.5*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Southbound
Agency or Company		Junction	WB PGA SB On Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	AM	Analysis Year	2030

Project Description: Alt 2: I-95 SB Merge at WB PGA On-Ramp (S7 - S8)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 5	☐ Yes ☐ On
☑ No ☐ Off	Ramp Number of Lanes, N: 1	☑ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A: 400	L_{down} = ft
V_u = veh/h	Deceleration Lane Length L_D:	V_D = veh/h
	Freeway Volume, V_F: 4699	
	Ramp Volume, V_R: 1245	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 40.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	4699	0.95	Level	4	0	0.980	1.00	5045
Ramp	1245	0.92	Level	3	0	0.985	1.00	1374
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 0.046 using Equation (Exhibit 13-6)

V_{12} = 181 pc/h

V_3 or V_{av34} = 1877 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes, V_{12a} = 1574 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	5310	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	2948	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = 25.3 (pc/mi/ln)

LOS = C (Exhibit 13-2)

Speed Determination

M_S = 0.363 (Exibit 13-11)

S_R = 59.8 mph (Exhibit 13-11)

S_0 = 67.5 mph (Exhibit 13-11)

S = 63.0 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R = mph (Exhibit 13-12)

S_0 = mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Southbound
Agency or Company		Junction	WB PGA SB On Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	PM	Analysis Year	2030

Project Description: Alt 2: I-95 SB Merge at WB PGA On-Ramp (S7 - S8)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 5	☐ Yes ☐ On
☑ No ☐ Off	Ramp Number of Lanes, N: 1	☑ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A: 400	L_{down} = ft
V_u = veh/h	Deceleration Lane Length L_D:	V_D = veh/h
	Freeway Volume, V_F: 4079	
	Ramp Volume, V_R: 2344	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 40.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	4079	0.95	Level	4	0	0.980	1.00	4380
Ramp	2344	0.92	Level	3	0	0.985	1.00	2586
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = -0.105 using Equation (Exhibit 13-6)

V_{12} = -359 pc/h

V_3 or V_{av34} = 1888 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes, V_{12a} = 1366 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	6003	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	3952	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = 32.6 (pc/mi/ln)

LOS = D (Exhibit 13-2)

Speed Determination

M_S = 0.492 (Exibit 13-11)

S_R = 56.2 mph (Exhibit 13-11)

S_0 = 68.1 mph (Exhibit 13-11)

S = 59.8 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R = mph (Exhibit 13-12)

S_0 = mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*AM Peak*

Site Information

Highway/Direction of Travel	*I-95 Southbound*
From/To	*WB PGA On to EB PGA On*
Jurisdiction	*FDOT D4*
Analysis Year	*2030*

Project Description *Alt 2: I-95 SB Basic WB PGA On to EB PGA On (S8 - S9)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*5944*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1276*	pc/h/ln
S	*69.9*	mph
D = v_p / S	*18.2*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 10-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*PM Peak*

Site Information

Highway/Direction of Travel	*I-95 Southbound*
From/To	*WB PGA On to EB PGA On*
Jurisdiction	*FDOT D4*
Analysis Year	*2030*

Project Description *Alt 2: I-95 SB Basic WB PGA On to EB PGA On (S8 - S9)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*6423*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1379*	pc/h/ln
S	*69.6*	mph
D = v_p / S	*19.8*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Southbound
Agency or Company		Junction	EB PGA SB On Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	AM	Analysis Year	2030

Project Description: Alt 2: I-95 SB Merge at WB PGA On-Ramp (S9 - S10)

Inputs

Upstream Adj Ramp		Freeway Number of Lanes, N	5	Downstream Adj Ramp	
☐ Yes	☐ On	Ramp Number of Lanes, N	1	☐ Yes	☐ On
☑ No	☐ Off	Acceleration Lane Length, L_A	400	☑ No	☐ Off
L_{up} =	ft	Deceleration Lane Length L_D		L_{down} =	ft
V_u =	veh/h	Freeway Volume, V_F	5944	V_D =	veh/h
		Ramp Volume, V_R	1293		
		Freeway Free-Flow Speed, S_{FF}	70.0		
		Ramp Free-Flow Speed, S_{FR}	50.0		

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	5944	0.95	Level	4	0	0.980	1.00	6382
Ramp	1293	0.92	Level	3	0	0.985	1.00	1427
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 0.039 using Equation (Exhibit 13-6)

V_{12} = 191 pc/h

V_3 or V_{av34} = 2330 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes, V_{12a} = 1940 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	6278	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	3367	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = 28.6 (pc/mi/ln)

LOS = D (Exhibit 13-2)

Speed Determination

M_S = 0.394 (Exibit 13-11)

S_R = 59.0 mph (Exhibit 13-11)

S_0 = 66.6 mph (Exhibit 13-11)

S = 62.3 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R = mph (Exhibit 13-12)

S_0 = mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Southbound
Agency or Company		Junction	EB PGA SB On Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	PM	Analysis Year	2030

Project Description: Alt 2: I-95 SB Merge at WB PGA On-Ramp (S9 - S10)

Inputs

Upstream Adj Ramp		Freeway / Ramp		Downstream Adj Ramp	
☐ Yes	☐ On	Freeway Number of Lanes, N	5	☐ Yes	☐ On
☑ No	☐ Off	Ramp Number of Lanes, N	1	☑ No	☐ Off
L_{up} =	ft	Acceleration Lane Length, L_A	400	L_{down} =	ft
V_u =	veh/h	Deceleration Lane Length L_D		V_D =	veh/h
		Freeway Volume, V_F	6423		
		Ramp Volume, V_R	1566		
		Freeway Free-Flow Speed, S_{FF}	70.0		
		Ramp Free-Flow Speed, S_{FR}	50.0		

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	6423	0.95	Level	4	0	0.980	1.00	6896
Ramp	1566	0.92	Level	3	0	0.985	1.00	1728
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 0.002 using Equation (Exhibit 13-6)

V_{12} = 9 pc/h

V_3 or V_{av34} = 2513 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes, V_{12a} = 2014 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	6763	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	3742	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = 31.4 (pc/mi/ln)

LOS = D (Exhibit 13-2)

Speed Determination

M_S = 0.446 (Exibit 13-11)

S_R = 57.5 mph (Exhibit 13-11)

S_0 = 66.4 mph (Exhibit 13-11)

S = 61.2 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R = mph (Exhibit 13-12)

S_0 = mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information		Site Information	
Analyst	*LRCB*	Highway/Direction of Travel	*I-95 Southbound*
Agency or Company		From/To	*EB PGA On to NLake Off*
Date Performed	*3/26/2015*	Jurisdiction	*FDOT D4*
Analysis Time Period	*AM Peak*	Analysis Year	*2030*

Project Description *Alt 2: I-95 SB - EB-PGA_On_to_NLake_SB_Off (S10 - S11)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*7237*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs			Calc Speed Adj and FFS		
Lane Width		ft			
Rt-Side Lat. Clearance		ft	f_{LW}		mph
Number of Lanes, N	*5*		f_{LC}		mph
Total Ramp Density, TRD		ramps/mi	TRD Adjustment		mph
FFS (measured)	*70.0*	mph	FFS	*70.0*	mph
Base free-flow Speed, BFFS		mph			

LOS and Performance Measures			Design (N)	
Operational (LOS)			Design (N)	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1554*	pc/h/ln	Design LOS	
S	*68.5*	mph	v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
D = v_p / S	*22.7*	pc/mi/ln	S	mph
LOS	*C*		D = v_p / S	pc/mi/ln
			Required Number of Lanes, N	

Glossary		Factor Location	
N - Number of lanes	S - Speed	E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
V - Hourly volume	D - Density	E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
v_p - Flow rate	FFS - Free-flow speed	f_p - Page 11-18	TRD - Page 11-11
LOS - Level of service	BFFS - Base free-flow speed	LOS, S, FFS, v_p - Exhibits 11-2, 11-3	
DDHV - Directional design hour volume			

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information		Site Information	
Analyst	*LRCB*	Highway/Direction of Travel	*I-95 Southbound*
Agency or Company		From/To	*EB PGA On to NLake Off*
Date Performed	*3/26/2015*	Jurisdiction	*FDOT D4*
Analysis Time Period	*PM Peak*	Analysis Year	*2030*

Project Description *Alt 2: I-95 SB - EB-PGA_On_to_NLake_SB_Off (S10 - S11)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*7989*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs			Calc Speed Adj and FFS		
Lane Width		ft			
Rt-Side Lat. Clearance		ft	f_{LW}		mph
Number of Lanes, N	*5*		f_{LC}		mph
Total Ramp Density, TRD		ramps/mi	TRD Adjustment		mph
FFS (measured)	*70.0*	mph	FFS	*70.0*	mph
Base free-flow Speed, BFFS		mph			

LOS and Performance Measures			Design (N)	
Operational (LOS)			Design (N)	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1716*	pc/h/ln	Design LOS	
S	*66.9*	mph	v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
D = v_p / S	*25.6*	pc/mi/ln	S	mph
LOS	*C*		D = v_p / S	pc/mi/ln
			Required Number of Lanes, N	

Glossary		Factor Location	
N - Number of lanes	S - Speed	E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
V - Hourly volume	D - Density	E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
v_p - Flow rate	FFS - Free-flow speed	f_p - Page 11-18	TRD - Page 11-11
LOS - Level of service	BFFS - Base free-flow speed	LOS, S, FFS, v_p - Exhibits 11-2, 11-3	
DDHV - Directional design hour volume			

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Southbound
Agency or Company		Junction	Nlake Off Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	AM Peak	Analysis Year	2030

Project Description: Alt 2: I-95 SB Diverge at Nlake Off-Ramp (S11 - S12)

Inputs

Upstream Adj Ramp		Freeway Number of Lanes, N	5	Downstream Adj Ramp	
☐ Yes	☐ On	Ramp Number of Lanes, N	2	☐ Yes	☐ On
☑ No	☐ Off	Acceleration Lane Length, L_A		☑ No	☐ Off
L_{up} =	ft	Deceleration Lane Length L_D	500	L_{down} =	ft
V_u =	veh/h	Freeway Volume, V_F	7237	V_D =	veh/h
		Ramp Volume, V_R	1179		
		Freeway Free-Flow Speed, S_{FF}	70.0		
		Ramp Free-Flow Speed, S_{FR}	50.0		

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	$v = V/PHF \times f_{HV} \times f_p$
Freeway	7237	0.95	Level	4	0	0.980	1.00	7770
Ramp	1179	0.92	Level	3	0	0.985	1.00	1301
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.260 using Equation (Exhibit 13-7)

V_{12} = 2579 pc/h

V_3 or V_{av34} 1818 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	6216	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	4915	Exhibit 13-8	9600	No
V_R	1301	Exhibit 13-10	4200	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	2579	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 12.9 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination

D_s = 0.350 (Exhibit 13-12)

S_R = 60.2 mph (Exhibit 13-12)

S_0 = 73.6 mph (Exhibit 13-12)

S = 67.4 mph (Exhibit 13-13)

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Southbound
Agency or Company		Junction	Nlake Off Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	PM Peak	Analysis Year	2030

Project Description: Alt 2: I-95 SB Diverge at Nlake Off-Ramp (S11 - S12)

Inputs

Upstream Adj Ramp		Freeway Number of Lanes, N	5	Downstream Adj Ramp	
☐ Yes	☐ On	Ramp Number of Lanes, N	2	☐ Yes	☐ On
☑ No	☐ Off	Acceleration Lane Length, L_A		☑ No	☐ Off
L_{up} =	ft	Deceleration Lane Length L_D	500	L_{down} =	ft
V_u =	veh/h	Freeway Volume, V_F	7989	V_D =	veh/h
		Ramp Volume, V_R	1350		
		Freeway Free-Flow Speed, S_{FF}	70.0		
		Ramp Free-Flow Speed, S_{FR}	50.0		

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	7989	0.95	Level	4	0	0.980	1.00	8578
Ramp	1350	0.92	Level	3	0	0.985	1.00	1489
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.260 using Equation (Exhibit 13-7)

V_{12} = 2886 pc/h

V_3 or V_{av34} 1988 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	6863	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	5374	Exhibit 13-8	9600	No
V_R	1489	Exhibit 13-10	4200	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	2886	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 15.6 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination

D_s = 0.367 (Exhibit 13-12)

S_R = 59.7 mph (Exhibit 13-12)

S_0 = 72.9 mph (Exhibit 13-12)

S = 66.7 mph (Exhibit 13-13)

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

FREEWAY WEAVING WORKSHEET

General Information

Analyst	LRCB
Agency/Company	
Date Performed	4/2/2015
Analysis Time Period	AM

Site Information

Freeway/Dir of Travel	Southbound
Weaving Segment Location	Central Blvd CD
Analysis Year	2030

Project Description Alt 2: I-95 PGA - SB CD Road (Central Blvd. On Ramp) btw MT Off-Ramp

Inputs

Weaving configuration	One-Sided	Segment type	C-D Roadway/ Multilane Highways
Weaving number of lanes, N	2		
Weaving segment length, L_S	2000ft	Freeway minimum speed, S_{MIN}	15
Freeway free-flow speed, FFS	50 mph	Freeway maximum capacity, C_{IFL}	2250
		Terrain type	Level

Conversions to pc/h Under Base Conditions

	V (veh/h)	PHF	Truck (%)	RV (%)	E_T	E_R	f_{HV}	f_p	v (pc/h)
V_{FF}	1226	0.92	3	0	1.5	1.2	0.985	1.00	1353
V_{RF}	0	0.92	3	0	1.5	1.2	0.985	1.00	0
V_{FR}	0	0.92	3	0	1.5	1.2	0.985	1.00	0
V_{RR}	832	0.92	3	0	1.5	1.2	0.985	1.00	918
V_{NW}	2271							V =	2271
V_W	0								
VR	0.000								

Configuration Characteristics

Minimum maneuver lanes, N_{WL}	2 lc	Minimum weaving lane changes, LC_{MIN}	0 lc/h
Interchange density, ID	0.8 int/mi	Weaving lane changes, LC_W	103 lc/h
Minimum RF lane changes, LC_{RF}	0 lc/pc	Non-weaving lane changes, LC_{NW}	1167 lc/h
Minimum FR lane changes, LC_{FR}	0 lc/pc	Total lane changes, LC_{ALL}	1270 lc/h
Minimum RR lane changes, LC_{RR}	lc/pc	Non-weaving vehicle index, I_{NW}	363

Weaving Segment Speed, Density, Level of Service, and Capacity

Weaving segment flow rate, v	2237 veh/h	Weaving intensity factor, W	0.158
Weaving segment capacity, c_w	4343 veh/h	Weaving segment speed, S	44.5 mph
Weaving segment v/c ratio	0.515	Average weaving speed, S_W	45.2 mph
Weaving segment density, D	25.5 pc/mi/ln	Average non-weaving speed, S_{NW}	44.5 mph
Level of Service, LOS	C	Maximum weaving length, L_{MAX}	2596 ft

Notes

a. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments".
b. For volumes that exceed the weaving segment capacity, the level of service is "F".

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

FREEWAY WEAVING WORKSHEET

General Information

Analyst	LRCB
Agency/Company	
Date Performed	4/2/2015
Analysis Time Period	PM

Site Information

Freeway/Dir of Travel	Southbound
Weaving Segment Location	Central Blvd CD
Analysis Year	2030

Project Description Alt 2: I-95 PGA - SB CD Road (Central Blvd. On Ramp) btw MT Off-Ramp

Inputs

Weaving configuration	One-Sided	Segment type	C-D Roadway/ Multilane Highways
Weaving number of lanes, N	2		
Weaving segment length, L_S	2000ft	Freeway minimum speed, S_{MIN}	15
Freeway free-flow speed, FFS	50 mph	Freeway maximum capacity, C_{IFL}	2250
		Terrain type	Level

Conversions to pc/h Under Base Conditions

	V (veh/h)	PHF	Truck (%)	RV (%)	E_T	E_R	f_{HV}	f_p	v (pc/h)
V_{FF}	1121	0.92	3	0	1.5	1.2	0.985	1.00	1237
V_{RF}	0	0.92	3	0	1.5	1.2	0.985	1.00	0
V_{FR}	0	0.92	3	0	1.5	1.2	0.985	1.00	0
V_{RR}	286	0.92	3	0	1.5	1.2	0.985	1.00	316
V_{NW}	1553							V =	1553
V_W	0								
VR	0.000								

Configuration Characteristics

Minimum maneuver lanes, N_{WL}	2 lc	Minimum weaving lane changes, LC_{MIN}	0 lc/h
Interchange density, ID	0.8 int/mi	Weaving lane changes, LC_W	103 lc/h
Minimum RF lane changes, LC_{RF}	0 lc/pc	Non-weaving lane changes, LC_{NW}	1019 lc/h
Minimum FR lane changes, LC_{FR}	0 lc/pc	Total lane changes, LC_{ALL}	1122 lc/h
Minimum RR lane changes, LC_{RR}	lc/pc	Non-weaving vehicle index, I_{NW}	248

Weaving Segment Speed, Density, Level of Service, and Capacity

Weaving segment flow rate, v	1530 veh/h	Weaving intensity factor, W	0.143
Weaving segment capacity, c_w	4343 veh/h	Weaving segment speed, S	46.3 mph
Weaving segment v/c ratio	0.352	Average weaving speed, S_W	45.6 mph
Weaving segment density, D	16.8 pc/mi/ln	Average non-weaving speed, S_{NW}	46.3 mph
Level of Service, LOS	B	Maximum weaving length, L_{MAX}	2596 ft

Notes

a. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments".
b. For volumes that exceed the weaving segment capacity, the level of service is "F".

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Northbound
Agency or Company		Junction	NLake NB On Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	AM	Analysis Year	2040

Project Description: Alt 2: I-95 NB Merge at Nlake On-Ramp (N1 - N2)

Inputs

Upstream Adj Ramp		Freeway / Ramp		Downstream Adj Ramp	
☐ Yes	☐ On	Freeway Number of Lanes, N	5	☐ Yes	☐ On
☑ No	☐ Off	Ramp Number of Lanes, N	1	☑ No	☐ Off
L_{up} =	ft	Acceleration Lane Length, L_A	400	L_{down} =	ft
V_u =	veh/h	Deceleration Lane Length L_D		V_D =	veh/h
		Freeway Volume, V_F	6590		
		Ramp Volume, V_R	1569		
		Freeway Free-Flow Speed, S_{FF}	70.0		
		Ramp Free-Flow Speed, S_{FR}	50.0		

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	6590	0.95	Level	4	0	0.980	1.00	7076
Ramp	1569	0.92	Level	3	0	0.985	1.00	1731
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 0.001 using Equation (Exhibit 13-6)

V_{12} = 7 pc/h

V_3 or V_{av34} = 2579 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes, V_{12a} = 2066 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	6897	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	3797	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = 31.8 (pc/mi/ln)

LOS = D (Exhibit 13-2)

Speed Determination

M_S = 0.455 (Exibit 13-11)

S_R = 57.3 mph (Exhibit 13-11)

S_0 = 66.2 mph (Exhibit 13-11)

S = 61.0 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R = mph (Exhibit 13-12)

S_0 = mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Northbound
Agency or Company		Junction	NLake NB On Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	PM	Analysis Year	2040

Project Description: Alt 2: I-95 NB Merge at Nlake On-Ramp (N1 - N2)

Inputs

Upstream Adj Ramp		Freeway Number of Lanes, N	5	Downstream Adj Ramp
☐ Yes	☐ On	Ramp Number of Lanes, N	1	☐ Yes ☐ On
☑ No	☐ Off	Acceleration Lane Length, L_A	400	☑ No ☐ Off
L_{up} =	ft	Deceleration Lane Length L_D		L_{down} = ft
V_u =	veh/h	Freeway Volume, V_F	5745	V_D = veh/h
		Ramp Volume, V_R	1689	
		Freeway Free-Flow Speed, S_{FF}	70.0	
		Ramp Free-Flow Speed, S_{FR}	50.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	5745	0.95	Level	4	0	0.980	1.00	6168
Ramp	1689	0.92	Level	3	0	0.985	1.00	1863
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = -0.015 using Equation (Exhibit 13-6)

V_{12} = -70 pc/h

V_3 or V_{av34} = 2379 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes, V_{12a} = 1875 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	6551	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	3738	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = 31.3 (pc/mi/ln)

LOS = D (Exhibit 13-2)

Speed Determination

M_S = 0.445 (Exibit 13-11)

S_R = 57.5 mph (Exhibit 13-11)

S_0 = 66.7 mph (Exhibit 13-11)

S = 61.2 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R = mph (Exhibit 13-12)

S_0 = mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information		Site Information	
Analyst	*LRCB*	Highway/Direction of Travel	*I-95 Northbound*
Agency or Company		From/To	*NLake On-Rmp to PGA Off-Rmp*
Date Performed	*3/26/2015*	Jurisdiction	*FDOT D4*
Analysis Time Period	*AM Peak*	Analysis Year	*2040*

Project Description *Alt 2: I-95 NB Basic Nlake-On to PGA-Off (N2 - N3)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*8159*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1752*	pc/h/ln
S	*66.5*	mph
D = v_p / S	*26.4*	pc/mi/ln
LOS	*D*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*PM Peak*

Site Information

Highway/Direction of Travel	*I-95 Northbound*
From/To	*NLake On-Rmp to PGA Off-Rmp*
Jurisdiction	*FDOT D4*
Analysis Year	*2040*

Project Description *Alt 2: I-95 NB Basic Nlake-On to PGA-Off (N2 - N3)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*7434*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1596*	pc/h/ln
S	*68.2*	mph
D = v_p / S	*23.4*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Northbound
Agency or Company		Junction	EB PGA Off-Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	AM Peak	Analysis Year	2040

Project Description: Alt 2: I-95 NB Diverge at EB PGA Off-Ramp (N3 - N4)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 5	☐ Yes ☐ On
☑ No ☐ Off	Ramp Number of Lanes, N: 2	☑ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A:	L_{down} = ft
V_u = veh/h	Deceleration Lane Length L_D: 500	V_D = veh/h
	Freeway Volume, V_F: 8159	
	Ramp Volume, V_R: 2674	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 55.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	8159	0.95	Level	4	0	0.980	1.00	8760
Ramp	2674	0.92	Level	3	0	0.985	1.00	2950
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.260 using Equation (Exhibit 13-7)

V_{12} = 4005 pc/h

V_3 or V_{av34} 1501 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	7008	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	4058	Exhibit 13-8	9600	No
V_R	2950	Exhibit 13-10	4400	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	4005	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 25.2 (pc/mi/ln)

LOS = C (Exhibit 13-2)

Speed Determination

D_s = 0.433 (Exhibit 13-12)

S_R = 57.9 mph (Exhibit 13-12)

S_0 = 74.8 mph (Exhibit 13-12)

S = 64.1 mph (Exhibit 13-13)

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Northbound
Agency or Company		Junction	EB PGA Off-Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	PM Peak	Analysis Year	2040

Project Description: Alt 2: I-95 NB Diverge at EB PGA Off-Ramp (N3 - N4)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 5	☐ Yes ☐ On
☑ No ☐ Off	Ramp Number of Lanes, N: 2	☑ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A:	L_{down} = ft
V_u = veh/h	Deceleration Lane Length L_D: 500	V_D = veh/h
	Freeway Volume, V_F: 7434	
	Ramp Volume, V_R: 1327	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 55.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	7434	0.95	Level	4	0	0.980	1.00	7982
Ramp	1327	0.92	Level	3	0	0.985	1.00	1464
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.260 using Equation (Exhibit 13-7)

V_{12} = 2744 pc/h

V_3 or V_{av34} 1821 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	6386	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	4922	Exhibit 13-8	9600	No
V_R	1464	Exhibit 13-10	4400	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	2744	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 14.4 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination

D_s = 0.300 (Exhibit 13-12)

S_R = 61.6 mph (Exhibit 13-12)

S_0 = 73.6 mph (Exhibit 13-12)

S = 67.9 mph (Exhibit 13-13)

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*AM Peak*

Site Information

Highway/Direction of Travel	*I-95 Northbound*
From/To	*PGA EB Off to PGA WB Off*
Jurisdiction	*FDOT D4*
Analysis Year	*2040*

Project Description *Alt 2: I-95 NB Basic EB PGA Off to WB PGA (N4 - N5)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*5485*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1178*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*16.8*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*PM Peak*

Site Information

Highway/Direction of Travel	*I-95 Northbound*
From/To	*PGA EB Off to PGA WB Off*
Jurisdiction	*FDOT D4*
Analysis Year	*2040*

Project Description *Alt 2: I-95 NB Basic EB PGA Off to WB PGA (N4 - N5)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*6107*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1311*	pc/h/ln
S	*69.9*	mph
D = v_p / S	*18.8*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Northbound
Agency or Company		Junction	WB PGA Off-Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	AM Peak	Analysis Year	2040

Project Description: Alt 2: I-95 NB Diverge at WB PGA Off-Ramp (N5 - N6)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 5	☐ Yes ☐ On
☑ No ☐ Off	Ramp Number of Lanes, N: 1	☑ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A:	L_{down} = ft
V_u = veh/h	Deceleration Lane Length L_D: 500	V_D = veh/h
	Freeway Volume, V_F: 5485	
	Ramp Volume, V_R: 951	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	5485	0.95	Level	4	0	0.980	1.00	5889
Ramp	951	0.92	Level	3	0	0.985	1.00	1049
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.436 using Equation (Exhibit 13-7)

V_{12} = 2774 pc/h

V_3 or V_{av34} 1116 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	5006	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	3957	Exhibit 13-8	9600	No
V_R	1049	Exhibit 13-10	2000	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	2774	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 23.6 (pc/mi/ln)

LOS = C (Exhibit 13-2)

Speed Determination

D_s = 0.522 (Exhibit 13-12)

S_R = 55.4 mph (Exhibit 13-12)

S_0 = 76.3 mph (Exhibit 13-12)

S = 63.1 mph (Exhibit 13-13)

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Northbound
Agency or Company		Junction	WB PGA Off-Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	PM Peak	Analysis Year	2040

Project Description: Alt 2: I-95 NB Diverge at WB PGA Off-Ramp (N5 - N6)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 5	☐ Yes ☐ On
☑ No ☐ Off	Ramp Number of Lanes, N: 1	☑ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A:	L_{down} = ft
V_u = veh/h	Deceleration Lane Length L_D: 500	V_D = veh/h
	Freeway Volume, V_F: 6107	
	Ramp Volume, V_R: 909	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	6107	0.95	Level	4	0	0.980	1.00	6557
Ramp	909	0.92	Level	3	0	0.985	1.00	1003
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.436 using Equation (Exhibit 13-7)

V_{12} = 2996 pc/h

V_3 or V_{av34} 1289 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	5574	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	4571	Exhibit 13-8	9600	No
V_R	1003	Exhibit 13-10	2000	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	2996	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 25.5 (pc/mi/ln)

LOS = C (Exhibit 13-2)

Speed Determination

D_s = 0.518 (Exhibit 13-12)

S_R = 55.5 mph (Exhibit 13-12)

S_0 = 75.7 mph (Exhibit 13-12)

S = 63.3 mph (Exhibit 13-13)

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*AM Peak*

Site Information

Highway/Direction of Travel	*I-95 Northbound*
From/To	*WB PGA Off to EB PGA On*
Jurisdiction	*FDOT D4*
Analysis Year	*2040*

Project Description *Alt 2: I-95 NB WB PGA Off to EB PGA On (N6 - N7)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4534*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*974*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*13.9*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*PM Peak*

Site Information

Highway/Direction of Travel	*I-95 Northbound*
From/To	*WB PGA Off to EB PGA On*
Jurisdiction	*FDOT D4*
Analysis Year	*2040*

Project Description *Alt 2: I-95 NB WB PGA Off to EB PGA On (N6 - N7)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*5198*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1116*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*15.9*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

FREEWAY WEAVING WORKSHEET

General Information

Analyst	LRCB
Agency/Company	
Date Performed	8/20/15
Analysis Time Period	AM

Site Information

Freeway/Dir of Travel	Northbound
Weaving Segment Location	PGA-On to Central-CD-Off
Analysis Year	2040

Project Description Alt 2: I-95 PGA Blvd - NB PGA-On to Central-CD-Off - N7 to N8

Inputs

Weaving configuration	One-Sided	Segment type	Freeway
Weaving number of lanes, N	6	Freeway minimum speed, S_{MIN}	15
Weaving segment length, L_S	2000ft	Freeway maximum capacity, C_{IFL}	2350
Freeway free-flow speed, FFS	70 mph	Terrain type	Level

Conversions to pc/h Under Base Conditions

	V (veh/h)	PHF	Truck (%)	RV (%)	E_T	E_R	f_{HV}	f_p	v (pc/h)
V_{FF}	3308	0.95	4	0	1.5	1.2	0.980	1.00	3552
V_{RF}	173	0.92	3	0	1.5	1.2	0.985	1.00	191
V_{FR}	1226	0.92	3	0	1.5	1.2	0.985	1.00	1353
V_{RR}	0	0.94	0	0	1.5	1.2	1.000	1.00	0
V_{NW}	3552							V =	5096
V_W	1544								
VR	0.303								

Configuration Characteristics

Minimum maneuver lanes, N_{WL}	3 lc	Minimum weaving lane changes, LC_{MIN}	191 lc/h
Interchange density, ID	0.8 int/mi	Weaving lane changes, LC_W	1117 lc/h
Minimum RF lane changes, LC_{RF}	1 lc/pc	Non-weaving lane changes, LC_{NW}	660 lc/h
Minimum FR lane changes, LC_{FR}	0 lc/pc	Total lane changes, LC_{ALL}	1777 lc/h
Minimum RR lane changes, LC_{RR}	lc/pc	Non-weaving vehicle index, I_{NW}	568

Weaving Segment Speed, Density, Level of Service, and Capacity

Weaving segment flow rate, v	5003 veh/h	Weaving intensity factor, W	0.206
Weaving segment capacity, c_w	11325 veh/h	Weaving segment speed, S	63.3 mph
Weaving segment v/c ratio	0.442	Average weaving speed, S_W	60.6 mph
Weaving segment density, D	13.4 pc/mi/ln	Average non-weaving speed, S_{NW}	64.5 mph
Level of Service, LOS	B	Maximum weaving length, L_{MAX}	4050 ft

Notes

a. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments".
b. For volumes that exceed the weaving segment capacity, the level of service is "F".

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

FREEWAY WEAVING WORKSHEET

General Information

Analyst	LRCB
Agency/Company	
Date Performed	8/20/15
Analysis Time Period	PM

Site Information

Freeway/Dir of Travel	Northbound
Weaving Segment Location	PGA-On to Central-CD-Off
Analysis Year	2040

Project Description Alt 2: I-95 PGA Blvd - NB PGA-On to Central-CD-Off - N7 to N8

Inputs

Weaving configuration	One-Sided	Segment type	Freeway
Weaving number of lanes, N	6	Freeway minimum speed, S_{MIN}	15
Weaving segment length, L_S	2000ft	Freeway maximum capacity, C_{IFL}	2350
Freeway free-flow speed, FFS	70 mph	Terrain type	Level

Conversions to pc/h Under Base Conditions

	V (veh/h)	PHF	Truck (%)	RV (%)	E_T	E_R	f_{HV}	f_p	v (pc/h)
V_{FF}	3850	0.95	4	0	1.5	1.2	0.980	1.00	4134
V_{RF}	810	0.92	3	0	1.5	1.2	0.985	1.00	894
V_{FR}	1348	0.92	3	0	1.5	1.2	0.985	1.00	1487
V_{RR}	0	0.94	0	0	1.5	1.2	1.000	1.00	0
V_{NW}	4134							V =	6515
V_W	2381								
VR	0.365								

Configuration Characteristics

Minimum maneuver lanes, N_{WL}	3 lc	Minimum weaving lane changes, LC_{MIN}	894 lc/h
Interchange density, ID	0.8 int/mi	Weaving lane changes, LC_W	1820 lc/h
Minimum RF lane changes, LC_{RF}	1 lc/pc	Non-weaving lane changes, LC_{NW}	780 lc/h
Minimum FR lane changes, LC_{FR}	0 lc/pc	Total lane changes, LC_{ALL}	2600 lc/h
Minimum RR lane changes, LC_{RR}	lc/pc	Non-weaving vehicle index, I_{NW}	661

Weaving Segment Speed, Density, Level of Service, and Capacity

Weaving segment flow rate, v	6399 veh/h	Weaving intensity factor, W	0.278
Weaving segment capacity, c_w	9389 veh/h	Weaving segment speed, S	58.2 mph
Weaving segment v/c ratio	0.681	Average weaving speed, S_W	58.0 mph
Weaving segment density, D	18.6 pc/mi/ln	Average non-weaving speed, S_{NW}	58.4 mph
Level of Service, LOS	B	Maximum weaving length, L_{MAX}	4731 ft

Notes

a. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments".
b. For volumes that exceed the weaving segment capacity, the level of service is "F".

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*4/2/2015*
Analysis Time Period	*AM Peak*

Site Information

Highway/Direction of Travel	*I-95 Northbound*
From/To	*Central-CD_Off_to_MT-CD-On*
Jurisdiction	*FDOT D4*
Analysis Year	*2040*

Project Description *Alt 2: I-95 PGA Blvd - Central-CD_Off_to_MT-CD-On N8 to N9*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3481*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*747*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*10.7*	pc/mi/ln
LOS	*A*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*4/2/2015*
Analysis Time Period	*PM Peak*

Site Information

Highway/Direction of Travel	*I-95 Northbound*
From/To	*Central-CD_Off_to_MT-CD-On*
Jurisdiction	*FDOT D4*
Analysis Year	*2040*

Project Description *Alt 2: I-95 PGA Blvd - Central-CD_Off_to_MT-CD-On N8 to N9*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4660*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1001*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*14.3*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Northbound
Agency or Company		Junction	at MT/CD On-Ramp
Date Performed	4/2/2015	Jurisdiction	FDOT D4
Analysis Time Period	AM	Analysis Year	2040

Project Description: Alt 2: I-95 NB Merge at MT/CD On-Ramp (N9 - N10)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 5	☐ Yes ☐ On
☑ No ☐ Off	Ramp Number of Lanes, N: 1	☑ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A: 400	L_{down} = ft
V_u = veh/h	Deceleration Lane Length L_D:	V_D = veh/h
	Freeway Volume, V_F: 3481	
	Ramp Volume, V_R: 178	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 50.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	3481	0.95	Level	4	0	0.980	1.00	3737
Ramp	178	0.92	Level	3	0	0.985	1.00	196
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 0.282 using Equation (Exhibit 13-6)

V_{12} = 823 pc/h

V_3 or V_{av34} = 1046 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes, V_{12a} = 1166 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	3111	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	1362	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = 13.5 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination

M_S = 0.296 (Exibit 13-11)

S_R = 61.7 mph (Exhibit 13-11)

S_0 = 68.7 mph (Exhibit 13-11)

S = 65.4 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R = mph (Exhibit 13-12)

S_0 = mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	1082	Freeway/Dir of Travel	I-95 Northbound
Agency or Company		Junction	at MT/CD On-Ramp
Date Performed	4/2/2015	Jurisdiction	FDOT D4
Analysis Time Period	PM	Analysis Year	2040

Project Description: Alt 2: I-95 NB Merge at MT/CD On-Ramp (N9 - N10)

Inputs

Upstream Adj Ramp		Freeway Number of Lanes, N	5	Downstream Adj Ramp	
☐ Yes	☐ On	Ramp Number of Lanes, N	1	☐ Yes	☐ On
☑ No	☐ Off	Acceleration Lane Length, L_A	400	☑ No	☐ Off
L_{up} =	ft	Deceleration Lane Length L_D		L_{down} =	ft
V_u =	veh/h	Freeway Volume, V_F	4660	V_D =	veh/h
		Ramp Volume, V_R	1082		
		Freeway Free-Flow Speed, S_{FF}	70.0		
		Ramp Free-Flow Speed, S_{FR}	50.0		

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	4660	0.95	Level	4	0	0.980	1.00	5003
Ramp	1082	0.92	Level	3	0	0.985	1.00	1194
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 0.069 using Equation (Exhibit 13-6)

V_{12} = 268 pc/h

V_3 or V_{av34} = 1817 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes, V_{12a} = 1561 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	5097	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	2755	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = 23.9 (pc/mi/ln)

LOS = C (Exhibit 13-2)

Speed Determination

M_S = 0.342 (Exibit 13-11)

S_R = 60.4 mph (Exhibit 13-11)

S_0 = 67.6 mph (Exhibit 13-11)

S = 63.5 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R = mph (Exhibit 13-12)

S_0 = mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*4/2/2015*
Analysis Time Period	*AM Peak*

Site Information

Highway/Direction of Travel	*I-95 Northbound*
From/To	*Military_Tr_On_to_Central_On*
Jurisdiction	*FDOT D4*
Analysis Year	*2040*

Project Description *Alt 2: I-95 PGA Boulevard - Military_Tr_On_to_Central_On*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3659*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*786*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*11.2*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*4/2/2015*
Analysis Time Period	*PM Peak*

Site Information

Highway/Direction of Travel	*I-95 Northbound*
From/To	*Military_Tr_On_to_Central_On*
Jurisdiction	*FDOT D4*
Analysis Year	*2040*

Project Description *Alt 2: I-95 PGA Boulevard - Military_Tr_On_to_Central_On*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*5742*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1233*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*17.6*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

FREEWAY WEAVING WORKSHEET

General Information

Analyst	LRCB
Agency/Company	
Date Performed	8/20/15
Analysis Time Period	AM

Site Information

Freeway/Dir of Travel	Nortbound
Weaving Segment Location	Central to DRoss
Analysis Year	2040

Project Description Alt 2: I-95 PGA Blvd - NB Central to DRoss - N11 to N12

Inputs

Weaving configuration	One-Sided	Segment type	Freeway
Weaving number of lanes, N	6	Freeway minimum speed, S_{MIN}	15
Weaving segment length, L_S	2450ft	Freeway maximum capacity, C_{IFL}	2350
Freeway free-flow speed, FFS	70 mph	Terrain type	Level

Conversions to pc/h Under Base Conditions

	V (veh/h)	PHF	Truck (%)	RV (%)	E_T	E_R	f_{HV}	f_p	v (pc/h)
V_{FF}	2507	0.95	4	0	1.5	1.2	0.980	1.00	2692
V_{RF}	375	0.92	3	0	1.5	1.2	0.985	1.00	414
V_{FR}	1152	0.92	3	0	1.5	1.2	0.985	1.00	1271
V_{RR}	0	0.94	0	0	1.5	1.2	1.000	1.00	0
V_{NW}	2692							V =	4377
V_W	1685								
VR	0.385								

Configuration Characteristics

Minimum maneuver lanes, N_{WL}	3 lc	Minimum weaving lane changes, LC_{MIN}	414 lc/h
Interchange density, ID	0.8 int/mi	Weaving lane changes, LC_W	1456 lc/h
Minimum RF lane changes, LC_{RF}	1 lc/pc	Non-weaving lane changes, LC_{NW}	727 lc/h
Minimum FR lane changes, LC_{FR}	0 lc/pc	Total lane changes, LC_{ALL}	2183 lc/h
Minimum RR lane changes, LC_{RR}	lc/pc	Non-weaving vehicle index, I_{NW}	528

Weaving Segment Speed, Density, Level of Service, and Capacity

Weaving segment flow rate, v	4299 veh/h	Weaving intensity factor, W	0.206
Weaving segment capacity, c_w	8913 veh/h	Weaving segment speed, S	62.4 mph
Weaving segment v/c ratio	0.482	Average weaving speed, S_W	60.6 mph
Weaving segment density, D	11.7 pc/mi/ln	Average non-weaving speed, S_{NW}	63.5 mph
Level of Service, LOS	B	Maximum weaving length, L_{MAX}	4947 ft

Notes

a. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments".
b. For volumes that exceed the weaving segment capacity, the level of service is "F".

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

FREEWAY WEAVING WORKSHEET

General Information

Analyst	LRCB
Agency/Company	
Date Performed	8/20/15
Analysis Time Period	PM

Site Information

Freeway/Dir of Travel	Nortbound
Weaving Segment Location	Central to DRoss
Analysis Year	2040

Project Description Alt 2: I-95 PGA Blvd - NB Central to DRoss - N11 to N12

Inputs

Weaving configuration	One-Sided	Segment type	Freeway
Weaving number of lanes, N	6	Freeway minimum speed, S_{MIN}	15
Weaving segment length, L_S	2450ft	Freeway maximum capacity, C_{IFL}	2350
Freeway free-flow speed, FFS	70 mph	Terrain type	Level

Conversions to pc/h Under Base Conditions

	V (veh/h)	PHF	Truck (%)	RV (%)	E_T	E_R	f_{HV}	f_p	v (pc/h)
V_{FF}	4069	0.95	4	0	1.5	1.2	0.980	1.00	4369
V_{RF}	425	0.92	3	0	1.5	1.2	0.985	1.00	469
V_{FR}	1673	0.92	3	0	1.5	1.2	0.985	1.00	1846
V_{RR}	0	0.94	0	0	1.5	1.2	1.000	1.00	0
V_{NW}	4369							V =	6684
V_W	2315								
VR	0.346								

Configuration Characteristics

Minimum maneuver lanes, N_{WL}	3 lc	Minimum weaving lane changes, LC_{MIN}	469 lc/h
Interchange density, ID	0.8 int/mi	Weaving lane changes, LC_W	1511 lc/h
Minimum RF lane changes, LC_{RF}	1 lc/pc	Non-weaving lane changes, LC_{NW}	1072 lc/h
Minimum FR lane changes, LC_{FR}	0 lc/pc	Total lane changes, LC_{ALL}	2583 lc/h
Minimum RR lane changes, LC_{RR}	lc/pc	Non-weaving vehicle index, I_{NW}	856

Weaving Segment Speed, Density, Level of Service, and Capacity

Weaving segment flow rate, v	6564 veh/h	Weaving intensity factor, W	0.236
Weaving segment capacity, c_w	9907 veh/h	Weaving segment speed, S	60.7 mph
Weaving segment v/c ratio	0.663	Average weaving speed, S_W	59.5 mph
Weaving segment density, D	18.4 pc/mi/ln	Average non-weaving speed, S_{NW}	61.3 mph
Level of Service, LOS	B	Maximum weaving length, L_{MAX}	4520 ft

Notes

a. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments".
b. For volumes that exceed the weaving segment capacity, the level of service is "F".

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

FREEWAY WEAVING WORKSHEET

General Information

Analyst	LRCB
Agency/Company	
Date Performed	4/2/2015
Analysis Time Period	AM

Site Information

Freeway/Dir of Travel	Northbound
Weaving Segment Location	NB CD Road
Analysis Year	2040

Project Description Alt 2: 95 PGA - NB CD Road (Central Blvd. Off Ramp) btw On-Ramp from MT and I95

Inputs

Weaving configuration	One-Sided	Segment type	C-D Roadway/ Multilane Highways
Weaving number of lanes, N	2		
Weaving segment length, L_S	2000ft	Freeway minimum speed, S_{MIN}	15
Freeway free-flow speed, FFS	50 mph	Freeway maximum capacity, C_{IFL}	2250
		Terrain type	Level

Conversions to pc/h Under Base Conditions

	V (veh/h)	PHF	Truck (%)	RV (%)	E_T	E_R	f_{HV}	f_p	v (pc/h)
V_{FF}	1226	0.92	3	0	1.5	1.2	0.985	1.00	1353
V_{RF}	0	0.92	3	0	1.5	1.2	0.985	1.00	0
V_{FR}	0	0.92	3	0	1.5	1.2	0.985	1.00	0
V_{RR}	178	0.92	3	0	1.5	1.2	0.985	1.00	196
V_{NW}	1549							V =	1549
V_W	0								
VR	0.000								

Configuration Characteristics

Minimum maneuver lanes, N_{WL}	2 lc	Minimum weaving lane changes, LC_{MIN}	0 lc/h
Interchange density, ID	0.8 int/mi	Weaving lane changes, LC_W	103 lc/h
Minimum RF lane changes, LC_{RF}	0 lc/pc	Non-weaving lane changes, LC_{NW}	1018 lc/h
Minimum FR lane changes, LC_{FR}	0 lc/pc	Total lane changes, LC_{ALL}	1121 lc/h
Minimum RR lane changes, LC_{RR}	lc/pc	Non-weaving vehicle index, I_{NW}	248

Weaving Segment Speed, Density, Level of Service, and Capacity

Weaving segment flow rate, v	1527 veh/h	Weaving intensity factor, W	0.143
Weaving segment capacity, c_w	4343 veh/h	Weaving segment speed, S	46.3 mph
Weaving segment v/c ratio	0.351	Average weaving speed, S_W	45.6 mph
Weaving segment density, D	16.7 pc/mi/ln	Average non-weaving speed, S_{NW}	46.3 mph
Level of Service, LOS	B	Maximum weaving length, L_{MAX}	2596 ft

Notes

a. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments".
b. For volumes that exceed the weaving segment capacity, the level of service is "F".

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

FREEWAY WEAVING WORKSHEET

General Information

Analyst	LRCB
Agency/Company	
Date Performed	4/2/2015
Analysis Time Period	PM

Site Information

Freeway/Dir of Travel	Northbound
Weaving Segment Location	NB CD Road
Analysis Year	2040

Project Description Alt 2: 95 PGA - NB CD Road (Central Blvd. Off Ramp) btw On-Ramp from MT and I95

Inputs

Weaving configuration	One-Sided	Segment type	C-D Roadway/ Multilane Highways
Weaving number of lanes, N	2		
Weaving segment length, L_S	2000ft	Freeway minimum speed, S_{MIN}	15
Freeway free-flow speed, FFS	50 mph	Freeway maximum capacity, C_{IFL}	2250
		Terrain type	Level

Conversions to pc/h Under Base Conditions

	V (veh/h)	PHF	Truck (%)	RV (%)	E_T	E_R	f_{HV}	f_p	v (pc/h)
V_{FF}	1348	0.92	3	0	1.5	1.2	0.985	1.00	1487
V_{RF}	0	0.92	3	0	1.5	1.2	0.985	1.00	0
V_{FR}	0	0.92	3	0	1.5	1.2	0.985	1.00	0
V_{RR}	1082	0.92	3	0	1.5	1.2	0.985	1.00	1194
V_{NW}	2681							V =	2681
V_W	0								
VR	0.000								

Configuration Characteristics

Minimum maneuver lanes, N_{WL}	2 lc	Minimum weaving lane changes, LC_{MIN}	0 lc/h
Interchange density, ID	0.8 int/mi	Weaving lane changes, LC_W	103 lc/h
Minimum RF lane changes, LC_{RF}	0 lc/pc	Non-weaving lane changes, LC_{NW}	1251 lc/h
Minimum FR lane changes, LC_{FR}	0 lc/pc	Total lane changes, LC_{ALL}	1354 lc/h
Minimum RR lane changes, LC_{RR}	lc/pc	Non-weaving vehicle index, I_{NW}	429

Weaving Segment Speed, Density, Level of Service, and Capacity

Weaving segment flow rate, v	2642 veh/h	Weaving intensity factor, W	0.166
Weaving segment capacity, c_w	4343 veh/h	Weaving segment speed, S	43.6 mph
Weaving segment v/c ratio	0.608	Average weaving speed, S_W	45.0 mph
Weaving segment density, D	30.8 pc/mi/ln	Average non-weaving speed, S_{NW}	43.6 mph
Level of Service, LOS	C	Maximum weaving length, L_{MAX}	2596 ft

Notes

a. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments".
b. For volumes that exceed the weaving segment capacity, the level of service is "F".

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

FREEWAY WEAVING WORKSHEET

General Information

Analyst	LRCB
Agency/Company	
Date Performed	8/22/15
Analysis Time Period	AM

Site Information

Freeway/Dir of Travel	Southbound
Weaving Segment Location	DRoss to Central
Analysis Year	2040

Project Description Alt 2: I-95 PGA Boulevard - SB DRoss to Central - S1-S2

Inputs

Weaving configuration	One-Sided	Segment type	Freeway
Weaving number of lanes, N	6	Freeway minimum speed, S_{MIN}	15
Weaving segment length, L_S	2450ft	Freeway maximum capacity, C_{IFL}	2350
Freeway free-flow speed, FFS	70 mph	Terrain type	Level

Conversions to pc/h Under Base Conditions

	V (veh/h)	PHF	Truck (%)	RV (%)	E_T	E_R	f_{HV}	f_p	v (pc/h)
V_{FF}	4150	0.95	4	0	1.5	1.2	0.980	1.00	4456
V_{RF}	1552	0.92	3	0	1.5	1.2	0.985	1.00	1712
V_{FR}	240	0.92	3	0	1.5	1.2	0.985	1.00	265
V_{RR}	0	0.94	0	0	1.5	1.2	1.000	1.00	0
V_{NW}	4456							V =	6433
V_W	1977								
VR	0.307								

Configuration Characteristics

Minimum maneuver lanes, N_{WL}	3 lc	Minimum weaving lane changes, LC_{MIN}	265 lc/h
Interchange density, ID	0.8 int/mi	Weaving lane changes, LC_W	1307 lc/h
Minimum RF lane changes, LC_{RF}	0 lc/pc	Non-weaving lane changes, LC_{NW}	1090 lc/h
Minimum FR lane changes, LC_{FR}	1 lc/pc	Total lane changes, LC_{ALL}	2397 lc/h
Minimum RR lane changes, LC_{RR}	lc/pc	Non-weaving vehicle index, I_{NW}	873

Weaving Segment Speed, Density, Level of Service, and Capacity

Weaving segment flow rate, v	6317 veh/h	Weaving intensity factor, W	0.222
Weaving segment capacity, c_w	11165 veh/h	Weaving segment speed, S	62.0 mph
Weaving segment v/c ratio	0.566	Average weaving speed, S_W	60.0 mph
Weaving segment density, D	17.3 pc/mi/ln	Average non-weaving speed, S_{NW}	62.9 mph
Level of Service, LOS	B	Maximum weaving length, L_{MAX}	4097 ft

Notes

a. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments".
b. For volumes that exceed the weaving segment capacity, the level of service is "F".

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

FREEWAY WEAVING WORKSHEET

General Information

Analyst	LRCB
Agency/Company	
Date Performed	8/22/15
Analysis Time Period	PM

Site Information

Freeway/Dir of Travel	Southbound
Weaving Segment Location	DRoss to Central
Analysis Year	2040

Project Description Alt 2: I-95 PGA Boulevard - SB DRoss to Central - S1-S2

Inputs

Weaving configuration	One-Sided	Segment type	Freeway
Weaving number of lanes, N	6	Freeway minimum speed, S_{MIN}	15
Weaving segment length, L_S	2450ft	Freeway maximum capacity, C_{IFL}	2350
Freeway free-flow speed, FFS	70 mph	Terrain type	Level

Conversions to pc/h Under Base Conditions

	V (veh/h)	PHF	Truck (%)	RV (%)	E_T	E_R	f_{HV}	f_p	v (pc/h)
V_{FF}	2749	0.95	4	0	1.5	1.2	0.980	1.00	2952
V_{RF}	1125	0.92	3	0	1.5	1.2	0.985	1.00	1241
V_{FR}	511	0.92	3	0	1.5	1.2	0.985	1.00	564
V_{RR}	0	0.94	0	0	1.5	1.2	1.000	1.00	0
V_{NW}	2952							V =	4757
V_W	1805								
VR	0.379								

Configuration Characteristics

Minimum maneuver lanes, N_{WL}	3 lc	Minimum weaving lane changes, LC_{MIN}	564 lc/h
Interchange density, ID	0.8 int/mi	Weaving lane changes, LC_W	1606 lc/h
Minimum RF lane changes, LC_{RF}	0 lc/pc	Non-weaving lane changes, LC_{NW}	780 lc/h
Minimum FR lane changes, LC_{FR}	1 lc/pc	Total lane changes, LC_{ALL}	2386 lc/h
Minimum RR lane changes, LC_{RR}	lc/pc	Non-weaving vehicle index, I_{NW}	579

Weaving Segment Speed, Density, Level of Service, and Capacity

Weaving segment flow rate, v	4672 veh/h	Weaving intensity factor, W	0.221
Weaving segment capacity, c_w	9043 veh/h	Weaving segment speed, S	61.3 mph
Weaving segment v/c ratio	0.517	Average weaving speed, S_W	60.0 mph
Weaving segment density, D	12.9 pc/mi/ln	Average non-weaving speed, S_{NW}	62.1 mph
Level of Service, LOS	B	Maximum weaving length, L_{MAX}	4886 ft

Notes

a. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments".
b. For volumes that exceed the weaving segment capacity, the level of service is "F".

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*AM Peak*

Site Information

Highway/Direction of Travel	*I-95 Southbound*
From/To	*Central-Off to MT_CD*
Jurisdiction	*FDOT D4*
Analysis Year	*2040*

Project Description *Alt 2: I-95 PGA Boulevard - SB Central-Off to MT_CD S2 to S3*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*5702*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1224*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*17.5*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*PM Peak*

Site Information

Highway/Direction of Travel	*I-95 Southbound*
From/To	*Central-Off to MT_CD*
Jurisdiction	*FDOT D4*
Analysis Year	*2040*

Project Description *Alt 2: I-95 PGA Boulevard - SB Central-Off to MT_CD S2 to S3*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3874*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*832*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*11.9*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Southbound
Agency or Company		Junction	PGA Off Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	AM Peak	Analysis Year	2040

Project Description: Alt 2: I-95 PGA Boulevard - Military CD Rd-Off S3 to S4

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 5	☐ Yes ☐ On
☑ No ☐ Off	Ramp Number of Lanes, N: 1	☑ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A:	L_{down} = ft
V_u = veh/h	Deceleration Lane Length L_D: 500	V_D = veh/h
	Freeway Volume, V_F: 5702	
	Ramp Volume, V_R: 905	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 50.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	$v = V/PHF \times f_{HV} \times f_p$
Freeway	5702	0.95	Level	4	0	0.980	1.00	6122
Ramp	905	0.92	Level	3	0	0.985	1.00	998
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.436 using Equation (Exhibit 13-7)

V_{12} = 2832 pc/h

V_3 or V_{av34} 1186 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	5204	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	4206	Exhibit 13-8	9600	No
V_R	998	Exhibit 13-10	2100	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	2832	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 24.1 (pc/mi/ln)

LOS = C (Exhibit 13-2)

Speed Determination

D_s = 0.323 (Exhibit 13-12)

S_R = 61.0 mph (Exhibit 13-12)

S_0 = 76.1 mph (Exhibit 13-12)

S = 67.0 mph (Exhibit 13-13)

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Southbound
Agency or Company		Junction	PGA Off Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	PM Peak	Analysis Year	2040

Project Description: Alt 2: I-95 PGA Boulevard - Military CD Rd-Off S3 to S4

Inputs

Upstream Adj Ramp		Freeway Number of Lanes, N	5	Downstream Adj Ramp	
☐ Yes	☐ On	Ramp Number of Lanes, N	1	☐ Yes	☐ On
☑ No	☐ Off	Acceleration Lane Length, L_A		☑ No	☐ Off
L_{up} =	ft	Deceleration Lane Length L_D	500	L_{down} =	ft
V_u =	veh/h	Freeway Volume, V_F	3874	V_D =	veh/h
		Ramp Volume, V_R	316		
		Freeway Free-Flow Speed, S_{FF}	70.0		
		Ramp Free-Flow Speed, S_{FR}	50.0		

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	3874	0.95	Level	4	0	0.980	1.00	4159
Ramp	316	0.92	Level	3	0	0.985	1.00	349
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.436 using Equation (Exhibit 13-7)

V_{12} = 1829 pc/h

V_3 or V_{av34} 957 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	3744	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	3395	Exhibit 13-8	9600	No
V_R	349	Exhibit 13-10	2100	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	1829	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 15.5 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination

D_s = 0.264 (Exhibit 13-12)

S_R = 62.6 mph (Exhibit 13-12)

S_0 = 76.8 mph (Exhibit 13-12)

S = 69.1 mph (Exhibit 13-13)

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*AM Peak*

Site Information

Highway/Direction of Travel	*I-95 Southbound*
From/To	*MT-CD_Off to Central-CD-On*
Jurisdiction	*FDOT D4*
Analysis Year	*2040*

Project Description *Alt 2: I-95 PGA Blvd -SB MT-CD_Off to Central-CD-On S4 to S5*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4797*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1030*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*14.7*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*PM Peak*

Site Information

Highway/Direction of Travel	*I-95 Southbound*
From/To	*MT-CD_Off to Central-CD-On*
Jurisdiction	*FDOT D4*
Analysis Year	*2040*

Project Description *Alt 2: I-95 PGA BLVD -SB MT-CD_Off to Central-CD-On S4 to S5*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3558*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*764*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*10.9*	pc/mi/ln
LOS	*A*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

FREEWAY WEAVING WORKSHEET

General Information

Analyst	LRCB
Agency/Company	
Date Performed	8/20/15
Analysis Time Period	AM

Site Information

Freeway/Dir of Travel	Southbound
Weaving Segment Location	Central-CD_to_PGA Off Ramp
Analysis Year	2040

Project Description Alt 2: I-95 PGA Blvd - Central-CD_to_PGA Off Ramp - S5-S6

Inputs

Weaving configuration	One-Sided	Segment type	Freeway
Weaving number of lanes, N	6	Freeway minimum speed, S_{MIN}	15
Weaving segment length, L_S	2000ft	Freeway maximum capacity, C_{IFL}	2350
Freeway free-flow speed, FFS	70 mph	Terrain type	Level

Conversions to pc/h Under Base Conditions

	V (veh/h)	PHF	Truck (%)	RV (%)	E_T	E_R	f_{HV}	f_p	v (pc/h)
V_{FF}	3768	0.95	4	0	1.5	1.2	0.980	1.00	4046
V_{RF}	1348	0.92	3	0	1.5	1.2	0.985	1.00	1487
V_{FR}	1029	0.92	3	0	1.5	1.2	0.985	1.00	1135
V_{RR}	0	0.94	0	0	1.5	1.2	1.000	1.00	0
V_{NW}	4046							V =	6668
V_W	2622								
VR	0.393								

Configuration Characteristics

Minimum maneuver lanes, N_{WL}	3 lc	Minimum weaving lane changes, LC_{MIN}	0 lc/h
Interchange density, ID	0.8 int/mi	Weaving lane changes, LC_W	926 lc/h
Minimum RF lane changes, LC_{RF}	0 lc/pc	Non-weaving lane changes, LC_{NW}	762 lc/h
Minimum FR lane changes, LC_{FR}	0 lc/pc	Total lane changes, LC_{ALL}	1688 lc/h
Minimum RR lane changes, LC_{RR}	lc/pc	Non-weaving vehicle index, I_{NW}	647

Weaving Segment Speed, Density, Level of Service, and Capacity

Weaving segment flow rate, v	6551 veh/h	Weaving intensity factor, W	0.198
Weaving segment capacity, c_w	8726 veh/h	Weaving segment speed, S	63.1 mph
Weaving segment v/c ratio	0.751	Average weaving speed, S_W	60.9 mph
Weaving segment density, D	17.6 pc/mi/ln	Average non-weaving speed, S_{NW}	64.7 mph
Level of Service, LOS	B	Maximum weaving length, L_{MAX}	5039 ft

Notes

a. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments".
b. For volumes that exceed the weaving segment capacity, the level of service is "F".

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

FREEWAY WEAVING WORKSHEET

General Information

Analyst	LRCB
Agency/Company	
Date Performed	8/20/15
Analysis Time Period	PM

Site Information

Freeway/Dir of Travel	Southbound
Weaving Segment Location	Central-CD_to_PGA Off Ramp
Analysis Year	2040

Project Description Alt 2: I-95 PGA Blvd - Central-CD_to_PGA Off Ramp - S5-S6

Inputs

Weaving configuration	One-Sided	Segment type	Freeway
Weaving number of lanes, N	6	Freeway minimum speed, S_{MIN}	15
Weaving segment length, L_S	2000ft	Freeway maximum capacity, C_{IFL}	2350
Freeway free-flow speed, FFS	70 mph	Terrain type	Level

Conversions to pc/h Under Base Conditions

	V (veh/h)	PHF	Truck (%)	RV (%)	E_T	E_R	f_{HV}	f_p	v (pc/h)
V_{FF}	3277	0.95	4	0	1.5	1.2	0.980	1.00	3518
V_{RF}	1232	0.92	3	0	1.5	1.2	0.985	1.00	1359
V_{FR}	281	0.92	3	0	1.5	1.2	0.985	1.00	310
V_{RR}	0	0.94	0	0	1.5	1.2	1.000	1.00	0
V_{NW}	3518							V =	5187
V_W	1669								
VR	0.322								

Configuration Characteristics

Minimum maneuver lanes, N_{WL}	3 lc	Minimum weaving lane changes, LC_{MIN}	0 lc/h
Interchange density, ID	0.8 int/mi	Weaving lane changes, LC_W	926 lc/h
Minimum RF lane changes, LC_{RF}	0 lc/pc	Non-weaving lane changes, LC_{NW}	653 lc/h
Minimum FR lane changes, LC_{FR}	0 lc/pc	Total lane changes, LC_{ALL}	1579 lc/h
Minimum RR lane changes, LC_{RR}	lc/pc	Non-weaving vehicle index, I_{NW}	563

Weaving Segment Speed, Density, Level of Service, and Capacity

Weaving segment flow rate, v	5095 veh/h	Weaving intensity factor, W	0.188
Weaving segment capacity, c_w	10664 veh/h	Weaving segment speed, S	64.3 mph
Weaving segment v/c ratio	0.478	Average weaving speed, S_W	61.3 mph
Weaving segment density, D	13.4 pc/mi/ln	Average non-weaving speed, S_{NW}	65.9 mph
Level of Service, LOS	B	Maximum weaving length, L_{MAX}	4253 ft

Notes

a. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments".
b. For volumes that exceed the weaving segment capacity, the level of service is "F".

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*AM Peak*

Site Information

Highway/Direction of Travel	*I-95 Southbound*
From/To	*PGA-Off to WB_PGA On*
Jurisdiction	*FDOT D4*
Analysis Year	*2040*

Project Description *Alt 2: I-95 SB Basic PGA-Off to WB PGA-On (S6 - S7)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*5116*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1099*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*15.7*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*PM Peak*

Site Information

Highway/Direction of Travel	*I-95 Southbound*
From/To	*PGA-Off to WB_PGA On*
Jurisdiction	*FDOT D4*
Analysis Year	*2040*

Project Description *Alt 2: I-95 SB Basic PGA-Off to WB PGA-On (S6 - S7)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4509*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*968*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*13.8*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Southbound
Agency or Company		Junction	WB PGA SB On Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	AM	Analysis Year	2040

Project Description: Alt 2: I-95 SB Merge at WB PGA On-Ramp (S7 - S8)

Inputs

Upstream Adj Ramp		Freeway Number of Lanes, N	5	Downstream Adj Ramp	
☐ Yes	☐ On	Ramp Number of Lanes, N	1	☐ Yes	☐ On
☑ No	☐ Off	Acceleration Lane Length, L_A	400	☑ No	☐ Off
L_{up} =	ft	Deceleration Lane Length L_D		L_{down} =	ft
V_u =	veh/h	Freeway Volume, V_F	5116	V_D =	veh/h
		Ramp Volume, V_R	1351		
		Freeway Free-Flow Speed, S_{FF}	70.0		
		Ramp Free-Flow Speed, S_{FR}	40.0		

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	5116	0.95	Level	4	0	0.980	1.00	5493
Ramp	1351	0.92	Level	3	0	0.985	1.00	1491
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 0.031 using Equation (Exhibit 13-6)

V_{12} = 135 pc/h

V_3 or V_{av34} = 2075 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes, V_{12a} = 1714 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	5776	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	3205	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = 27.3 (pc/mi/ln)

LOS = C (Exhibit 13-2)

Speed Determination

M_S = 0.385 (Exibit 13-11)

S_R = 59.2 mph (Exhibit 13-11)

S_0 = 67.2 mph (Exhibit 13-11)

S = 62.5 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R = mph (Exhibit 13-12)

S_0 = mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Southbound
Agency or Company		Junction	WB PGA SB On Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	PM	Analysis Year	2040

Project Description: Alt 2: I-95 SB Merge at WB PGA On-Ramp (S7 - S8)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 5	☐ Yes ☐ On
☑ No ☐ Off	Ramp Number of Lanes, N: 1	☑ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A: 400	L_{down} = ft
V_u = veh/h	Deceleration Lane Length L_D:	V_D = veh/h
	Freeway Volume, V_F: 4509	
	Ramp Volume, V_R: 2593	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 40.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	4509	0.95	Level	4	0	0.980	1.00	4841
Ramp	2593	0.92	Level	3	0	0.985	1.00	2861
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = -0.140 using Equation (Exhibit 13-6)

V_{12} = -527 pc/h

V_3 or V_{av34} = 2151 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes, V_{12a} = 1510 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	6637	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	4371	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = 35.7 (pc/mi/ln)

LOS = E (Exhibit 13-2)

Speed Determination

M_S = 0.598 (Exibit 13-11)

S_R = 53.3 mph (Exhibit 13-11)

S_0 = 67.7 mph (Exhibit 13-11)

S = 57.5 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R = mph (Exhibit 13-12)

S_0 = mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*AM Peak*

Site Information

Highway/Direction of Travel	*I-95 Southbound*
From/To	*WB PGA On to EB PGA On*
Jurisdiction	*FDOT D4*
Analysis Year	*2040*

Project Description *Alt 2: I-95 SB Basic WB PGA On to EB PGA On (S8 - S9)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*6467*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1389*	pc/h/ln
S	*69.6*	mph
D = v_p / S	*20.0*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*PM Peak*

Site Information

Highway/Direction of Travel	*I-95 Southbound*
From/To	*WB PGA On to EB PGA On*
Jurisdiction	*FDOT D4*
Analysis Year	*2040*

Project Description *Alt 2: I-95 SB Basic WB PGA On to EB PGA On (S8 - S9)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*7102*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1525*	pc/h/ln
S	*68.8*	mph
D = v_p / S	*22.2*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Southbound
Agency or Company		Junction	EB PGA SB On Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	AM	Analysis Year	2040

Project Description: Alt 2: I-95 SB Merge at WB PGA On-Ramp (S9 - S10)

Inputs

Upstream Adj Ramp		Freeway Number of Lanes, N	5	Downstream Adj Ramp	
☐ Yes	☐ On	Ramp Number of Lanes, N	1	☐ Yes	☐ On
☑ No	☐ Off	Acceleration Lane Length, L_A	400	☑ No	☐ Off
L_{up} =	ft	Deceleration Lane Length L_D		L_{down} =	ft
V_u =	veh/h	Freeway Volume, V_F	6467	V_D =	veh/h
		Ramp Volume, V_R	1406		
		Freeway Free-Flow Speed, S_{FF}	70.0		
		Ramp Free-Flow Speed, S_{FR}	50.0		

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	6467	0.95	Level	4	0	0.980	1.00	6944
Ramp	1406	0.92	Level	3	0	0.985	1.00	1551
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 0.024 using Equation (Exhibit 13-6)

V_{12} = 121 pc/h

V_3 or V_{av34} = 2474 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes, V_{12a} = 2028 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	6621	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	3579	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = 30.2 (pc/mi/ln)

LOS = D (Exhibit 13-2)

Speed Determination

M_S = 0.421 (Exibit 13-11)

S_R = 58.2 mph (Exhibit 13-11)

S_0 = 66.3 mph (Exhibit 13-11)

S = 61.7 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R = mph (Exhibit 13-12)

S_0 = mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Southbound
Agency or Company		Junction	EB PGA SB On Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	PM	Analysis Year	2040

Project Description: Alt 2: I-95 SB Merge at WB PGA On-Ramp (S9 - S10)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 5	☐ Yes ☐ On
☑ No ☐ Off	Ramp Number of Lanes, N: 1	☑ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A: 400	L_{down} = ft
V_u = veh/h	Deceleration Lane Length L_D:	V_D = veh/h
	Freeway Volume, V_F: 7102	
	Ramp Volume, V_R: 1733	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 50.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	$v = V/PHF \times f_{HV} \times f_p$
Freeway	7102	0.95	Level	4	0	0.980	1.00	7625
Ramp	1733	0.92	Level	3	0	0.985	1.00	1912
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = -0.021 using Equation (Exhibit 13-6)

V_{12} = -115 pc/h

V_3 or V_{av34} = 2783 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☑ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes, V_{12a} = 2180 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	7364	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	4092	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = 34.0 (pc/mi/ln)

LOS = D (Exhibit 13-2)

Speed Determination

M_S = 0.514 (Exibit 13-11)

S_R = 55.6 mph (Exhibit 13-11)

S_0 = 65.9 mph (Exhibit 13-11)

S = 59.8 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R = mph (Exhibit 13-12)

S_0 = mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information		Site Information	
Analyst	*LRCB*	Highway/Direction of Travel	*I-95 Southbound*
Agency or Company		From/To	*EB PGA On to NLake Off*
Date Performed	*3/26/2015*	Jurisdiction	*FDOT D4*
Analysis Time Period	*AM Peak*	Analysis Year	*2040*

Project Description *Alt 2: I-95 SB - EB-PGA_On_to_NLake_SB_Off (S10 - S11)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*7873*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs			Calc Speed Adj and FFS		
Lane Width		ft			
Rt-Side Lat. Clearance		ft	f_{LW}		mph
Number of Lanes, N	*5*		f_{LC}		mph
Total Ramp Density, TRD		ramps/mi	TRD Adjustment		mph
FFS (measured)	*70.0*	mph	FFS	*70.0*	mph
Base free-flow Speed, BFFS		mph			

LOS and Performance Measures			Design (N)	
Operational (LOS)			Design (N)	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1691*	pc/h/ln	Design LOS	
S	*67.2*	mph	v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
D = v_p / S	*25.2*	pc/mi/ln	S	mph
LOS	*C*		D = v_p / S	pc/mi/ln
			Required Number of Lanes, N	

Glossary		Factor Location	
N - Number of lanes	S - Speed	E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
V - Hourly volume	D - Density	E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
v_p - Flow rate	FFS - Free-flow speed	f_p - Page 11-18	TRD - Page 11-11
LOS - Level of service	BFFS - Base free-flow speed	LOS, S, FFS, v_p - Exhibits 11-2, 11-3	
DDHV - Directional design hour volume			

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*PM Peak*

Site Information

Highway/Direction of Travel	*I-95 Southbound*
From/To	*EB PGA On to NLake Off*
Jurisdiction	*FDOT D4*
Analysis Year	*2040*

Project Description *Alt 2: I-95 SB - EB-PGA_On_to_NLake_SB_Off (S10 - S11)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*8835*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1897*	pc/h/ln
S	*64.4*	mph
D = v_p / S	*29.5*	pc/mi/ln
LOS	*D*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Southbound
Agency or Company		Junction	Nlake Off Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	AM Peak	Analysis Year	2040

Project Description: Alt 2: I-95 SB Diverge at Nlake Off-Ramp (S11 - S12)

Inputs

Upstream Adj Ramp		Freeway Number of Lanes, N	5	Downstream Adj Ramp	
☐ Yes	☐ On	Ramp Number of Lanes, N	2	☐ Yes	☐ On
☑ No	☐ Off	Acceleration Lane Length, L_A		☑ No	☐ Off
L_{up} =	ft	Deceleration Lane Length L_D	500	L_{down} =	ft
V_u =	veh/h	Freeway Volume, V_F	7873	V_D =	veh/h
		Ramp Volume, V_R	1282		
		Freeway Free-Flow Speed, S_{FF}	70.0		
		Ramp Free-Flow Speed, S_{FR}	50.0		

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	7873	0.95	Level	4	0	0.980	1.00	8453
Ramp	1282	0.92	Level	3	0	0.985	1.00	1414
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.260 using Equation (Exhibit 13-7)

V_{12} = 2805 pc/h

V_3 or V_{av34} 1979 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	6763	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	5349	Exhibit 13-8	9600	No
V_R	1414	Exhibit 13-10	4200	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	2805	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 14.9 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination

D_s = 0.360 (Exhibit 13-12)

S_R = 59.9 mph (Exhibit 13-12)

S_0 = 73.0 mph (Exhibit 13-12)

S = 66.9 mph (Exhibit 13-13)

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Southbound
Agency or Company		Junction	Nlake Off Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	PM Peak	Analysis Year	2040

Project Description: Alt 2: I-95 SB Diverge at Nlake Off-Ramp (S11 - S12)

Inputs

Upstream Adj Ramp		Freeway Number of Lanes, N	5	Downstream Adj Ramp	
☐ Yes	☐ On	Ramp Number of Lanes, N	2	☐ Yes	☐ On
☑ No	☐ Off	Acceleration Lane Length, L_A		☑ No	☐ Off
L_{up} =	ft	Deceleration Lane Length L_D	500	L_{down} =	ft
V_u =	veh/h	Freeway Volume, V_F	8835	V_D =	veh/h
		Ramp Volume, V_R	1494		
		Freeway Free-Flow Speed, S_{FF}	70.0		
		Ramp Free-Flow Speed, S_{FR}	50.0		

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	8835	0.95	Level	4	0	0.980	1.00	9486
Ramp	1494	0.92	Level	3	0	0.985	1.00	1648
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.260 using Equation (Exhibit 13-7)

V_{12} = 3193 pc/h

V_3 or V_{av34} 2198 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	7589	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	5941	Exhibit 13-8	9600	No
V_R	1648	Exhibit 13-10	4200	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	3193	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 18.2 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination

D_s = 0.381 (Exhibit 13-12)

S_R = 59.3 mph (Exhibit 13-12)

S_0 = 72.1 mph (Exhibit 13-12)

S = 66.1 mph (Exhibit 13-13)

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

FREEWAY WEAVING WORKSHEET

General Information

Analyst	LRCB
Agency/Company	
Date Performed	4/2/2015
Analysis Time Period	AM

Site Information

Freeway/Dir of Travel	Southbound
Weaving Segment Location	Central Blvd CD
Analysis Year	2040

Project Description Alt 2: I-95 PGA - SB CD Road (Central Blvd. On Ramp) btw MT Off-Ramp

Inputs

Weaving configuration	One-Sided	Segment type	C-D Roadway/ Multilane Highways
Weaving number of lanes, N	2		
Weaving segment length, L_S	2000ft	Freeway minimum speed, S_{MIN}	15
Freeway free-flow speed, FFS	50 mph	Freeway maximum capacity, C_{IFL}	2250
		Terrain type	Level

Conversions to pc/h Under Base Conditions

	V (veh/h)	PHF	Truck (%)	RV (%)	E_T	E_R	f_{HV}	f_p	v (pc/h)
V_{FF}	1348	0.92	3	0	1.5	1.2	0.985	1.00	1487
V_{RF}	0	0.92	3	0	1.5	1.2	0.985	1.00	0
V_{FR}	0	0.92	3	0	1.5	1.2	0.985	1.00	0
V_{RR}	905	0.92	3	0	1.5	1.2	0.985	1.00	998
V_{NW}	2485							V =	2485
V_W	0								
VR	0.000								

Configuration Characteristics

Minimum maneuver lanes, N_{WL}	2 lc	Minimum weaving lane changes, LC_{MIN}	0 lc/h
Interchange density, ID	0.8 int/mi	Weaving lane changes, LC_W	103 lc/h
Minimum RF lane changes, LC_{RF}	0 lc/pc	Non-weaving lane changes, LC_{NW}	1211 lc/h
Minimum FR lane changes, LC_{FR}	0 lc/pc	Total lane changes, LC_{ALL}	1314 lc/h
Minimum RR lane changes, LC_{RR}	lc/pc	Non-weaving vehicle index, I_{NW}	398

Weaving Segment Speed, Density, Level of Service, and Capacity

Weaving segment flow rate, v	2449 veh/h	Weaving intensity factor, W	0.162
Weaving segment capacity, c_w	4343 veh/h	Weaving segment speed, S	44.0 mph
Weaving segment v/c ratio	0.564	Average weaving speed, S_W	45.1 mph
Weaving segment density, D	28.2 pc/mi/ln	Average non-weaving speed, S_{NW}	44.0 mph
Level of Service, LOS	C	Maximum weaving length, L_{MAX}	2596 ft

Notes

a. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments".
b. For volumes that exceed the weaving segment capacity, the level of service is "F".

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APPENDIX AL - ALTERNATIVE 2 HCS REPORTS

FREEWAY WEAVING WORKSHEET

General Information

Analyst	LRCB
Agency/Company	
Date Performed	4/2/2015
Analysis Time Period	PM

Site Information

Freeway/Dir of Travel	Southbound
Weaving Segment Location	Central Blvd CD
Analysis Year	2040

Project Description Alt 2: I-95 PGA - SB CD Road (Central Blvd. On Ramp) btw MT Off-Ramp

Inputs

Weaving configuration	One-Sided	Segment type	C-D Roadway/ Multilane Highways
Weaving number of lanes, N	2		
Weaving segment length, L_S	2000ft	Freeway minimum speed, S_{MIN}	15
Freeway free-flow speed, FFS	50 mph	Freeway maximum capacity, C_{IFL}	2250
		Terrain type	Level

Conversions to pc/h Under Base Conditions

	V (veh/h)	PHF	Truck (%)	RV (%)	E_T	E_R	f_{HV}	f_p	v (pc/h)
V_{FF}	1232	0.92	3	0	1.5	1.2	0.985	1.00	1359
V_{RF}	0	0.92	3	0	1.5	1.2	0.985	1.00	0
V_{FR}	0	0.92	3	0	1.5	1.2	0.985	1.00	0
V_{RR}	316	0.92	3	0	1.5	1.2	0.985	1.00	349
V_{NW}	1708							V =	1708
V_W	0								
VR	0.000								

Configuration Characteristics

Minimum maneuver lanes, N_{WL}	2 lc	Minimum weaving lane changes, LC_{MIN}	0 lc/h
Interchange density, ID	0.8 int/mi	Weaving lane changes, LC_W	103 lc/h
Minimum RF lane changes, LC_{RF}	0 lc/pc	Non-weaving lane changes, LC_{NW}	1051 lc/h
Minimum FR lane changes, LC_{FR}	0 lc/pc	Total lane changes, LC_{ALL}	1154 lc/h
Minimum RR lane changes, LC_{RR}	lc/pc	Non-weaving vehicle index, I_{NW}	273

Weaving Segment Speed, Density, Level of Service, and Capacity

Weaving segment flow rate, v	1683 veh/h	Weaving intensity factor, W	0.146
Weaving segment capacity, c_w	4343 veh/h	Weaving segment speed, S	45.9 mph
Weaving segment v/c ratio	0.387	Average weaving speed, S_W	45.5 mph
Weaving segment density, D	18.6 pc/mi/ln	Average non-weaving speed, S_{NW}	45.9 mph
Level of Service, LOS	B	Maximum weaving length, L_{MAX}	2596 ft

Notes

a. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments".
b. For volumes that exceed the weaving segment capacity, the level of service is "F".

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APPENDIX AM

HCS REPORTS

ALTERNATIVE 3

APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Northbound
Agency or Company		Junction	NLake NB On Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	PM	Analysis Year	2020

Project Description: Alt 3: I-95 NB Merge at Nlake On-Ramp (N1 - N2)

Inputs

Upstream Adj Ramp		Freeway/Ramp		Downstream Adj Ramp	
☐ Yes	☐ On	Freeway Number of Lanes, N	5	☐ Yes	☐ On
☑ No	☐ Off	Ramp Number of Lanes, N	1	☑ No	☐ Off
L_{up} =	ft	Acceleration Lane Length, L_A	400	L_{down} =	ft
V_u =	veh/h	Deceleration Lane Length L_D		V_D =	veh/h
		Freeway Volume, V_F	4737		
		Ramp Volume, V_R	1392		
		Freeway Free-Flow Speed, S_{FF}	70.0		
		Ramp Free-Flow Speed, S_{FR}	50.0		

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	4737	0.95	Level	4	0	0.980	1.00	5086
Ramp	1392	0.92	Level	3	0	0.985	1.00	1536
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 0.026 using Equation (Exhibit 13-6)

V_{12} = 102 pc/h

V_3 or V_{av34} = 1933 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes, V_{12a} = 1587 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	5504	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	3123	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = 26.6 (pc/mi/ln)

LOS = C (Exhibit 13-2)

Speed Determination

M_S = 0.370 (Exibit 13-11)

S_R = 59.7 mph (Exhibit 13-11)

S_0 = 67.5 mph (Exhibit 13-11)

S = 62.8 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R = mph (Exhibit 13-12)

S_0 = mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Northbound
Agency or Company		Junction	NLake NB On Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	AM	Analysis Year	2020

Project Description: Alt 3: I-95 NB Merge at Nlake On-Ramp (N1 - N2)

Inputs

Upstream Adj Ramp		Freeway Number of Lanes, N	5	Downstream Adj Ramp	
☐ Yes	☐ On	Ramp Number of Lanes, N	1	☐ Yes	☐ On
☑ No	☐ Off	Acceleration Lane Length, L_A	400	☑ No	☐ Off
L_{up} =	ft	Deceleration Lane Length L_D		L_{down} =	ft
V_u =	veh/h	Freeway Volume, V_F	5291	V_D =	veh/h
		Ramp Volume, V_R	1259		
		Freeway Free-Flow Speed, S_{FF}	70.0		
		Ramp Free-Flow Speed, S_{FR}	50.0		

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	5291	0.95	Level	4	0	0.980	1.00	5681
Ramp	1259	0.92	Level	3	0	0.985	1.00	1389
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 0.044 using Equation (Exhibit 13-6)

V_{12} = 191 pc/h

V_3 or V_{av34} = 2063 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes, V_{12a} = 1727 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	5707	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	3116	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = 26.6 (pc/mi/ln)

LOS = C (Exhibit 13-2)

Speed Determination

M_S = 0.369 (Exibit 13-11)

S_R = 59.7 mph (Exhibit 13-11)

S_0 = 67.1 mph (Exhibit 13-11)

S = 62.8 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R = mph (Exhibit 13-12)

S_0 = mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*AM Peak*

Site Information

Highway/Direction of Travel	*I-95 Northbound*
From/To	*NLake On-Rmp to PGA Off-Rmp*
Jurisdiction	*FDOT D4*
Analysis Year	*2020*

Project Description *Alt 3: I-95 NB Basic Nlake-On to PGA-Off (N2 - N3)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*6550*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1407*	pc/h/ln
S	*69.5*	mph
D = v_p / S	*20.2*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*PM Peak*

Site Information

Highway/Direction of Travel	*I-95 Northbound*
From/To	*NLake On-Rmp to PGA Off-Rmp*
Jurisdiction	*FDOT D4*
Analysis Year	*2020*

Project Description *Alt 3: I-95 NB Basic Nlake-On to PGA-Off (N2 - N3)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*6129*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1316*	pc/h/ln
S	*69.8*	mph
D = v_p / S	*18.8*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Northbound
Agency or Company		Junction	EB PGA Off-Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	AM Peak	Analysis Year	2020

Project Description: Alt 3: I-95 NB Diverge at EB PGA Off-Ramp (N3 - N4)

Inputs

Upstream Adj Ramp		Freeway Number of Lanes, N	5	Downstream Adj Ramp	
☐ Yes	☐ On	Ramp Number of Lanes, N	2	☐ Yes	☐ On
☑ No	☐ Off	Acceleration Lane Length, L_A		☑ No	☐ Off
L_{up} =	ft	Deceleration Lane Length L_D	500	L_{down} =	ft
V_u =	veh/h	Freeway Volume, V_F	6550	V_D =	veh/h
		Ramp Volume, V_R	2146		
		Freeway Free-Flow Speed, S_{FF}	70.0		
		Ramp Free-Flow Speed, S_{FR}	55.0		

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	6550	0.95	Level	4	0	0.980	1.00	7033
Ramp	2146	0.92	Level	3	0	0.985	1.00	2368
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.260 using Equation (Exhibit 13-7)

V_{12} = 3215 pc/h

V_3 or V_{av34} 1206 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	5627	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	3259	Exhibit 13-8	9600	No
V_R	2368	Exhibit 13-10	4400	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	3215	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 18.4 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination

D_s = 0.381 (Exhibit 13-12)

S_R = 59.3 mph (Exhibit 13-12)

S_0 = 76.0 mph (Exhibit 13-12)

S = 65.5 mph (Exhibit 13-13)

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Northbound
Agency or Company		Junction	EB PGA Off-Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	PM Peak	Analysis Year	2020

Project Description: Alt 3: I-95 NB Diverge at EB PGA Off-Ramp (N3 - N4)

Inputs

Upstream Adj Ramp		Freeway Number of Lanes, N	5	Downstream Adj Ramp	
☐ Yes	☐ On	Ramp Number of Lanes, N	2	☐ Yes	☐ On
☑ No	☐ Off	Acceleration Lane Length, L_A		☑ No	☐ Off
L_{up} =	ft	Deceleration Lane Length L_D	500	L_{down} =	ft
V_u =	veh/h	Freeway Volume, V_F	6129	V_D =	veh/h
		Ramp Volume, V_R	1094		
		Freeway Free-Flow Speed, S_{FF}	70.0		
		Ramp Free-Flow Speed, S_{FR}	55.0		

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	6129	0.95	Level	4	0	0.980	1.00	6581
Ramp	1094	0.92	Level	3	0	0.985	1.00	1207
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.260 using Equation (Exhibit 13-7)

V_{12} = 2348 pc/h

V_3 or V_{av34} 1623 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	5594	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	4387	Exhibit 13-8	9600	No
V_R	1207	Exhibit 13-10	4400	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	2348	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 10.9 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination

D_s = 0.277 (Exhibit 13-12)

S_R = 62.3 mph (Exhibit 13-12)

S_0 = 74.4 mph (Exhibit 13-12)

S = 68.7 mph (Exhibit 13-13)

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information		Site Information	
Analyst	*LRCB*	Highway/Direction of Travel	*I-95 Northbound*
Agency or Company		From/To	*PGA EB Off to PGA WB Off*
Date Performed	*3/26/2015*	Jurisdiction	*FDOT D4*
Analysis Time Period	*AM Peak*	Analysis Year	*2020*

Project Description *Alt 3: I-95 NB Basic EB PGA Off to WB PGA (N4 - N5)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4404*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs			Calc Speed Adj and FFS		
Lane Width		ft			
Rt-Side Lat. Clearance		ft	f_{LW}		mph
Number of Lanes, N	*5*		f_{LC}		mph
Total Ramp Density, TRD		ramps/mi	TRD Adjustment		mph
FFS (measured)	*70.0*	mph	FFS	*70.0*	mph
Base free-flow Speed, BFFS		mph			

LOS and Performance Measures			Design (N)	
Operational (LOS)			Design (N)	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*946*	pc/h/ln	Design LOS	
S	*70.0*	mph	v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
D = v_p / S	*13.5*	pc/mi/ln	S	mph
LOS	*B*		D = v_p / S	pc/mi/ln
			Required Number of Lanes, N	

Glossary		Factor Location	
N - Number of lanes	S - Speed	E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
V - Hourly volume	D - Density	E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
v_p - Flow rate	FFS - Free-flow speed	f_p - Page 11-18	TRD - Page 11-11
LOS - Level of service	BFFS - Base free-flow speed	LOS, S, FFS, v_p - Exhibits 11-2, 11-3	
DDHV - Directional design hour volume			

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information		Site Information	
Analyst	*LRCB*	Highway/Direction of Travel	*I-95 Northbound*
Agency or Company		From/To	*PGA EB Off to PGA WB Off*
Date Performed	*3/26/2015*	Jurisdiction	*FDOT D4*
Analysis Time Period	*PM Peak*	Analysis Year	*2020*

Project Description *Alt 3: I-95 NB Basic EB PGA Off to WB PGA (N4 - N5)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*5035*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs			Calc Speed Adj and FFS		
Lane Width		ft			
Rt-Side Lat. Clearance		ft	f_{LW}		mph
Number of Lanes, N	*5*		f_{LC}		mph
Total Ramp Density, TRD		ramps/mi	TRD Adjustment		mph
FFS (measured)	*70.0*	mph	FFS	*70.0*	mph
Base free-flow Speed, BFFS		mph			

LOS and Performance Measures			Design (N)	
Operational (LOS)			Design (N)	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1081*	pc/h/ln	Design LOS	
S	*70.0*	mph	v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
D = v_p / S	*15.4*	pc/mi/ln	S	mph
LOS	*B*		D = v_p / S	pc/mi/ln
			Required Number of Lanes, N	

Glossary		Factor Location	
N - Number of lanes	S - Speed	E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
V - Hourly volume	D - Density	E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
v_p - Flow rate	FFS - Free-flow speed	f_p - Page 11-18	TRD - Page 11-11
LOS - Level of service	BFFS - Base free-flow speed	LOS, S, FFS, v_p - Exhibits 11-2, 11-3	
DDHV - Directional design hour volume			

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Northbound
Agency or Company		Junction	WB PGA Off-Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	AM Peak	Analysis Year	2020

Project Description: Alt 3: I-95 NB Diverge at WB PGA Off-Ramp (N5 - N6)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 5	☐ Yes ☐ On
☑ No ☐ Off	Ramp Number of Lanes, N: 1	☑ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A:	L_{down} = ft
V_u = veh/h	Deceleration Lane Length L_D: 500	V_D = veh/h
	Freeway Volume, V_F: 4404	
	Ramp Volume, V_R: 764	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	$v = V/PHF \times f_{HV} \times f_p$
Freeway	4404	0.95	Level	4	0	0.980	1.00	4729
Ramp	764	0.92	Level	3	0	0.985	1.00	843
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.436 using Equation (Exhibit 13-7)

V_{12} = 2332 pc/h

V_3 or V_{av34} 962 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	4257	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	3414	Exhibit 13-8	9600	No
V_R	843	Exhibit 13-10	2000	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	2332	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 19.8 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination

D_s = 0.504 (Exhibit 13-12)

S_R = 55.9 mph (Exhibit 13-12)

S_0 = 76.8 mph (Exhibit 13-12)

S = 63.7 mph (Exhibit 13-13)

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Northbound
Agency or Company		Junction	WB PGA Off-Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	PM Peak	Analysis Year	2020

Project Description: Alt 3: I-95 NB Diverge at WB PGA Off-Ramp (N5 - N6)

Inputs

Upstream Adj Ramp		Freeway Number of Lanes, N	5	Downstream Adj Ramp	
☐ Yes	☐ On	Ramp Number of Lanes, N	1	☐ Yes	☐ On
☑ No	☐ Off	Acceleration Lane Length, L_A		☑ No	☐ Off
L_{up} =	ft	Deceleration Lane Length L_D	500	L_{down} =	ft
V_u =	veh/h	Freeway Volume, V_F	5035	V_D =	veh/h
		Ramp Volume, V_R	749		
		Freeway Free-Flow Speed, S_{FF}	70.0		
		Ramp Free-Flow Speed, S_{FR}	35.0		

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	5035	0.95	Level	4	0	0.980	1.00	5406
Ramp	749	0.92	Level	3	0	0.985	1.00	826
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.436 using Equation (Exhibit 13-7)

V_{12} = 2587 pc/h

V_3 or V_{av34} 1139 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	4866	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	4040	Exhibit 13-8	9600	No
V_R	826	Exhibit 13-10	2000	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	2587	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 22.0 (pc/mi/ln)

LOS = C (Exhibit 13-2)

Speed Determination

D_s = 0.502 (Exhibit 13-12)

S_R = 55.9 mph (Exhibit 13-12)

S_0 = 76.2 mph (Exhibit 13-12)

S = 63.9 mph (Exhibit 13-13)

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*AM Peak*

Site Information

Highway/Direction of Travel	*I-95 Northbound*
From/To	*WB PGA Off to EB PGA On*
Jurisdiction	*FDOT D4*
Analysis Year	*2020*

Project Description *Alt 3: I-95 NB WB PGA Off to EB PGA On (N6 - N7)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3640*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*782*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*11.2*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information		Site Information	
Analyst	*LRCB*	Highway/Direction of Travel	*I-95 Northbound*
Agency or Company		From/To	*WB PGA Off to EB PGA On*
Date Performed	*3/26/2015*	Jurisdiction	*FDOT D4*
Analysis Time Period	*PM Peak*	Analysis Year	*2020*

Project Description *Alt 3: I-95 NB WB PGA Off to EB PGA On (N6 - N7)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4286*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs			Calc Speed Adj and FFS		
Lane Width		ft			
Rt-Side Lat. Clearance		ft	f_{LW}		mph
Number of Lanes, N	*5*		f_{LC}		mph
Total Ramp Density, TRD		ramps/mi	TRD Adjustment		mph
FFS (measured)	*70.0*	mph	FFS	*70.0*	mph
Base free-flow Speed, BFFS		mph			

LOS and Performance Measures			Design (N)	
Operational (LOS)			Design (N)	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*920*	pc/h/ln	Design LOS	
S	*70.0*	mph	v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
D = v_p / S	*13.1*	pc/mi/ln	S	mph
LOS	*B*		D = v_p / S	pc/mi/ln
			Required Number of Lanes, N	

Glossary		Factor Location	
N - Number of lanes	S - Speed	E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
V - Hourly volume	D - Density	E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
v_p - Flow rate	FFS - Free-flow speed	f_p - Page 11-18	TRD - Page 11-11
LOS - Level of service	BFFS - Base free-flow speed	LOS, S, FFS, v_p - Exhibits 11-2, 11-3	
DDHV - Directional design hour volume			

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

FREEWAY WEAVING WORKSHEET

General Information

Analyst	LRCB
Agency/Company	
Date Performed	8/22/15
Analysis Time Period	AM

Site Information

Freeway/Dir of Travel	Northbound
Weaving Segment Location	PGA-On to Central-CD-Off
Analysis Year	2020

Project Description Alt 3: I-95 PGA Blvd - NB PGA-On to Central-CD-Off - N7 to N8

Inputs

Weaving configuration	One-Sided	Segment type	Freeway
Weaving number of lanes, N	6	Freeway minimum speed, S_{MIN}	15
Weaving segment length, L_S	2850ft	Freeway maximum capacity, C_{IFL}	2350
Freeway free-flow speed, FFS	70 mph	Terrain type	Level

Conversions to pc/h Under Base Conditions

	V (veh/h)	PHF	Truck (%)	RV (%)	E_T	E_R	f_{HV}	f_p	v (pc/h)
V_{FF}	2626	0.95	4	0	1.5	1.2	0.980	1.00	2819
V_{RF}	140	0.92	3	0	1.5	1.2	0.985	1.00	154
V_{FR}	1014	0.92	3	0	1.5	1.2	0.985	1.00	1119
V_{RR}	0	0.94	0	0	1.5	1.2	1.000	1.00	0
V_{NW}	2819							V =	4092
V_W	1273								
VR	0.311								

Configuration Characteristics

Minimum maneuver lanes, N_{WL}	3 lc	Minimum weaving lane changes, LC_{MIN}	154 lc/h
Interchange density, ID	0.8 int/mi	Weaving lane changes, LC_W	1289 lc/h
Minimum RF lane changes, LC_{RF}	1 lc/pc	Non-weaving lane changes, LC_{NW}	970 lc/h
Minimum FR lane changes, LC_{FR}	0 lc/pc	Total lane changes, LC_{ALL}	2259 lc/h
Minimum RR lane changes, LC_{RR}	lc/pc	Non-weaving vehicle index, I_{NW}	643

Weaving Segment Speed, Density, Level of Service, and Capacity

Weaving segment flow rate, v	4019 veh/h	Weaving intensity factor, W	0.188
Weaving segment capacity, c_w	11030 veh/h	Weaving segment speed, S	64.2 mph
Weaving segment v/c ratio	0.364	Average weaving speed, S_W	61.3 mph
Weaving segment density, D	10.6 pc/mi/ln	Average non-weaving speed, S_{NW}	65.6 mph
Level of Service, LOS	B	Maximum weaving length, L_{MAX}	4137 ft

Notes

a. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments".
b. For volumes that exceed the weaving segment capacity, the level of service is "F".

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

FREEWAY WEAVING WORKSHEET

General Information

Analyst	LRCB
Agency/Company	
Date Performed	8/22/15
Analysis Time Period	PM

Site Information

Freeway/Dir of Travel	Northbound
Weaving Segment Location	PGA-On to Central-CD-Off
Analysis Year	2020

Project Description Alt 3: I-95 PGA Blvd - NB PGA-On to Central-CD-Off - N7 to N8

Inputs

Weaving configuration	One-Sided	Segment type	Freeway
Weaving number of lanes, N	6	Freeway minimum speed, S_{MIN}	15
Weaving segment length, L_S	2850ft	Freeway maximum capacity, C_{IFL}	2350
Freeway free-flow speed, FFS	70 mph	Terrain type	Level

Conversions to pc/h Under Base Conditions

	V (veh/h)	PHF	Truck (%)	RV (%)	E_T	E_R	f_{HV}	f_p	v (pc/h)
V_{FF}	3186	0.95	4	0	1.5	1.2	0.980	1.00	3421
V_{RF}	667	0.92	3	0	1.5	1.2	0.985	1.00	736
V_{FR}	1100	0.92	3	0	1.5	1.2	0.985	1.00	1214
V_{RR}	0	0.94	0	0	1.5	1.2	1.000	1.00	0
V_{NW}	3421							V =	5371
V_W	1950								
VR	0.363								

Configuration Characteristics

Minimum maneuver lanes, N_{WL}	3 lc	Minimum weaving lane changes, LC_{MIN}	736 lc/h
Interchange density, ID	0.8 int/mi	Weaving lane changes, LC_W	1871 lc/h
Minimum RF lane changes, LC_{RF}	1 lc/pc	Non-weaving lane changes, LC_{NW}	1094 lc/h
Minimum FR lane changes, LC_{FR}	0 lc/pc	Total lane changes, LC_{ALL}	2965 lc/h
Minimum RR lane changes, LC_{RR}	lc/pc	Non-weaving vehicle index, I_{NW}	780

Weaving Segment Speed, Density, Level of Service, and Capacity

Weaving segment flow rate, v	5275 veh/h	Weaving intensity factor, W	0.233
Weaving segment capacity, c_w	9451 veh/h	Weaving segment speed, S	60.1 mph
Weaving segment v/c ratio	0.558	Average weaving speed, S_W	59.6 mph
Weaving segment density, D	14.9 pc/mi/ln	Average non-weaving speed, S_{NW}	60.4 mph
Level of Service, LOS	B	Maximum weaving length, L_{MAX}	4704 ft

Notes

a. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments".
b. For volumes that exceed the weaving segment capacity, the level of service is "F".

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*4/2/2015*
Analysis Time Period	*AM Peak*

Site Information

Highway/Direction of Travel	*I-95 Northbound*
From/To	*Central-CD_Off_to_MT-CD-On*
Jurisdiction	*FDOT D4*
Analysis Year	*2020*

Project Description *Alt 3: I-95 PGA Blvd - Bet Central-Off_to_MT-On N8 to N9*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*2766*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*594*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*8.5*	pc/mi/ln
LOS	*A*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information		Site Information	
Analyst	*LRCB*	Highway/Direction of Travel	*I-95 Northbound*
Agency or Company		From/To	*Central-CD_Off_to_MT-CD-On*
Date Performed	*4/2/2015*	Jurisdiction	*FDOT D4*
Analysis Time Period	*PM Peak*	Analysis Year	*2020*

Project Description *Alt 3: I-95 PGA Blvd - Bet Central-Off_to_MT-On N8 to N9*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3853*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*827*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*11.8*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Northbound
Agency or Company		Junction	at MT/CD On-Ramp
Date Performed	4/2/2015	Jurisdiction	FDOT D4
Analysis Time Period	AM	Analysis Year	2020

Project Description: Alt 3: I-95 NB Merge at MT On-Ramp (N9 - N10)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 5	☐ Yes ☐ On
☑ No ☐ Off	Ramp Number of Lanes, N: 1	☑ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A: 400	L_{down} = ft
V_u = veh/h	Deceleration Lane Length L_D:	V_D = veh/h
	Freeway Volume, V_F: 2766	
	Ramp Volume, V_R: 143	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 50.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	2766	0.95	Level	4	0	0.980	1.00	2970
Ramp	143	0.92	Level	3	0	0.985	1.00	158
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 0.287 using Equation (Exhibit 13-6)

V_{12} = 666 pc/h

V_3 or V_{av34} = 825 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes, V_{12a} = 926 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	2475	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	1084	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = 11.3 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination

M_S = 0.293 (Exibit 13-11)

S_R = 61.8 mph (Exhibit 13-11)

S_0 = 69.3 mph (Exhibit 13-11)

S = 65.8 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R = mph (Exhibit 13-12)

S_0 = mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	1082	Freeway/Dir of Travel	I-95 Northbound
Agency or Company		Junction	at MT/CD On-Ramp
Date Performed	4/2/2015	Jurisdiction	FDOT D4
Analysis Time Period	PM	Analysis Year	2020

Project Description: Alt 3: I-95 NB Merge at MT On-Ramp (N9 - N10)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 5	☐ Yes ☐ On
☑ No ☐ Off	Ramp Number of Lanes, N: 1	☑ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A: 400	L_{down} = ft
V_u = veh/h	Deceleration Lane Length L_D:	V_D = veh/h
	Freeway Volume, V_F: 3853	
	Ramp Volume, V_R: 893	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 50.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	3853	0.95	Level	4	0	0.980	1.00	4137
Ramp	893	0.92	Level	3	0	0.985	1.00	985
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 0.184 using Equation (Exhibit 13-6)

V_{12} = 593 pc/h

V_3 or V_{av34} = 1317 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes, V_{12a} = 1290 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	4212	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	2275	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = 20.3 (pc/mi/ln)

LOS = C (Exhibit 13-2)

Speed Determination

M_S = 0.319 (Exibit 13-11)

S_R = 61.1 mph (Exhibit 13-11)

S_0 = 68.3 mph (Exhibit 13-11)

S = 64.2 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R = mph (Exhibit 13-12)

S_0 = mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*4/2/2015*
Analysis Time Period	*AM Peak*

Site Information

Highway/Direction of Travel	*I-95 Northbound*
From/To	*Military_Tr_On_to_Central_On*
Jurisdiction	*FDOT D4*
Analysis Year	*2020*

Project Description *Alt 3: I-95 PGA Boulevard - Military_Tr_On_to_Central_On*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*2909*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*625*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*8.9*	pc/mi/ln
LOS	*A*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*4/2/2015*
Analysis Time Period	*PM Peak*

Site Information

Highway/Direction of Travel	*I-95 Northbound*
From/To	*Military_Tr_On_to_Central_On*
Jurisdiction	*FDOT D4*
Analysis Year	*2020*

Project Description *Alt 3: I-95 PGA Boulevard - Military_Tr_On_to_Central_On*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4746*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1019*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*14.6*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

FREEWAY WEAVING WORKSHEET

General Information

Analyst	LRCB
Agency/Company	
Date Performed	8/22/15
Analysis Time Period	AM

Site Information

Freeway/Dir of Travel	Nortbound
Weaving Segment Location	Central to DRoss
Analysis Year	2020

Project Description Alt 3: I-95 PGA Blvd - NB Central to DRoss - N11 to N12

Inputs

Weaving configuration	One-Sided	Segment type	Freeway
Weaving number of lanes, N	6	Freeway minimum speed, S_{MIN}	15
Weaving segment length, L_S	5000ft	Freeway maximum capacity, C_{IFL}	2350
Freeway free-flow speed, FFS	70 mph	Terrain type	Level

Conversions to pc/h Under Base Conditions

	V (veh/h)	PHF	Truck (%)	RV (%)	E_T	E_R	f_{HV}	f_p	v (pc/h)
V_{FF}	1983	0.95	4	0	1.5	1.2	0.980	1.00	2129
V_{RF}	310	0.92	3	0	1.5	1.2	0.985	1.00	342
V_{FR}	926	0.92	3	0	1.5	1.2	0.985	1.00	1022
V_{RR}	0	0.94	0	0	1.5	1.2	1.000	1.00	0
V_{NW}	2129							V =	3493
V_W	1364								
VR	0.390								

Configuration Characteristics

Minimum maneuver lanes, N_{WL}	3 lc	Minimum weaving lane changes, LC_{MIN}	342 lc/h
Interchange density, ID	0.8 int/mi	Weaving lane changes, LC_W	1882 lc/h
Minimum RF lane changes, LC_{RF}	1 lc/pc	Non-weaving lane changes, LC_{NW}	1993 lc/h
Minimum FR lane changes, LC_{FR}	0 lc/pc	Total lane changes, LC_{ALL}	3875 lc/h
Minimum RR lane changes, LC_{RR}	lc/pc	Non-weaving vehicle index, I_{NW}	852

Weaving Segment Speed, Density, Level of Service, and Capacity

Weaving segment flow rate, v	3431 veh/h	Weaving intensity factor, W	0.185
Weaving segment capacity, c_w	8787 veh/h	Weaving segment speed, S	63.4 mph
Weaving segment v/c ratio	0.390	Average weaving speed, S_W	61.4 mph
Weaving segment density, D	9.2 pc/mi/ln	Average non-weaving speed, S_{NW}	64.7 mph
Level of Service, LOS	A	Maximum weaving length, L_{MAX}	5009 ft

Notes

a. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments".
b. For volumes that exceed the weaving segment capacity, the level of service is "F".

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

FREEWAY WEAVING WORKSHEET

General Information

Analyst	LRCB
Agency/Company	
Date Performed	8/22/15
Analysis Time Period	PM

Site Information

Freeway/Dir of Travel	Nortbound
Weaving Segment Location	Central to DRoss
Analysis Year	2020

Project Description Alt 3: I-95 PGA Blvd - NB Central to DRoss - N11 to N12

Inputs

Weaving configuration	One-Sided	Segment type	Freeway
Weaving number of lanes, N	6	Freeway minimum speed, S_{MIN}	15
Weaving segment length, L_S	4500ft	Freeway maximum capacity, C_{IFL}	2350
Freeway free-flow speed, FFS	70 mph	Terrain type	Level

Conversions to pc/h Under Base Conditions

	V (veh/h)	PHF	Truck (%)	RV (%)	E_T	E_R	f_{HV}	f_p	v (pc/h)
V_{FF}	3367	0.95	4	0	1.5	1.2	0.980	1.00	3615
V_{RF}	347	0.92	3	0	1.5	1.2	0.985	1.00	383
V_{FR}	1379	0.92	3	0	1.5	1.2	0.985	1.00	1521
V_{RR}	0	0.94	0	0	1.5	1.2	1.000	1.00	0
V_{NW}	3615							V =	5519
V_W	1904								
VR	0.345								

Configuration Characteristics

Minimum maneuver lanes, N_{WL}	3 lc	Minimum weaving lane changes, LC_{MIN}	383 lc/h
Interchange density, ID	0.8 int/mi	Weaving lane changes, LC_W	1839 lc/h
Minimum RF lane changes, LC_{RF}	1 lc/pc	Non-weaving lane changes, LC_{NW}	2029 lc/h
Minimum FR lane changes, LC_{FR}	0 lc/pc	Total lane changes, LC_{ALL}	3868 lc/h
Minimum RR lane changes, LC_{RR}	lc/pc	Non-weaving vehicle index, I_{NW}	1301

Weaving Segment Speed, Density, Level of Service, and Capacity

Weaving segment flow rate, v	5421 veh/h	Weaving intensity factor, W	0.201
Weaving segment capacity, c_w	9946 veh/h	Weaving segment speed, S	62.1 mph
Weaving segment v/c ratio	0.545	Average weaving speed, S_W	60.8 mph
Weaving segment density, D	14.8 pc/mi/ln	Average non-weaving speed, S_{NW}	62.8 mph
Level of Service, LOS	B	Maximum weaving length, L_{MAX}	4506 ft

Notes

a. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments".
b. For volumes that exceed the weaving segment capacity, the level of service is "F".

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

FREEWAY WEAVING WORKSHEET

General Information

Analyst	LRCB
Agency/Company	
Date Performed	8/22/15
Analysis Time Period	AM

Site Information

Freeway/Dir of Travel	Southbound
Weaving Segment Location	DRoss to Central
Analysis Year	2020

Project Description Alt 3: I-95 PGA Boulevard - SB DRoss to Central - S1-S2

Inputs

Weaving configuration	One-Sided	Segment type	Freeway
Weaving number of lanes, N	6	Freeway minimum speed, S_{MIN}	15
Weaving segment length, L_S	4084ft	Freeway maximum capacity, C_{IFL}	2350
Freeway free-flow speed, FFS	70 mph	Terrain type	Level

Conversions to pc/h Under Base Conditions

	V (veh/h)	PHF	Truck (%)	RV (%)	E_T	E_R	f_{HV}	f_p	v (pc/h)
V_{FF}	3530	0.95	4	0	1.5	1.2	0.980	1.00	3790
V_{RF}	1317	0.92	3	0	1.5	1.2	0.985	1.00	1453
V_{FR}	199	0.92	3	0	1.5	1.2	0.985	1.00	220
V_{RR}	0	0.94	0	0	1.5	1.2	1.000	1.00	0
V_{NW}	3790							V =	5463
V_W	1673								
VR	0.306								

Configuration Characteristics

Minimum maneuver lanes, N_{WL}	3 lc	Minimum weaving lane changes, LC_{MIN}	220 lc/h
Interchange density, ID	0.8 int/mi	Weaving lane changes, LC_W	1602 lc/h
Minimum RF lane changes, LC_{RF}	0 lc/pc	Non-weaving lane changes, LC_{NW}	1839 lc/h
Minimum FR lane changes, LC_{FR}	1 lc/pc	Total lane changes, LC_{ALL}	3441 lc/h
Minimum RR lane changes, LC_{RR}	lc/pc	Non-weaving vehicle index, I_{NW}	1238

Weaving Segment Speed, Density, Level of Service, and Capacity

Weaving segment flow rate, v	5364 veh/h	Weaving intensity factor, W	0.197
Weaving segment capacity, c_w	11205 veh/h	Weaving segment speed, S	63.1 mph
Weaving segment v/c ratio	0.479	Average weaving speed, S_W	60.9 mph
Weaving segment density, D	14.4 pc/mi/ln	Average non-weaving speed, S_{NW}	64.0 mph
Level of Service, LOS	B	Maximum weaving length, L_{MAX}	4085 ft

Notes

a. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments".
b. For volumes that exceed the weaving segment capacity, the level of service is "F".

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

FREEWAY WEAVING WORKSHEET

General Information

Analyst	LRCB
Agency/Company	
Date Performed	8/22/15
Analysis Time Period	PM

Site Information

Freeway/Dir of Travel	Southbound
Weaving Segment Location	DRoss to Central
Analysis Year	2020

Project Description Alt 3: I-95 PGA Boulevard - SB DRoss to Central - S1-S2

Inputs

Weaving configuration	One-Sided	Segment type	Freeway
Weaving number of lanes, N	6	Freeway minimum speed, S_{MIN}	15
Weaving segment length, L_S	4899ft	Freeway maximum capacity, C_{IFL}	2350
Freeway free-flow speed, FFS	70 mph	Terrain type	Level

Conversions to pc/h Under Base Conditions

	V (veh/h)	PHF	Truck (%)	RV (%)	E_T	E_R	f_{HV}	f_p	v (pc/h)
V_{FF}	2215	0.95	4	0	1.5	1.2	0.980	1.00	2378
V_{RF}	908	0.92	3	0	1.5	1.2	0.985	1.00	1002
V_{FR}	417	0.92	3	0	1.5	1.2	0.985	1.00	460
V_{RR}	0	0.94	0	0	1.5	1.2	1.000	1.00	0
V_{NW}	2378							V =	3840
V_W	1462								
VR	0.381								

Configuration Characteristics

Minimum maneuver lanes, N_{WL}	3 lc	Minimum weaving lane changes, LC_{MIN}	460 lc/h
Interchange density, ID	0.8 int/mi	Weaving lane changes, LC_W	1984 lc/h
Minimum RF lane changes, LC_{RF}	0 lc/pc	Non-weaving lane changes, LC_{NW}	1990 lc/h
Minimum FR lane changes, LC_{FR}	1 lc/pc	Total lane changes, LC_{ALL}	3974 lc/h
Minimum RR lane changes, LC_{RR}	lc/pc	Non-weaving vehicle index, I_{NW}	932

Weaving Segment Speed, Density, Level of Service, and Capacity

Weaving segment flow rate, v	3772 veh/h	Weaving intensity factor, W	0.192
Weaving segment capacity, c_w	9013 veh/h	Weaving segment speed, S	62.7 mph
Weaving segment v/c ratio	0.418	Average weaving speed, S_W	61.2 mph
Weaving segment density, D	10.2 pc/mi/ln	Average non-weaving speed, S_{NW}	63.6 mph
Level of Service, LOS	B	Maximum weaving length, L_{MAX}	4900 ft

Notes

a. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments".
b. For volumes that exceed the weaving segment capacity, the level of service is "F".

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*AM Peak*

Site Information

Highway/Direction of Travel	*I-95 Southbound*
From/To	*Central-Off to MT_CD*
Jurisdiction	*FDOT D4*
Analysis Year	*2020*

Project Description *Alt 3: I-95 PGA Boulevard - SB Central-Off to MT S2 to S3*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4847*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1041*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*14.9*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*PM Peak*

Site Information

Highway/Direction of Travel	*I-95 Southbound*
From/To	*Central-Off to MT_CD*
Jurisdiction	*FDOT D4*
Analysis Year	*2020*

Project Description *Alt 3: I-95 PGA Boulevard - SB Central-Off to MT S2 to S3*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3123*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*671*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*9.6*	pc/mi/ln
LOS	*A*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Southbound
Agency or Company		Junction	PGA Off Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	AM Peak	Analysis Year	2020

Project Description: Alt 3: I-95 PGA Boulevard - Military Rd-Off S3 to S4

Inputs

Upstream Adj Ramp		Freeway Number of Lanes, N	5	Downstream Adj Ramp	
☐ Yes	☐ On	Ramp Number of Lanes, N	1	☐ Yes	☐ On
☑ No	☐ Off	Acceleration Lane Length, L_A		☑ No	☐ Off
L_{up} =	ft	Deceleration Lane Length L_D	500	L_{down} =	ft
V_u =	veh/h	Freeway Volume, V_F	4847	V_D =	veh/h
		Ramp Volume, V_R	768		
		Freeway Free-Flow Speed, S_{FF}	70.0		
		Ramp Free-Flow Speed, S_{FR}	50.0		

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	4847	0.95	Level	4	0	0.980	1.00	5204
Ramp	768	0.92	Level	3	0	0.985	1.00	847
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.436 using Equation (Exhibit 13-7)

V_{12} = 2520 pc/h

V_3 or V_{av34} 1082 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	4684	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	3837	Exhibit 13-8	9600	No
V_R	847	Exhibit 13-10	2100	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	2520	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 21.4 (pc/mi/ln)

LOS = C (Exhibit 13-2)

Speed Determination

D_s = 0.309 (Exhibit 13-12)

S_R = 61.3 mph (Exhibit 13-12)

S_0 = 76.5 mph (Exhibit 13-12)

S = 67.5 mph (Exhibit 13-13)

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Southbound
Agency or Company		Junction	PGA Off Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	PM Peak	Analysis Year	2020

Project Description: Alt 3: I-95 PGA Boulevard - Military Rd-Off S3 to S4

Inputs

Upstream Adj Ramp		Freeway Number of Lanes, N	5	Downstream Adj Ramp	
☐ Yes	☐ On	Ramp Number of Lanes, N	1	☐ Yes	☐ On
☑ No	☐ Off	Acceleration Lane Length, L_A		☑ No	☐ Off
L_{up} =	ft	Deceleration Lane Length L_D	500	L_{down} =	ft
V_u =	veh/h	Freeway Volume, V_F	3123	V_D =	veh/h
		Ramp Volume, V_R	255		
		Freeway Free-Flow Speed, S_{FF}	70.0		
		Ramp Free-Flow Speed, S_{FR}	50.0		

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	3123	0.95	Level	4	0	0.980	1.00	3353
Ramp	255	0.92	Level	3	0	0.985	1.00	281
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.436 using Equation (Exhibit 13-7)

V_{12} = 1620 pc/h

V_3 or V_{av34} 866 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	3353	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	3072	Exhibit 13-8	9600	No
V_R	281	Exhibit 13-10	2100	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	1620	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 13.7 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination

D_s = 0.258 (Exhibit 13-12)

S_R = 62.8 mph (Exhibit 13-12)

S_0 = 76.8 mph (Exhibit 13-12)

S = 69.3 mph (Exhibit 13-13)

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*AM Peak*

Site Information

Highway/Direction of Travel	*I-95 Southbound*
From/To	*MT-CD_Off to Central-CD-On*
Jurisdiction	*FDOT D4*
Analysis Year	*2020*

Project Description *Alt 3: I-95 PGA Blvd - Bet SB MT_Off to Central On S4 to S5*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4079*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*876*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*12.5*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*PM Peak*

Site Information

Highway/Direction of Travel	*I-95 Southbound*
From/To	*MT-CD_Off to Central-CD-On*
Jurisdiction	*FDOT D4*
Analysis Year	*2020*

Project Description *Alt 3: I-95 PGA Blvd - Bet SB MT_Off to Central On S4 to S5*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*2868*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*616*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*8.8*	pc/mi/ln
LOS	*A*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

FREEWAY WEAVING WORKSHEET

General Information

Analyst	LRCB
Agency/Company	
Date Performed	8/22/15
Analysis Time Period	AM

Site Information

Freeway/Dir of Travel	Southbound
Weaving Segment Location	Central-CD_to_PGA Off Ramp
Analysis Year	2020

Project Description Alt 3: I-95 PGA Blvd - Central-CD_to_PGA Off Ramp - S5-S6

Inputs

Weaving configuration	One-Sided	Segment type	Freeway
Weaving number of lanes, N	6	Freeway minimum speed, S_{MIN}	15
Weaving segment length, L_S	2800ft	Freeway maximum capacity, C_{IFL}	2350
Freeway free-flow speed, FFS	70 mph	Terrain type	Level

Conversions to pc/h Under Base Conditions

	V (veh/h)	PHF	Truck (%)	RV (%)	E_T	E_R	f_{HV}	f_p	v (pc/h)
V_{FF}	3205	0.95	4	0	1.5	1.2	0.980	1.00	3441
V_{RF}	1115	0.92	3	0	1.5	1.2	0.985	1.00	1230
V_{FR}	874	0.92	3	0	1.5	1.2	0.985	1.00	964
V_{RR}	0	0.94	0	0	1.5	1.2	1.000	1.00	0
V_{NW}	3441							V =	5635
V_W	2194								
VR	0.389								

Configuration Characteristics

Minimum maneuver lanes, N_{WL}	3 lc	Minimum weaving lane changes, LC_{MIN}	0 lc/h
Interchange density, ID	0.8 int/mi	Weaving lane changes, LC_W	1123 lc/h
Minimum RF lane changes, LC_{RF}	0 lc/pc	Non-weaving lane changes, LC_{NW}	1071 lc/h
Minimum FR lane changes, LC_{FR}	0 lc/pc	Total lane changes, LC_{ALL}	2194 lc/h
Minimum RR lane changes, LC_{RR}	lc/pc	Non-weaving vehicle index, I_{NW}	771

Weaving Segment Speed, Density, Level of Service, and Capacity

Weaving segment flow rate, v	5536 veh/h	Weaving intensity factor, W	0.186
Weaving segment capacity, c_w	8813 veh/h	Weaving segment speed, S	63.8 mph
Weaving segment v/c ratio	0.628	Average weaving speed, S_W	61.4 mph
Weaving segment density, D	14.7 pc/mi/ln	Average non-weaving speed, S_{NW}	65.5 mph
Level of Service, LOS	B	Maximum weaving length, L_{MAX}	4996 ft

Notes

a. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments".
b. For volumes that exceed the weaving segment capacity, the level of service is "F".

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

FREEWAY WEAVING WORKSHEET

General Information

Analyst	LRCB
Agency/Company	
Date Performed	8/22/15
Analysis Time Period	PM

Site Information

Freeway/Dir of Travel	Southbound
Weaving Segment Location	Central-CD_to_PGA Off Ramp
Analysis Year	2020

Project Description Alt 3: I-95 PGA Blvd - Central-CD_to_PGA Off Ramp - S5-S6

Inputs

Weaving configuration	One-Sided	Segment type	Freeway
Weaving number of lanes, N	6	Freeway minimum speed, S_{MIN}	15
Weaving segment length, L_S	2800ft	Freeway maximum capacity, C_{IFL}	2350
Freeway free-flow speed, FFS	70 mph	Terrain type	Level

Conversions to pc/h Under Base Conditions

	V (veh/h)	PHF	Truck (%)	RV (%)	E_T	E_R	f_{HV}	f_p	v (pc/h)
V_{FF}	2641	0.95	4	0	1.5	1.2	0.980	1.00	2836
V_{RF}	1006	0.92	3	0	1.5	1.2	0.985	1.00	1110
V_{FR}	227	0.92	3	0	1.5	1.2	0.985	1.00	250
V_{RR}	0	0.94	0	0	1.5	1.2	1.000	1.00	0
V_{NW}	2836							V =	4196
V_W	1360								
VR	0.324								

Configuration Characteristics

Minimum maneuver lanes, N_{WL}	3 lc	Minimum weaving lane changes, LC_{MIN}	0 lc/h
Interchange density, ID	0.8 int/mi	Weaving lane changes, LC_W	1123 lc/h
Minimum RF lane changes, LC_{RF}	0 lc/pc	Non-weaving lane changes, LC_{NW}	946 lc/h
Minimum FR lane changes, LC_{FR}	0 lc/pc	Total lane changes, LC_{ALL}	2069 lc/h
Minimum RR lane changes, LC_{RR}	lc/pc	Non-weaving vehicle index, I_{NW}	635

Weaving Segment Speed, Density, Level of Service, and Capacity

Weaving segment flow rate, v	4121 veh/h	Weaving intensity factor, W	0.178
Weaving segment capacity, c_w	10587 veh/h	Weaving segment speed, S	65.0 mph
Weaving segment v/c ratio	0.389	Average weaving speed, S_W	61.7 mph
Weaving segment density, D	10.8 pc/mi/ln	Average non-weaving speed, S_{NW}	66.6 mph
Level of Service, LOS	B	Maximum weaving length, L_{MAX}	4278 ft

Notes

a. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments".
b. For volumes that exceed the weaving segment capacity, the level of service is "F".

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*AM Peak*

Site Information

Highway/Direction of Travel	*I-95 Southbound*
From/To	*PGA-Off to WB_PGA On*
Jurisdiction	*FDOT D4*
Analysis Year	*2020*

Project Description *Alt 3: I-95 SB Basic PGA-Off to WB PGA-On (S6 - S7)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4320*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*928*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*13.3*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 10-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*PM Peak*

Site Information

Highway/Direction of Travel	*I-95 Southbound*
From/To	*PGA-Off to WB_PGA On*
Jurisdiction	*FDOT D4*
Analysis Year	*2020*

Project Description *Alt 3: I-95 SB Basic PGA-Off to WB PGA-On (S6 - S7)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3646*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*783*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*11.2*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 10-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Southbound
Agency or Company		Junction	WB PGA SB On Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	AM	Analysis Year	2020

Project Description: Alt 3: I-95 SB Merge at WB PGA On-Ramp (S7 - S8)

Inputs

Upstream Adj Ramp		Freeway Number of Lanes, N	5	Downstream Adj Ramp	
☐ Yes	☐ On	Ramp Number of Lanes, N	1	☐ Yes	☐ On
☑ No	☐ Off	Acceleration Lane Length, L_A	400	☑ No	☐ Off
L_{up} =	ft	Deceleration Lane Length L_D		L_{down} =	ft
V_u =	veh/h	Freeway Volume, V_F	4320	V_D =	veh/h
		Ramp Volume, V_R	1148		
		Freeway Free-Flow Speed, S_{FF}	70.0		
		Ramp Free-Flow Speed, S_{FR}	40.0		

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	4320	0.95	Level	4	0	0.980	1.00	4638
Ramp	1148	0.92	Level	3	0	0.985	1.00	1267
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 0.059 using Equation (Exhibit 13-6)

V_{12} = 215 pc/h

V_3 or V_{av34} = 1701 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes, V_{12a} = 1447 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	4885	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	2714	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = 23.6 (pc/mi/ln)

LOS = C (Exhibit 13-2)

Speed Determination

M_S = 0.348 (Exibit 13-11)

S_R = 60.3 mph (Exhibit 13-11)

S_0 = 67.9 mph (Exhibit 13-11)

S = 63.4 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R = mph (Exhibit 13-12)

S_0 = mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Southbound
Agency or Company		Junction	WB PGA SB On Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	PM	Analysis Year	2020

Project Description: Alt 3: I-95 SB Merge at WB PGA On-Ramp (S7 - S8)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 5	☐ Yes ☐ On
☑ No ☐ Off	Ramp Number of Lanes, N: 1	☑ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A: 400	L_{down} = ft
V_u = veh/h	Deceleration Lane Length L_D:	V_D = veh/h
	Freeway Volume, V_F: 3646	
	Ramp Volume, V_R: 2094	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 40.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	3646	0.95	Level	4	0	0.980	1.00	3915
Ramp	2094	0.92	Level	3	0	0.985	1.00	2310
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = -0.071 using Equation (Exhibit 13-6)

V_{12} = -216 pc/h

V_3 or V_{av34} = 1635 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes, V_{12a} = 1221 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	5364	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	3531	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = 29.4 (pc/mi/ln)

LOS = D (Exhibit 13-2)

Speed Determination

M_S = 0.422 (Exibit 13-11)

S_R = 58.2 mph (Exhibit 13-11)

S_0 = 68.5 mph (Exhibit 13-11)

S = 61.3 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R = mph (Exhibit 13-12)

S_0 = mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*AM Peak*

Site Information

Highway/Direction of Travel	*I-95 Southbound*
From/To	*WB PGA On to EB PGA On*
Jurisdiction	*FDOT D4*
Analysis Year	*2020*

Project Description *Alt 3: I-95 SB Basic WB PGA On to EB PGA On (S8 - S9)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*5468*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1174*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*16.8*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*PM Peak*

Site Information

Highway/Direction of Travel	*I-95 Southbound*
From/To	*WB PGA On to EB PGA On*
Jurisdiction	*FDOT D4*
Analysis Year	*2020*

Project Description *Alt 3: I-95 SB Basic WB PGA On to EB PGA On (S8 - S9)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*5740*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1233*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*17.6*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Southbound
Agency or Company		Junction	EB PGA SB On Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	AM	Analysis Year	2020

Project Description: Alt 3: I-95 SB Merge at WB PGA On-Ramp (S9 - S10)

Inputs

Upstream Adj Ramp		Freeway Number of Lanes, N	5	Downstream Adj Ramp	
☐ Yes	☐ On	Ramp Number of Lanes, N	1	☐ Yes	☐ On
☑ No	☐ Off	Acceleration Lane Length, L_A	400	☑ No	☐ Off
L_{up} =	ft	Deceleration Lane Length L_D		L_{down} =	ft
V_u =	veh/h	Freeway Volume, V_F	5468	V_D =	veh/h
		Ramp Volume, V_R	1193		
		Freeway Free-Flow Speed, S_{FF}	70.0		
		Ramp Free-Flow Speed, S_{FR}	50.0		

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	5468	0.95	Level	4	0	0.980	1.00	5871
Ramp	1193	0.92	Level	3	0	0.985	1.00	1316
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 0.053 using Equation (Exhibit 13-6)

V_{12} = 238 pc/h

V_3 or V_{av34} = 2112 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes, V_{12a} = 1784 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	5778	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	3100	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = 26.5 (pc/mi/ln)

LOS = C (Exhibit 13-2)

Speed Determination

M_S = 0.368 (Exibit 13-11)

S_R = 59.7 mph (Exhibit 13-11)

S_0 = 67.0 mph (Exhibit 13-11)

S = 62.9 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R = mph (Exhibit 13-12)

S_0 = mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Southbound
Agency or Company		Junction	EB PGA SB On Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	PM	Analysis Year	2020

Project Description: Alt 3: I-95 SB Merge at WB PGA On-Ramp (S9 - S10)

Inputs

Upstream Adj Ramp		Freeway Number of Lanes, N	5	Downstream Adj Ramp	
☐ Yes	☐ On	Ramp Number of Lanes, N	1	☐ Yes	☐ On
☑ No	☐ Off	Acceleration Lane Length, L_A	400	☑ No	☐ Off
L_{up} =	ft	Deceleration Lane Length L_D		L_{down} =	ft
V_u =	veh/h	Freeway Volume, V_F	5740	V_D =	veh/h
		Ramp Volume, V_R	1400		
		Freeway Free-Flow Speed, S_{FF}	70.0		
		Ramp Free-Flow Speed, S_{FR}	50.0		

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	5740	0.95	Level	4	0	0.980	1.00	6163
Ramp	1400	0.92	Level	3	0	0.985	1.00	1545
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 0.025 using Equation (Exhibit 13-6)

V_{12} = 116 pc/h

V_3 or V_{av34} = 2284 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes, V_{12a} = 1873 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	6229	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	3418	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = 28.9 (pc/mi/ln)

LOS = D (Exhibit 13-2)

Speed Determination

M_S = 0.400 (Exibit 13-11)

S_R = 58.8 mph (Exhibit 13-11)

S_0 = 66.7 mph (Exhibit 13-11)

S = 62.1 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R = mph (Exhibit 13-12)

S_0 = mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*AM Peak*

Site Information

Highway/Direction of Travel	*I-95 Southbound*
From/To	*EB PGA On to NLake Off*
Jurisdiction	*FDOT D4*
Analysis Year	*2020*

Project Description *Alt 3: I-95 SB - EB-PGA_On_to_NLake_SB_Off (S10 - S11)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*6661*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1430*	pc/h/ln
S	*69.4*	mph
D = v_p / S	*20.6*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*PM Peak*

Site Information

Highway/Direction of Travel	*I-95 Southbound*
From/To	*EB PGA On to NLake Off*
Jurisdiction	*FDOT D4*
Analysis Year	*2020*

Project Description *Alt 3: I-95 SB - EB-PGA_On_to_NLake_SB_Off (S10 - S11)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*7140*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1533*	pc/h/ln
S	*68.7*	mph
D = v_p / S	*22.3*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Southbound
Agency or Company		Junction	Nlake Off Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	AM Peak	Analysis Year	2020

Project Description: Alt 3: I-95 SB Diverge at Nlake Off-Ramp (S11 - S12)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 5	☐ Yes ☐ On
☑ No ☐ Off	Ramp Number of Lanes, N: 2	☑ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A:	L_{down} = ft
V_u = veh/h	Deceleration Lane Length L_D: 500	V_D = veh/h
	Freeway Volume, V_F: 6661	
	Ramp Volume, V_R: 1088	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 50.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	6661	0.95	Level	4	0	0.980	1.00	7152
Ramp	1088	0.92	Level	3	0	0.985	1.00	1200
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.260 using Equation (Exhibit 13-7)

V_{12} = 2376 pc/h

V_3 or V_{av34} 1673 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	5722	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	4522	Exhibit 13-8	9600	No
V_R	1200	Exhibit 13-10	4200	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	2376	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 11.2 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination

D_s = 0.341 (Exhibit 13-12)

S_R = 60.5 mph (Exhibit 13-12)

S_0 = 74.2 mph (Exhibit 13-12)

S = 67.8 mph (Exhibit 13-13)

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Southbound
Agency or Company		Junction	Nlake Off Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	PM Peak	Analysis Year	2020

Project Description: Alt 3: I-95 SB Diverge at Nlake Off-Ramp (S11 - S12)

Inputs

Upstream Adj Ramp		Freeway Number of Lanes, N	5	Downstream Adj Ramp	
☐ Yes	☐ On	Ramp Number of Lanes, N	2	☐ Yes	☐ On
☑ No	☐ Off	Acceleration Lane Length, L_A		☑ No	☐ Off
L_{up} =	ft	Deceleration Lane Length L_D	500	L_{down} =	ft
V_u =	veh/h	Freeway Volume, V_F	7140	V_D =	veh/h
		Ramp Volume, V_R	1208		
		Freeway Free-Flow Speed, S_{FF}	70.0		
		Ramp Free-Flow Speed, S_{FR}	50.0		

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	7140	0.95	Level	4	0	0.980	1.00	7666
Ramp	1208	0.92	Level	3	0	0.985	1.00	1333
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.260 using Equation (Exhibit 13-7)

V_{12} = 2581 pc/h

V_3 or V_{av34} 1776 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	6133	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	4800	Exhibit 13-8	9600	No
V_R	1333	Exhibit 13-10	4200	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	2581	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 12.9 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination

D_s = 0.353 (Exhibit 13-12)

S_R = 60.1 mph (Exhibit 13-12)

S_0 = 73.8 mph (Exhibit 13-12)

S = 67.3 mph (Exhibit 13-13)

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Northbound
Agency or Company		Junction	NLake NB On Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	AM	Analysis Year	2030

Project Description: Alt 3: I-95 NB Merge at Nlake On-Ramp (N1 - N2)

Inputs

Upstream Adj Ramp		Freeway/Ramp		Downstream Adj Ramp	
☐ Yes	☐ On	Freeway Number of Lanes, N	5	☐ Yes	☐ On
☑ No	☐ Off	Ramp Number of Lanes, N	1	☑ No	☐ Off
L_{up} =	ft	Acceleration Lane Length, L_A	400	L_{down} =	ft
V_u =	veh/h	Deceleration Lane Length L_D		V_D =	veh/h
		Freeway Volume, V_F	5917		
		Ramp Volume, V_R	1407		
		Freeway Free-Flow Speed, S_{FF}	70.0		
		Ramp Free-Flow Speed, S_{FR}	50.0		

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	5917	0.95	Level	4	0	0.980	1.00	6353
Ramp	1407	0.92	Level	3	0	0.985	1.00	1552
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 0.024 using Equation (Exhibit 13-6)

V_{12} = 115 pc/h

V_3 or V_{av34} = 2357 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes, V_{12a} = 1931 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	6381	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	3483	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = 29.4 (pc/mi/ln)

LOS = D (Exhibit 13-2)

Speed Determination

M_S = 0.408 (Exibit 13-11)

S_R = 58.6 mph (Exhibit 13-11)

S_0 = 66.6 mph (Exhibit 13-11)

S = 62.0 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R = mph (Exhibit 13-12)

S_0 = mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Northbound
Agency or Company		Junction	NLake NB On Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	PM	Analysis Year	2030

Project Description: Alt 3: I-95 NB Merge at Nlake On-Ramp (N1 - N2)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 5	☐ Yes ☐ On
☑ No ☐ Off	Ramp Number of Lanes, N: 1	☑ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A: 400	L_{down} = ft
V_u = veh/h	Deceleration Lane Length L_D:	V_D = veh/h
	Freeway Volume, V_F: 5263	
	Ramp Volume, V_R: 1548	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 50.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	5263	0.95	Level	4	0	0.980	1.00	5651
Ramp	1548	0.92	Level	3	0	0.985	1.00	1708
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 0.004 using Equation (Exhibit 13-6)

V_{12} = 18 pc/h

V_3 or V_{av34} = 2138 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes, V_{12a} = 1718 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	6003	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	3426	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = 28.9 (pc/mi/ln)

LOS = D (Exhibit 13-2)

Speed Determination

M_S = 0.401 (Exibit 13-11)

S_R = 58.8 mph (Exhibit 13-11)

S_0 = 67.2 mph (Exhibit 13-11)

S = 62.1 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R = mph (Exhibit 13-12)

S_0 = mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*AM Peak*

Site Information

Highway/Direction of Travel	*I-95 Northbound*
From/To	*NLake On-Rmp to PGA Off-Rmp*
Jurisdiction	*FDOT D4*
Analysis Year	*2030*

Project Description *Alt 3: I-95 NB Basic Nlake-On to PGA-Off (N2 - N3)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*7324*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1573*	pc/h/ln
S	*68.4*	mph
D = v_p / S	*23.0*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*PM Peak*

Site Information

Highway/Direction of Travel	*I-95 Northbound*
From/To	*NLake On-Rmp to PGA Off-Rmp*
Jurisdiction	*FDOT D4*
Analysis Year	*2030*

Project Description *Alt 3: I-95 NB Basic Nlake-On to PGA-Off (N2 - N3)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*6811*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1463*	pc/h/ln
S	*69.2*	mph
D = v_p / S	*21.1*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Northbound
Agency or Company		Junction	EB PGA Off-Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	AM Peak	Analysis Year	2030

Project Description: Alt 3: I-95 NB Diverge at EB PGA Off-Ramp (N3 - N4)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 5	☐ Yes ☐ On
☑ No ☐ Off	Ramp Number of Lanes, N: 2	☑ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A:	L_{down} = ft
V_u = veh/h	Deceleration Lane Length L_D: 500	V_D = veh/h
	Freeway Volume, V_F: 7324	
	Ramp Volume, V_R: 2400	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 55.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	7324	0.95	Level	4	0	0.980	1.00	7864
Ramp	2400	0.92	Level	3	0	0.985	1.00	2648
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.260 using Equation (Exhibit 13-7)

V_{12} = 3595 pc/h

V_3 or V_{av34} 1348 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	6292	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	3644	Exhibit 13-8	9600	No
V_R	2648	Exhibit 13-10	4400	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	3595	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 21.7 (pc/mi/ln)

LOS = C (Exhibit 13-2)

Speed Determination

D_s = 0.406 (Exhibit 13-12)

S_R = 58.6 mph (Exhibit 13-12)

S_0 = 75.4 mph (Exhibit 13-12)

S = 64.8 mph (Exhibit 13-13)

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Northbound
Agency or Company		Junction	EB PGA Off-Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	PM Peak	Analysis Year	2030

Project Description: Alt 3: I-95 NB Diverge at EB PGA Off-Ramp (N3 - N4)

Inputs

Upstream Adj Ramp		Freeway Number of Lanes, N	5	Downstream Adj Ramp	
☐ Yes	☐ On	Ramp Number of Lanes, N	2	☐ Yes	☐ On
☑ No	☐ Off	Acceleration Lane Length, L_A		☑ No	☐ Off
L_{up} =	ft	Deceleration Lane Length L_D	500	L_{down} =	ft
V_u =	veh/h	Freeway Volume, V_F	6811	V_D =	veh/h
		Ramp Volume, V_R	1216		
		Freeway Free-Flow Speed, S_{FF}	70.0		
		Ramp Free-Flow Speed, S_{FR}	55.0		

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	6811	0.95	Level	4	0	0.980	1.00	7313
Ramp	1216	0.92	Level	3	0	0.985	1.00	1342
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.260 using Equation (Exhibit 13-7)

V_{12} = 2514 pc/h

V_3 or V_{av34} 1668 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	5851	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	4509	Exhibit 13-8	9600	No
V_R	1342	Exhibit 13-10	4400	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	2514	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 12.4 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination

D_s = 0.289 (Exhibit 13-12)

S_R = 61.9 mph (Exhibit 13-12)

S_0 = 74.2 mph (Exhibit 13-12)

S = 68.4 mph (Exhibit 13-13)

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information		Site Information	
Analyst	*LRCB*	Highway/Direction of Travel	*I-95 Northbound*
Agency or Company		From/To	*PGA EB Off to PGA WB Off*
Date Performed	*3/26/2015*	Jurisdiction	*FDOT D4*
Analysis Time Period	*AM Peak*	Analysis Year	*2030*

Project Description *Alt 3: I-95 NB Basic EB PGA Off to WB PGA (N4 - N5)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4924*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs			Calc Speed Adj and FFS		
Lane Width		ft			
Rt-Side Lat. Clearance		ft	f_{LW}		mph
Number of Lanes, N	*5*		f_{LC}		mph
Total Ramp Density, TRD		ramps/mi	TRD Adjustment		mph
FFS (measured)	*70.0*	mph	FFS	*70.0*	mph
Base free-flow Speed, BFFS		mph			

LOS and Performance Measures			Design (N)	
Operational (LOS)			Design (N)	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1057*	pc/h/ln	Design LOS	
S	*70.0*	mph	v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
D = v_p / S	*15.1*	pc/mi/ln	S	mph
LOS	*B*		D = v_p / S	pc/mi/ln
			Required Number of Lanes, N	

Glossary		Factor Location	
N - Number of lanes	S - Speed	E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
V - Hourly volume	D - Density	E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
v_p - Flow rate	FFS - Free-flow speed	f_p - Page 11-18	TRD - Page 11-11
LOS - Level of service	BFFS - Base free-flow speed	LOS, S, FFS, v_p - Exhibits 11-2, 11-3	
DDHV - Directional design hour volume			

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information		Site Information	
Analyst	*LRCB*	Highway/Direction of Travel	*I-95 Northbound*
Agency or Company		From/To	*PGA EB Off to PGA WB Off*
Date Performed	*3/26/2015*	Jurisdiction	*FDOT D4*
Analysis Time Period	*PM Peak*	Analysis Year	*2030*

Project Description *Alt 3: I-95 NB Basic EB PGA Off to WB PGA (N4 - N5)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*5595*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1201*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*17.2*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Northbound
Agency or Company		Junction	WB PGA Off-Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	AM Peak	Analysis Year	2030

Project Description: Alt 3: I-95 NB Diverge at WB PGA Off-Ramp (N5 - N6)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 5	☐ Yes ☐ On
☑ No ☐ Off	Ramp Number of Lanes, N: 1	☑ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A:	L_{down} = ft
V_u = veh/h	Deceleration Lane Length L_D: 500	V_D = veh/h
	Freeway Volume, V_F: 4924	
	Ramp Volume, V_R: 854	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	4924	0.95	Level	4	0	0.980	1.00	5287
Ramp	854	0.92	Level	3	0	0.985	1.00	942
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.436 using Equation (Exhibit 13-7)

V_{12} = 2606 pc/h

V_3 or V_{av34} 1076 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	4759	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	3817	Exhibit 13-8	9600	No
V_R	942	Exhibit 13-10	2000	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	2606	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 22.2 (pc/mi/ln)

LOS = C (Exhibit 13-2)

Speed Determination

D_s = 0.513 (Exhibit 13-12)

S_R = 55.6 mph (Exhibit 13-12)

S_0 = 76.5 mph (Exhibit 13-12)

S = 63.5 mph (Exhibit 13-13)

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Northbound
Agency or Company		Junction	WB PGA Off-Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	PM Peak	Analysis Year	2030

Project Description: Alt 3: I-95 NB Diverge at WB PGA Off-Ramp (N5 - N6)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 5	☐ Yes ☐ On
☑ No ☐ Off	Ramp Number of Lanes, N: 1	☑ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A:	L_{down} = ft
V_u = veh/h	Deceleration Lane Length L_D: 500	V_D = veh/h
	Freeway Volume, V_F: 5595	
	Ramp Volume, V_R: 833	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	5595	0.95	Level	4	0	0.980	1.00	6007
Ramp	833	0.92	Level	3	0	0.985	1.00	919
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.436 using Equation (Exhibit 13-7)

V_{12} = 2745 pc/h

V_3 or V_{av34} 1180 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	5106	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	4187	Exhibit 13-8	9600	No
V_R	919	Exhibit 13-10	2000	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	2745	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 23.4 (pc/mi/ln)

LOS = C (Exhibit 13-2)

Speed Determination

D_s = 0.511 (Exhibit 13-12)

S_R = 55.7 mph (Exhibit 13-12)

S_0 = 76.1 mph (Exhibit 13-12)

S = 63.6 mph (Exhibit 13-13)

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*AM Peak*

Site Information

Highway/Direction of Travel	*I-95 Northbound*
From/To	*WB PGA Off to EB PGA On*
Jurisdiction	*FDOT D4*
Analysis Year	*2030*

Project Description *Alt 3: I-95 NB WB PGA Off to EB PGA On (N6 - N7)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4070*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*874*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*12.5*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*PM Peak*

Site Information

Highway/Direction of Travel	*I-95 Northbound*
From/To	*WB PGA Off to EB PGA On*
Jurisdiction	*FDOT D4*
Analysis Year	*2030*

Project Description *Alt 3: I-95 NB WB PGA Off to EB PGA On (N6 - N7)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4762*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1023*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*14.6*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

FREEWAY WEAVING WORKSHEET

General Information

Analyst	LRCB
Agency/Company	
Date Performed	8/22/15
Analysis Time Period	AM

Site Information

Freeway/Dir of Travel	Northbound
Weaving Segment Location	PGA-On to Central-CD-Off
Analysis Year	2030

Project Description Alt 2: I-95 PGA Blvd - NB PGA-On to Central-CD-Off - N7 to N8

Inputs

Weaving configuration	One-Sided	Segment type	Freeway
Weaving number of lanes, N	6	Freeway minimum speed, S_{MIN}	15
Weaving segment length, L_S	2850ft	Freeway maximum capacity, C_{IFL}	2350
Freeway free-flow speed, FFS	70 mph	Terrain type	Level

Conversions to pc/h Under Base Conditions

	V (veh/h)	PHF	Truck (%)	RV (%)	E_T	E_R	f_{HV}	f_p	v (pc/h)
V_{FF}	2955	0.95	4	0	1.5	1.2	0.980	1.00	3173
V_{RF}	155	0.92	3	0	1.5	1.2	0.985	1.00	171
V_{FR}	1115	0.92	3	0	1.5	1.2	0.985	1.00	1230
V_{RR}	0	0.94	0	0	1.5	1.2	1.000	1.00	0
V_{NW}	3173							V =	4574
V_W	1401								
VR	0.306								

Configuration Characteristics

Minimum maneuver lanes, N_{WL}	3 lc	Minimum weaving lane changes, LC_{MIN}	171 lc/h
Interchange density, ID	0.8 int/mi	Weaving lane changes, LC_W	1306 lc/h
Minimum RF lane changes, LC_{RF}	1 lc/pc	Non-weaving lane changes, LC_{NW}	1043 lc/h
Minimum FR lane changes, LC_{FR}	0 lc/pc	Total lane changes, LC_{ALL}	2349 lc/h
Minimum RR lane changes, LC_{RR}	lc/pc	Non-weaving vehicle index, I_{NW}	723

Weaving Segment Speed, Density, Level of Service, and Capacity

Weaving segment flow rate, v	4491 veh/h	Weaving intensity factor, W	0.194
Weaving segment capacity, c_w	11203 veh/h	Weaving segment speed, S	63.8 mph
Weaving segment v/c ratio	0.401	Average weaving speed, S_W	61.1 mph
Weaving segment density, D	11.9 pc/mi/ln	Average non-weaving speed, S_{NW}	65.1 mph
Level of Service, LOS	B	Maximum weaving length, L_{MAX}	4086 ft

Notes

a. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments".
b. For volumes that exceed the weaving segment capacity, the level of service is "F".

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

FREEWAY WEAVING WORKSHEET

General Information

Analyst	LRCB
Agency/Company	
Date Performed	8/22/15
Analysis Time Period	PM

Site Information

Freeway/Dir of Travel	Northbound
Weaving Segment Location	PGA-On to Central-CD-Off
Analysis Year	2030

Project Description Alt 3: I-95 PGA Blvd - NB PGA-On to Central-CD-Off - N7 to N8

Inputs

Weaving configuration	One-Sided	Segment type	Freeway
Weaving number of lanes, N	6	Freeway minimum speed, S_{MIN}	15
Weaving segment length, L_S	2850ft	Freeway maximum capacity, C_{IFL}	2350
Freeway free-flow speed, FFS	70 mph	Terrain type	Level

Conversions to pc/h Under Base Conditions

	V (veh/h)	PHF	Truck (%)	RV (%)	E_T	E_R	f_{HV}	f_p	v (pc/h)
V_{FF}	3535	0.95	4	0	1.5	1.2	0.980	1.00	3795
V_{RF}	741	0.92	3	0	1.5	1.2	0.985	1.00	818
V_{FR}	1227	0.92	3	0	1.5	1.2	0.985	1.00	1354
V_{RR}	0	0.94	0	0	1.5	1.2	1.000	1.00	0
V_{NW}	3795							V =	5967
V_W	2172								
VR	0.364								

Configuration Characteristics

Minimum maneuver lanes, N_{WL}	3 lc	Minimum weaving lane changes, LC_{MIN}	818 lc/h
Interchange density, ID	0.8 int/mi	Weaving lane changes, LC_W	1953 lc/h
Minimum RF lane changes, LC_{RF}	1 lc/pc	Non-weaving lane changes, LC_{NW}	1171 lc/h
Minimum FR lane changes, LC_{FR}	0 lc/pc	Total lane changes, LC_{ALL}	3124 lc/h
Minimum RR lane changes, LC_{RR}	lc/pc	Non-weaving vehicle index, I_{NW}	865

Weaving Segment Speed, Density, Level of Service, and Capacity

Weaving segment flow rate, v	5861 veh/h	Weaving intensity factor, W	0.243
Weaving segment capacity, c_w	9427 veh/h	Weaving segment speed, S	59.3 mph
Weaving segment v/c ratio	0.622	Average weaving speed, S_W	59.2 mph
Weaving segment density, D	16.8 pc/mi/ln	Average non-weaving speed, S_{NW}	59.3 mph
Level of Service, LOS	B	Maximum weaving length, L_{MAX}	4715 ft

Notes

a. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments".
b. For volumes that exceed the weaving segment capacity, the level of service is "F".

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*4/2/2015*
Analysis Time Period	*AM Peak*

Site Information

Highway/Direction of Travel	*I-95 Northbound*
From/To	*Central-CD_Off_to_MT-CD-On*
Jurisdiction	*FDOT D4*
Analysis Year	*2030*

Project Description *Alt 3: I-95 PGA Blvd - Bet Central-Off_to_MT-On N8 to N9*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3110*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*668*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*9.5*	pc/mi/ln
LOS	*A*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*4/2/2015*
Analysis Time Period	*PM Peak*

Site Information

Highway/Direction of Travel	*I-95 Northbound*
From/To	*Central-CD_Off_to_MT-CD-On*
Jurisdiction	*FDOT D4*
Analysis Year	*2030*

Project Description *Alt 3: I-95 PGA Blvd - Bet Central-Off_to_MT-On N8 to N9*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4276*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*918*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*13.1*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Northbound
Agency or Company		Junction	at MT/CD On-Ramp
Date Performed	4/2/2015	Jurisdiction	FDOT D4
Analysis Time Period	AM	Analysis Year	2030

Project Description: Alt 3: I-95 NB Merge at MT On-Ramp (N9 - N10)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 5	☐ Yes ☐ On
☑ No ☐ Off	Ramp Number of Lanes, N: 1	☑ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A: 400	L_{down} = ft
V_u = veh/h	Deceleration Lane Length L_D:	V_D = veh/h
	Freeway Volume, V_F: 3110	
	Ramp Volume, V_R: 159	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 50.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	3110	0.95	Level	4	0	0.980	1.00	3339
Ramp	159	0.92	Level	3	0	0.985	1.00	175
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 0.285 using Equation (Exhibit 13-6)

V_{12} = 743 pc/h

V_3 or V_{av34} = 931 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes, V_{12a} = 1042 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	2780	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	1217	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = 12.4 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination

M_S = 0.294 (Exibit 13-11)

S_R = 61.8 mph (Exhibit 13-11)

S_0 = 69.0 mph (Exhibit 13-11)

S = 65.6 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R = mph (Exhibit 13-12)

S_0 = mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	1082	Freeway/Dir of Travel	I-95 Northbound
Agency or Company		Junction	at MT/CD On-Ramp
Date Performed	4/2/2015	Jurisdiction	FDOT D4
Analysis Time Period	PM	Analysis Year	2030

Project Description: Alt 3: I-95 NB Merge at MT On-Ramp (N9 - N10)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 5	☐ Yes ☐ On
☑ No ☐ Off	Ramp Number of Lanes, N: 1	☑ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A: 400	L_{down} = ft
V_u = veh/h	Deceleration Lane Length L_D:	V_D = veh/h
	Freeway Volume, V_F: 4276	
	Ramp Volume, V_R: 992	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 50.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	4276	0.95	Level	4	0	0.980	1.00	4591
Ramp	992	0.92	Level	3	0	0.985	1.00	1094
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 0.170 using Equation (Exhibit 13-6)

V_{12} = 610 pc/h

V_3 or V_{av34} = 1485 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes, V_{12a} = 1432 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	4675	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	2526	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = 22.2 (pc/mi/ln)

LOS = C (Exhibit 13-2)

Speed Determination

M_S = 0.330 (Exibit 13-11)

S_R = 60.8 mph (Exhibit 13-11)

S_0 = 67.9 mph (Exhibit 13-11)

S = 63.9 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R = mph (Exhibit 13-12)

S_0 = mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*4/2/2015*
Analysis Time Period	*AM Peak*

Site Information

Highway/Direction of Travel	*I-95 Northbound*
From/To	*Military_Tr_On_to_Central_On*
Jurisdiction	*FDOT D4*
Analysis Year	*2030*

Project Description *Alt 3: I-95 PGA Boulevard - Military_Tr_On_to_Central_On*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3269*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*702*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*10.0*	pc/mi/ln
LOS	*A*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*4/2/2015*
Analysis Time Period	*PM Peak*

Site Information

Highway/Direction of Travel	*I-95 Northbound*
From/To	*Military_Tr_On_to_Central_On*
Jurisdiction	*FDOT D4*
Analysis Year	*2030*

Project Description *Alt 3: I-95 PGA Boulevard - Military_Tr_On_to_Central_On*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*5268*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1131*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*16.2*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

FREEWAY WEAVING WORKSHEET

General Information

Analyst	LRCB
Agency/Company	
Date Performed	8/22/15
Analysis Time Period	AM

Site Information

Freeway/Dir of Travel	Nortbound
Weaving Segment Location	Central to DRoss
Analysis Year	2030

Project Description Alt 3: I-95 PGA Blvd - NB Central to DRoss - N11 to N12

Inputs

Weaving configuration	One-Sided	Segment type	Freeway
Weaving number of lanes, N	6	Freeway minimum speed, S_{MIN}	15
Weaving segment length, L_S	4970ft	Freeway maximum capacity, C_{IFL}	2350
Freeway free-flow speed, FFS	70 mph	Terrain type	Level

Conversions to pc/h Under Base Conditions

	V (veh/h)	PHF	Truck (%)	RV (%)	E_T	E_R	f_{HV}	f_p	v (pc/h)
V_{FF}	2234	0.95	4	0	1.5	1.2	0.980	1.00	2399
V_{RF}	341	0.92	3	0	1.5	1.2	0.985	1.00	376
V_{FR}	1035	0.92	3	0	1.5	1.2	0.985	1.00	1142
V_{RR}	0	0.94	0	0	1.5	1.2	1.000	1.00	0
V_{NW}	2399							V =	3917
V_W	1518								
VR	0.388								

Configuration Characteristics

Minimum maneuver lanes, N_{WL}	3 lc	Minimum weaving lane changes, LC_{MIN}	376 lc/h
Interchange density, ID	0.8 int/mi	Weaving lane changes, LC_W	1911 lc/h
Minimum RF lane changes, LC_{RF}	1 lc/pc	Non-weaving lane changes, LC_{NW}	2032 lc/h
Minimum FR lane changes, LC_{FR}	0 lc/pc	Total lane changes, LC_{ALL}	3943 lc/h
Minimum RR lane changes, LC_{RR}	lc/pc	Non-weaving vehicle index, I_{NW}	954

Weaving Segment Speed, Density, Level of Service, and Capacity

Weaving segment flow rate, v	3848 veh/h	Weaving intensity factor, W	0.188
Weaving segment capacity, c_w	8854 veh/h	Weaving segment speed, S	63.0 mph
Weaving segment v/c ratio	0.435	Average weaving speed, S_W	61.3 mph
Weaving segment density, D	10.4 pc/mi/ln	Average non-weaving speed, S_{NW}	64.2 mph
Level of Service, LOS	B	Maximum weaving length, L_{MAX}	4976 ft

Notes

a. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments".
b. For volumes that exceed the weaving segment capacity, the level of service is "F".

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

FREEWAY WEAVING WORKSHEET

General Information

Analyst	LRCB
Agency/Company	
Date Performed	8/22/15
Analysis Time Period	PM

Site Information

Freeway/Dir of Travel	Nortbound
Weaving Segment Location	Central to DRoss
Analysis Year	2030

Project Description Alt 2: I-95 PGA Blvd - NB Central to DRoss - N11 to N12

Inputs

Weaving configuration	One-Sided	Segment type	Freeway
Weaving number of lanes, N	6	Freeway minimum speed, S_{MIN}	15
Weaving segment length, L_S	4500ft	Freeway maximum capacity, C_{IFL}	2350
Freeway free-flow speed, FFS	70 mph	Terrain type	Level

Conversions to pc/h Under Base Conditions

	V (veh/h)	PHF	Truck (%)	RV (%)	E_T	E_R	f_{HV}	f_p	v (pc/h)
V_{FF}	3736	0.95	4	0	1.5	1.2	0.980	1.00	4011
V_{RF}	387	0.92	3	0	1.5	1.2	0.985	1.00	427
V_{FR}	1532	0.92	3	0	1.5	1.2	0.985	1.00	1690
V_{RR}	0	0.94	0	0	1.5	1.2	1.000	1.00	0
V_{NW}	4011							V =	6128
V_W	2117								
VR	0.345								

Configuration Characteristics

Minimum maneuver lanes, N_{WL}	3 lc	Minimum weaving lane changes, LC_{MIN}	427 lc/h
Interchange density, ID	0.8 int/mi	Weaving lane changes, LC_W	1883 lc/h
Minimum RF lane changes, LC_{RF}	1 lc/pc	Non-weaving lane changes, LC_{NW}	2215 lc/h
Minimum FR lane changes, LC_{FR}	0 lc/pc	Total lane changes, LC_{ALL}	4098 lc/h
Minimum RR lane changes, LC_{RR}	lc/pc	Non-weaving vehicle index, I_{NW}	1444

Weaving Segment Speed, Density, Level of Service, and Capacity

Weaving segment flow rate, v	6019 veh/h	Weaving intensity factor, W	0.210
Weaving segment capacity, c_w	9933 veh/h	Weaving segment speed, S	61.5 mph
Weaving segment v/c ratio	0.606	Average weaving speed, S_W	60.5 mph
Weaving segment density, D	16.6 pc/mi/ln	Average non-weaving speed, S_{NW}	62.0 mph
Level of Service, LOS	B	Maximum weaving length, L_{MAX}	4511 ft

Notes

a. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments".
b. For volumes that exceed the weaving segment capacity, the level of service is "F".

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

FREEWAY WEAVING WORKSHEET

General Information

Analyst	LRCB
Agency/Company	
Date Performed	8/22/15
Analysis Time Period	AM

Site Information

Freeway/Dir of Travel	Southbound
Weaving Segment Location	DRoss to Central
Analysis Year	2030

Project Description Alt 3: I-95 PGA Boulevard - SB DRoss to Central - S1-S2

Inputs

Weaving configuration	One-Sided	Segment type	Freeway
Weaving number of lanes, N	6	Freeway minimum speed, S_{MIN}	15
Weaving segment length, L_S	4090ft	Freeway maximum capacity, C_{IFL}	2350
Freeway free-flow speed, FFS	70 mph	Terrain type	Level

Conversions to pc/h Under Base Conditions

	V (veh/h)	PHF	Truck (%)	RV (%)	E_T	E_R	f_{HV}	f_p	v (pc/h)
V_{FF}	3823	0.95	4	0	1.5	1.2	0.980	1.00	4105
V_{RF}	1428	0.92	3	0	1.5	1.2	0.985	1.00	1575
V_{FR}	219	0.92	3	0	1.5	1.2	0.985	1.00	242
V_{RR}	0	0.94	0	0	1.5	1.2	1.000	1.00	0
V_{NW}	4105							V =	5922
V_W	1817								
VR	0.307								

Configuration Characteristics

Minimum maneuver lanes, N_{WL}	3 lc	Minimum weaving lane changes, LC_{MIN}	242 lc/h
Interchange density, ID	0.8 int/mi	Weaving lane changes, LC_W	1625 lc/h
Minimum RF lane changes, LC_{RF}	0 lc/pc	Non-weaving lane changes, LC_{NW}	1953 lc/h
Minimum FR lane changes, LC_{FR}	1 lc/pc	Total lane changes, LC_{ALL}	3578 lc/h
Minimum RR lane changes, LC_{RR}	lc/pc	Non-weaving vehicle index, I_{NW}	1343

Weaving Segment Speed, Density, Level of Service, and Capacity

Weaving segment flow rate, v	5815 veh/h	Weaving intensity factor, W	0.203
Weaving segment capacity, c_w	11184 veh/h	Weaving segment speed, S	62.6 mph
Weaving segment v/c ratio	0.520	Average weaving speed, S_W	60.7 mph
Weaving segment density, D	15.8 pc/mi/ln	Average non-weaving speed, S_{NW}	63.5 mph
Level of Service, LOS	B	Maximum weaving length, L_{MAX}	4091 ft

Notes

a. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments".
b. For volumes that exceed the weaving segment capacity, the level of service is "F".

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

FREEWAY WEAVING WORKSHEET

General Information

Analyst	LRCB
Agency/Company	
Date Performed	8/22/15
Analysis Time Period	PM

Site Information

Freeway/Dir of Travel	Southbound
Weaving Segment Location	DRoss to Central
Analysis Year	2030

Project Description Alt 3: I-95 PGA Boulevard - SB DRoss to Central - S1-S2

Inputs

Weaving configuration	One-Sided	Segment type	Freeway
Weaving number of lanes, N	6	Freeway minimum speed, S_{MIN}	15
Weaving segment length, L_S	4890ft	Freeway maximum capacity, C_{IFL}	2350
Freeway free-flow speed, FFS	70 mph	Terrain type	Level

Conversions to pc/h Under Base Conditions

	V (veh/h)	PHF	Truck (%)	RV (%)	E_T	E_R	f_{HV}	f_p	v (pc/h)
V_{FF}	2481	0.95	4	0	1.5	1.2	0.980	1.00	2664
V_{RF}	1017	0.92	3	0	1.5	1.2	0.985	1.00	1122
V_{FR}	465	0.92	3	0	1.5	1.2	0.985	1.00	513
V_{RR}	0	0.94	0	0	1.5	1.2	1.000	1.00	0
V_{NW}	2664							V =	4299
V_W	1635								
VR	0.380								

Configuration Characteristics

Minimum maneuver lanes, N_{WL}	3 lc	Minimum weaving lane changes, LC_{MIN}	513 lc/h
Interchange density, ID	0.8 int/mi	Weaving lane changes, LC_W	2035 lc/h
Minimum RF lane changes, LC_{RF}	0 lc/pc	Non-weaving lane changes, LC_{NW}	2044 lc/h
Minimum FR lane changes, LC_{FR}	1 lc/pc	Total lane changes, LC_{ALL}	4079 lc/h
Minimum RR lane changes, LC_{RR}	lc/pc	Non-weaving vehicle index, I_{NW}	1042

Weaving Segment Speed, Density, Level of Service, and Capacity

Weaving segment flow rate, v	4223 veh/h	Weaving intensity factor, W	0.196
Weaving segment capacity, c_w	9022 veh/h	Weaving segment speed, S	62.1 mph
Weaving segment v/c ratio	0.468	Average weaving speed, S_W	61.0 mph
Weaving segment density, D	11.5 pc/mi/ln	Average non-weaving speed, S_{NW}	62.9 mph
Level of Service, LOS	B	Maximum weaving length, L_{MAX}	4895 ft

Notes

a. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments".
b. For volumes that exceed the weaving segment capacity, the level of service is "F".

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*AM Peak*

Site Information

Highway/Direction of Travel	*I-95 Southbound*
From/To	*Central-Off to MT_CD*
Jurisdiction	*FDOT D4*
Analysis Year	*2030*

Project Description *Alt 3: I-95 PGA Boulevard - SB Central-Off to MT S2 to S3*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*5251*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1128*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*16.1*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*PM Peak*

Site Information

Highway/Direction of Travel	*I-95 Southbound*
From/To	*Central-Off to MT_CD*
Jurisdiction	*FDOT D4*
Analysis Year	*2030*

Project Description *Alt 3: I-95 PGA Boulevard - SB Central-Off to MT S2 to S3*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3498*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*751*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*10.7*	pc/mi/ln
LOS	*A*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Southbound
Agency or Company		Junction	PGA Off Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	AM Peak	Analysis Year	2030

Project Description: Alt 3: I-95 PGA Boulevard - Military Rd-Off S3 to S4

Inputs

Upstream Adj Ramp		Freeway Number of Lanes, N	5	Downstream Adj Ramp	
☐ Yes	☐ On	Ramp Number of Lanes, N	1	☐ Yes	☐ On
☑ No	☐ Off	Acceleration Lane Length, L_A		☑ No	☐ Off
L_{up} =	ft	Deceleration Lane Length L_D	500	L_{down} =	ft
V_u =	veh/h	Freeway Volume, V_F	5251	V_D =	veh/h
		Ramp Volume, V_R	832		
		Freeway Free-Flow Speed, S_{FF}	70.0		
		Ramp Free-Flow Speed, S_{FR}	50.0		

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	5251	0.95	Level	4	0	0.980	1.00	5638
Ramp	832	0.92	Level	3	0	0.985	1.00	918
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.436 using Equation (Exhibit 13-7)

V_{12} = 2607 pc/h

V_3 or V_{av34} 1093 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	4793	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	3875	Exhibit 13-8	9600	No
V_R	918	Exhibit 13-10	2100	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	2607	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 22.2 (pc/mi/ln)

LOS = C (Exhibit 13-2)

Speed Determination

D_s = 0.316 (Exhibit 13-12)

S_R = 61.2 mph (Exhibit 13-12)

S_0 = 76.4 mph (Exhibit 13-12)

S = 67.3 mph (Exhibit 13-13)

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Southbound
Agency or Company		Junction	PGA Off Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	PM Peak	Analysis Year	2030

Project Description: Alt 3: I-95 PGA Boulevard - Military Rd-Off S3 to S4

Inputs

Upstream Adj Ramp		Freeway Number of Lanes, N	5	Downstream Adj Ramp	
☐ Yes	☐ On	Ramp Number of Lanes, N	1	☐ Yes	☐ On
☑ No	☐ Off	Acceleration Lane Length, L_A		☑ No	☐ Off
L_{up} =	ft	Deceleration Lane Length L_D	500	L_{down} =	ft
V_u =	veh/h	Freeway Volume, V_F	3498	V_D =	veh/h
		Ramp Volume, V_R	286		
		Freeway Free-Flow Speed, S_{FF}	70.0		
		Ramp Free-Flow Speed, S_{FR}	50.0		

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	3498	0.95	Level	4	0	0.980	1.00	3756
Ramp	286	0.92	Level	3	0	0.985	1.00	316
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.436 using Equation (Exhibit 13-7)

V_{12} = 1816 pc/h

V_3 or V_{av34} 970 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	3756	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	3440	Exhibit 13-8	9600	No
V_R	316	Exhibit 13-10	2100	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	1816	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 15.4 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination

D_s = 0.261 (Exhibit 13-12)

S_R = 62.7 mph (Exhibit 13-12)

S_0 = 76.8 mph (Exhibit 13-12)

S = 69.3 mph (Exhibit 13-13)

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*AM Peak*

Site Information

Highway/Direction of Travel	*I-95 Southbound*
From/To	*MT-CD_Off to Central-CD-On*
Jurisdiction	*FDOT D4*
Analysis Year	*2030*

Project Description *Alt 3: I-95 PGA Blvd - Bet SB MT_Off to Central On S4 to S5*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4419*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*949*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*13.6*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*PM Peak*

Site Information

Highway/Direction of Travel	*I-95 Southbound*
From/To	*MT-CD_Off to Central-CD-On*
Jurisdiction	*FDOT D4*
Analysis Year	*2030*

Project Description *Alt 3: I-95 PGA Blvd - Bet SB MT_Off to Central On S4 to S5*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3212*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*690*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*9.9*	pc/mi/ln
LOS	*A*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

FREEWAY WEAVING WORKSHEET

General Information

Analyst	LRCB
Agency/Company	
Date Performed	8/22/15
Analysis Time Period	AM

Site Information

Freeway/Dir of Travel	Southbound
Weaving Segment Location	Central-CD_to_PGA Off Ramp
Analysis Year	2030

Project Description Alt 3: I-95 PGA Blvd - Central-CD_to_PGA Off Ramp - S5-S6

Inputs

Weaving configuration	One-Sided	Segment type	Freeway
Weaving number of lanes, N	6	Freeway minimum speed, S_{MIN}	15
Weaving segment length, L_S	2800ft	Freeway maximum capacity, C_{IFL}	2350
Freeway free-flow speed, FFS	70 mph	Terrain type	Level

Conversions to pc/h Under Base Conditions

	V (veh/h)	PHF	Truck (%)	RV (%)	E_T	E_R	f_{HV}	f_p	v (pc/h)
V_{FF}	3472	0.95	4	0	1.5	1.2	0.980	1.00	3728
V_{RF}	1226	0.92	3	0	1.5	1.2	0.985	1.00	1353
V_{FR}	947	0.92	3	0	1.5	1.2	0.985	1.00	1045
V_{RR}	0	0.94	0	0	1.5	1.2	1.000	1.00	0
V_{NW}	3728							V =	6126
V_W	2398								
VR	0.391								

Configuration Characteristics

Minimum maneuver lanes, N_{WL}	3 lc	Minimum weaving lane changes, LC_{MIN}	0 lc/h
Interchange density, ID	0.8 int/mi	Weaving lane changes, LC_W	1123 lc/h
Minimum RF lane changes, LC_{RF}	0 lc/pc	Non-weaving lane changes, LC_{NW}	1130 lc/h
Minimum FR lane changes, LC_{FR}	0 lc/pc	Total lane changes, LC_{ALL}	2253 lc/h
Minimum RR lane changes, LC_{RR}	lc/pc	Non-weaving vehicle index, I_{NW}	835

Weaving Segment Speed, Density, Level of Service, and Capacity

Weaving segment flow rate, v	6017 veh/h	Weaving intensity factor, W	0.190
Weaving segment capacity, c_w	8766 veh/h	Weaving segment speed, S	63.5 mph
Weaving segment v/c ratio	0.686	Average weaving speed, S_W	61.2 mph
Weaving segment density, D	16.1 pc/mi/ln	Average non-weaving speed, S_{NW}	65.1 mph
Level of Service, LOS	B	Maximum weaving length, L_{MAX}	5019 ft

Notes

a. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments".
b. For volumes that exceed the weaving segment capacity, the level of service is "F".

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

FREEWAY WEAVING WORKSHEET

General Information

Analyst	LRCB
Agency/Company	
Date Performed	8/22/15
Analysis Time Period	PM

Site Information

Freeway/Dir of Travel	Southbound
Weaving Segment Location	Central-CD_to_PGA Off Ramp
Analysis Year	2030

Project Description Alt 3: I-95 PGA Blvd - Central-CD_to_PGA Off Ramp - S5-S6

Inputs

Weaving configuration	One-Sided	Segment type	Freeway
Weaving number of lanes, N	6	Freeway minimum speed, S_{MIN}	15
Weaving segment length, L_S	2800ft	Freeway maximum capacity, C_{IFL}	2350
Freeway free-flow speed, FFS	70 mph	Terrain type	Level

Conversions to pc/h Under Base Conditions

	V (veh/h)	PHF	Truck (%)	RV (%)	E_T	E_R	f_{HV}	f_p	v (pc/h)
V_{FF}	2958	0.95	4	0	1.5	1.2	0.980	1.00	3176
V_{RF}	1121	0.92	3	0	1.5	1.2	0.985	1.00	1237
V_{FR}	254	0.92	3	0	1.5	1.2	0.985	1.00	280
V_{RR}	0	0.94	0	0	1.5	1.2	1.000	1.00	0
V_{NW}	3176							V =	4693
V_W	1517								
VR	0.323								

Configuration Characteristics

Minimum maneuver lanes, N_{WL}	3 lc	Minimum weaving lane changes, LC_{MIN}	0 lc/h
Interchange density, ID	0.8 int/mi	Weaving lane changes, LC_W	1123 lc/h
Minimum RF lane changes, LC_{RF}	0 lc/pc	Non-weaving lane changes, LC_{NW}	1016 lc/h
Minimum FR lane changes, LC_{FR}	0 lc/pc	Total lane changes, LC_{ALL}	2139 lc/h
Minimum RR lane changes, LC_{RR}	lc/pc	Non-weaving vehicle index, I_{NW}	711

Weaving Segment Speed, Density, Level of Service, and Capacity

Weaving segment flow rate, v	4609 veh/h	Weaving intensity factor, W	0.183
Weaving segment capacity, c_w	10615 veh/h	Weaving segment speed, S	64.6 mph
Weaving segment v/c ratio	0.434	Average weaving speed, S_W	61.5 mph
Weaving segment density, D	12.1 pc/mi/ln	Average non-weaving speed, S_{NW}	66.2 mph
Level of Service, LOS	B	Maximum weaving length, L_{MAX}	4269 ft

Notes

a. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments".
b. For volumes that exceed the weaving segment capacity, the level of service is "F".

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*AM Peak*

Site Information

Highway/Direction of Travel	*I-95 Southbound*
From/To	*PGA-Off to WB_PGA On*
Jurisdiction	*FDOT D4*
Analysis Year	*2030*

Project Description *Alt 3: I-95 SB Basic PGA-Off to WB PGA-On (S6 - S7)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4699*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1009*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*14.4*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*PM Peak*

Site Information

Highway/Direction of Travel	*I-95 Southbound*
From/To	*PGA-Off to WB_PGA On*
Jurisdiction	*FDOT D4*
Analysis Year	*2030*

Project Description *Alt 3: I-95 SB Basic PGA-Off to WB PGA-On (S6 - S7)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4079*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*876*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*12.5*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Southbound
Agency or Company		Junction	WB PGA SB On Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	AM	Analysis Year	2030

Project Description: Alt 3: I-95 SB Merge at WB PGA On-Ramp (S7 - S8)

Inputs

Upstream Adj Ramp		Freeway Number of Lanes, N	5	Downstream Adj Ramp	
☐ Yes	☐ On	Ramp Number of Lanes, N	1	☐ Yes	☐ On
☑ No	☐ Off	Acceleration Lane Length, L_A	400	☑ No	☐ Off
L_{up} =	ft	Deceleration Lane Length L_D		L_{down} =	ft
V_u =	veh/h	Freeway Volume, V_F	4699	V_D =	veh/h
		Ramp Volume, V_R	1245		
		Freeway Free-Flow Speed, S_{FF}	70.0		
		Ramp Free-Flow Speed, S_{FR}	40.0		

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	4699	0.95	Level	4	0	0.980	1.00	5045
Ramp	1245	0.92	Level	3	0	0.985	1.00	1374
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 0.046 using Equation (Exhibit 13-6)

V_{12} = 181 pc/h

V_3 or V_{av34} = 1877 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes, V_{12a} = 1574 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	5310	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	2948	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = 25.3 (pc/mi/ln)

LOS = C (Exhibit 13-2)

Speed Determination

M_S = 0.363 (Exibit 13-11)

S_R = 59.8 mph (Exhibit 13-11)

S_0 = 67.5 mph (Exhibit 13-11)

S = 63.0 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R = mph (Exhibit 13-12)

S_0 = mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Southbound
Agency or Company		Junction	WB PGA SB On Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	PM	Analysis Year	2030

Project Description: Alt 3: I-95 SB Merge at WB PGA On-Ramp (S7 - S8)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 5	☐ Yes ☐ On
☑ No ☐ Off	Ramp Number of Lanes, N: 1	☑ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A: 400	L_{down} = ft
V_u = veh/h	Deceleration Lane Length L_D:	V_D = veh/h
	Freeway Volume, V_F: 4079	
	Ramp Volume, V_R: 2344	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 40.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	4079	0.95	Level	4	0	0.980	1.00	4380
Ramp	2344	0.92	Level	3	0	0.985	1.00	2586
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = -0.105 using Equation (Exhibit 13-6)

V_{12} = -359 pc/h

V_3 or V_{av34} = 1888 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes, V_{12a} = 1366 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	6003	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	3952	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = 32.6 (pc/mi/ln)

LOS = D (Exhibit 13-2)

Speed Determination

M_S = 0.492 (Exibit 13-11)

S_R = 56.2 mph (Exhibit 13-11)

S_0 = 68.1 mph (Exhibit 13-11)

S = 59.8 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R = mph (Exhibit 13-12)

S_0 = mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*AM Peak*

Site Information

Highway/Direction of Travel	*I-95 Southbound*
From/To	*WB PGA On to EB PGA On*
Jurisdiction	*FDOT D4*
Analysis Year	*2030*

Project Description *Alt 3: I-95 SB Basic WB PGA On to EB PGA On (S8 - S9)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*5944*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1276*	pc/h/ln
S	*69.9*	mph
D = v_p / S	*18.2*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*PM Peak*

Site Information

Highway/Direction of Travel	*I-95 Southbound*
From/To	*WB PGA On to EB PGA On*
Jurisdiction	*FDOT D4*
Analysis Year	*2030*

Project Description *Alt 3: I-95 SB Basic WB PGA On to EB PGA On (S8 - S9)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*6423*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1379*	pc/h/ln
S	*69.6*	mph
D = v_p / S	*19.8*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Southbound
Agency or Company		Junction	EB PGA SB On Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	AM	Analysis Year	2030

Project Description: Alt 3: I-95 SB Merge at WB PGA On-Ramp (S9 - S10)

Inputs

Upstream Adj Ramp		Freeway Number of Lanes, N	5	Downstream Adj Ramp	
☐ Yes	☐ On	Ramp Number of Lanes, N	1	☐ Yes	☐ On
☑ No	☐ Off	Acceleration Lane Length, L_A	400	☑ No	☐ Off
L_{up} =	ft	Deceleration Lane Length L_D		L_{down} =	ft
V_u =	veh/h	Freeway Volume, V_F	5944	V_D =	veh/h
		Ramp Volume, V_R	1293		
		Freeway Free-Flow Speed, S_{FF}	70.0		
		Ramp Free-Flow Speed, S_{FR}	50.0		

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	5944	0.95	Level	4	0	0.980	1.00	6382
Ramp	1293	0.92	Level	3	0	0.985	1.00	1427
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 0.039 using Equation (Exhibit 13-6)

V_{12} = 191 pc/h

V_3 or V_{av34} = 2330 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes, V_{12a} = 1940 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	6278	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	3367	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = 28.6 (pc/mi/ln)

LOS = D (Exhibit 13-2)

Speed Determination

M_S = 0.394 (Exibit 13-11)

S_R = 59.0 mph (Exhibit 13-11)

S_0 = 66.6 mph (Exhibit 13-11)

S = 62.3 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R = mph (Exhibit 13-12)

S_0 = mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Southbound
Agency or Company		Junction	EB PGA SB On Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	PM	Analysis Year	2030

Project Description: Alt 3: I-95 SB Merge at WB PGA On-Ramp (S9 - S10)

Inputs

Upstream Adj Ramp		Freeway Number of Lanes, N	5	Downstream Adj Ramp	
☐ Yes	☐ On	Ramp Number of Lanes, N	1	☐ Yes	☐ On
☑ No	☐ Off	Acceleration Lane Length, L_A	400	☑ No	☐ Off
L_{up} =	ft	Deceleration Lane Length L_D		L_{down} =	ft
V_u =	veh/h	Freeway Volume, V_F	6423	V_D =	veh/h
		Ramp Volume, V_R	1566		
		Freeway Free-Flow Speed, S_{FF}	70.0		
		Ramp Free-Flow Speed, S_{FR}	50.0		

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	6423	0.95	Level	4	0	0.980	1.00	6896
Ramp	1566	0.92	Level	3	0	0.985	1.00	1728
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 0.002 using Equation (Exhibit 13-6)

V_{12} = 9 pc/h

V_3 or V_{av34} = 2513 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes, V_{12a} = 2014 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	6763	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	3742	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = 31.4 (pc/mi/ln)

LOS = D (Exhibit 13-2)

Speed Determination

M_S = 0.446 (Exibit 13-11)

S_R = 57.5 mph (Exhibit 13-11)

S_0 = 66.4 mph (Exhibit 13-11)

S = 61.2 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R = mph (Exhibit 13-12)

S_0 = mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*AM Peak*

Site Information

Highway/Direction of Travel	*I-95 Southbound*
From/To	*EB PGA On to NLake Off*
Jurisdiction	*FDOT D4*
Analysis Year	*2030*

Project Description *Alt 3: I-95 SB - EB-PGA_On_to_NLake_SB_Off (S10 - S11)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*7237*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1554*	pc/h/ln
S	*68.5*	mph
D = v_p / S	*22.7*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*PM Peak*

Site Information

Highway/Direction of Travel	*I-95 Southbound*
From/To	*EB PGA On to NLake Off*
Jurisdiction	*FDOT D4*
Analysis Year	*2030*

Project Description *Alt 3: I-95 SB - EB-PGA_On_to_NLake_SB_Off (S10 - S11)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*7989*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1716*	pc/h/ln
S	*66.9*	mph
D = v_p / S	*25.6*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Southbound
Agency or Company		Junction	Nlake Off Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	AM Peak	Analysis Year	2030

Project Description: Alt 3: I-95 SB Diverge at Nlake Off-Ramp (S11 - S12)

Inputs

Upstream Adj Ramp		Freeway Number of Lanes, N	5	Downstream Adj Ramp	
☐ Yes	☐ On	Ramp Number of Lanes, N	2	☐ Yes	☐ On
☑ No	☐ Off	Acceleration Lane Length, L_A		☑ No	☐ Off
L_{up} =	ft	Deceleration Lane Length L_D	500	L_{down} =	ft
V_u =	veh/h	Freeway Volume, V_F	7237	V_D =	veh/h
		Ramp Volume, V_R	1179		
		Freeway Free-Flow Speed, S_{FF}	70.0		
		Ramp Free-Flow Speed, S_{FR}	50.0		

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	7237	0.95	Level	4	0	0.980	1.00	7770
Ramp	1179	0.92	Level	3	0	0.985	1.00	1301
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.260 using Equation (Exhibit 13-7)

V_{12} = 2579 pc/h

V_3 or V_{av34} 1818 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	6216	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	4915	Exhibit 13-8	9600	No
V_R	1301	Exhibit 13-10	4200	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	2579	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 12.9 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination

D_s = 0.350 (Exhibit 13-12)

S_R = 60.2 mph (Exhibit 13-12)

S_0 = 73.6 mph (Exhibit 13-12)

S = 67.4 mph (Exhibit 13-13)

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Southbound
Agency or Company		Junction	Nlake Off Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	PM Peak	Analysis Year	2030

Project Description: Alt 3: I-95 SB Diverge at Nlake Off-Ramp (S11 - S12)

Inputs

Upstream Adj Ramp		Freeway Number of Lanes, N	5	Downstream Adj Ramp	
☐ Yes	☐ On	Ramp Number of Lanes, N	2	☐ Yes	☐ On
☑ No	☐ Off	Acceleration Lane Length, L_A		☑ No	☐ Off
L_{up} =	ft	Deceleration Lane Length L_D	500	L_{down} =	ft
V_u =	veh/h	Freeway Volume, V_F	7989	V_D =	veh/h
		Ramp Volume, V_R	1350		
		Freeway Free-Flow Speed, S_{FF}	70.0		
		Ramp Free-Flow Speed, S_{FR}	50.0		

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	7989	0.95	Level	4	0	0.980	1.00	8578
Ramp	1350	0.92	Level	3	0	0.985	1.00	1489
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.260 using Equation (Exhibit 13-7)

V_{12} = 2886 pc/h

V_3 or V_{av34} 1988 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	6863	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	5374	Exhibit 13-8	9600	No
V_R	1489	Exhibit 13-10	4200	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	2886	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 15.6 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination

D_s = 0.367 (Exhibit 13-12)

S_R = 59.7 mph (Exhibit 13-12)

S_0 = 72.9 mph (Exhibit 13-12)

S = 66.7 mph (Exhibit 13-13)

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Northbound
Agency or Company		Junction	NLake NB On Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	AM	Analysis Year	2040

Project Description: Alt 3: I-95 NB Merge at Nlake On-Ramp (N1 - N2)

Inputs

Upstream Adj Ramp		Freeway / Ramp		Downstream Adj Ramp	
☐ Yes	☐ On	Freeway Number of Lanes, N	5	☐ Yes	☐ On
☑ No	☐ Off	Ramp Number of Lanes, N	1	☑ No	☐ Off
L_{up} =	ft	Acceleration Lane Length, L_A	400	L_{down} =	ft
V_u =	veh/h	Deceleration Lane Length L_D		V_D =	veh/h
		Freeway Volume, V_F	6590		
		Ramp Volume, V_R	1569		
		Freeway Free-Flow Speed, S_{FF}	70.0		
		Ramp Free-Flow Speed, S_{FR}	50.0		

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	6590	0.95	Level	4	0	0.980	1.00	7076
Ramp	1569	0.92	Level	3	0	0.985	1.00	1731
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 0.001 using Equation (Exhibit 13-6)

V_{12} = 7 pc/h

V_3 or V_{av34} = 2579 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes, V_{12a} = 2066 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	6897	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	3797	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = 31.8 (pc/mi/ln)

LOS = D (Exhibit 13-2)

Speed Determination

M_S = 0.455 (Exibit 13-11)

S_R = 57.3 mph (Exhibit 13-11)

S_0 = 66.2 mph (Exhibit 13-11)

S = 61.0 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R = mph (Exhibit 13-12)

S_0 = mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Northbound
Agency or Company		Junction	NLake NB On Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	PM	Analysis Year	2040

Project Description: Alt 3: I-95 NB Merge at NIake On-Ramp (N1 - N2)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 5	☐ Yes ☐ On
☑ No ☐ Off	Ramp Number of Lanes, N: 1	☑ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A: 400	L_{down} = ft
V_u = veh/h	Deceleration Lane Length L_D:	V_D = veh/h
	Freeway Volume, V_F: 5745	
	Ramp Volume, V_R: 1689	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 50.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	5745	0.95	Level	4	0	0.980	1.00	6168
Ramp	1689	0.92	Level	3	0	0.985	1.00	1863
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = -0.015 using Equation (Exhibit 13-6)

V_{12} = -70 pc/h

V_3 or V_{av34} = 2379 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes, V_{12a} = 1875 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	6551	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	3738	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = 31.3 (pc/mi/ln)

LOS = D (Exhibit 13-2)

Speed Determination

M_S = 0.445 (Exibit 13-11)

S_R = 57.5 mph (Exhibit 13-11)

S_0 = 66.7 mph (Exhibit 13-11)

S = 61.2 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R = mph (Exhibit 13-12)

S_0 = mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*AM Peak*

Site Information

Highway/Direction of Travel	*I-95 Northbound*
From/To	*NLake On-Rmp to PGA Off-Rmp*
Jurisdiction	*FDOT D4*
Analysis Year	*2040*

Project Description *Alt 3: I-95 NB Basic Nlake-On to PGA-Off (N2 - N3)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*8159*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1752*	pc/h/ln
S	*66.5*	mph
D = v_p / S	*26.4*	pc/mi/ln
LOS	*D*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*PM Peak*

Site Information

Highway/Direction of Travel	*I-95 Northbound*
From/To	*NLake On-Rmp to PGA Off-Rmp*
Jurisdiction	*FDOT D4*
Analysis Year	*2040*

Project Description *Alt 3: I-95 NB Basic Nlake-On to PGA-Off (N2 - N3)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*7434*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1596*	pc/h/ln
S	*68.2*	mph
D = v_p / S	*23.4*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Northbound
Agency or Company		Junction	EB PGA Off-Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	AM Peak	Analysis Year	2040

Project Description: Alt 3: I-95 NB Diverge at EB PGA Off-Ramp (N3 - N4)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 5	☐ Yes ☐ On
☑ No ☐ Off	Ramp Number of Lanes, N: 2	☑ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A:	L_{down} = ft
V_u = veh/h	Deceleration Lane Length L_D: 500	V_D = veh/h
	Freeway Volume, V_F: 8159	
	Ramp Volume, V_R: 2674	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 55.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	8159	0.95	Level	4	0	0.980	1.00	8760
Ramp	2674	0.92	Level	3	0	0.985	1.00	2950
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.260 using Equation (Exhibit 13-7)

V_{12} = 4005 pc/h

V_3 or V_{av34} 1501 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	7008	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	4058	Exhibit 13-8	9600	No
V_R	2950	Exhibit 13-10	4400	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	4005	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 25.2 (pc/mi/ln)

LOS = C (Exhibit 13-2)

Speed Determination

D_s = 0.433 (Exhibit 13-12)

S_R = 57.9 mph (Exhibit 13-12)

S_0 = 74.8 mph (Exhibit 13-12)

S = 64.1 mph (Exhibit 13-13)

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Northbound
Agency or Company		Junction	EB PGA Off-Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	PM Peak	Analysis Year	2040

Project Description: Alt 3: I-95 NB Diverge at EB PGA Off-Ramp (N3 - N4)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 5	☐ Yes ☐ On
☑ No ☐ Off	Ramp Number of Lanes, N: 2	☑ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A:	L_{down} = ft
V_u = veh/h	Deceleration Lane Length L_D: 500	V_D = veh/h
	Freeway Volume, V_F: 7434	
	Ramp Volume, V_R: 1327	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 55.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	7434	0.95	Level	4	0	0.980	1.00	7982
Ramp	1327	0.92	Level	3	0	0.985	1.00	1464
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.260 using Equation (Exhibit 13-7)

V_{12} = 2744 pc/h

V_3 or V_{av34} 1821 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	6386	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	4922	Exhibit 13-8	9600	No
V_R	1464	Exhibit 13-10	4400	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	2744	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 14.4 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination

D_s = 0.300 (Exhibit 13-12)

S_R = 61.6 mph (Exhibit 13-12)

S_0 = 73.6 mph (Exhibit 13-12)

S = 67.9 mph (Exhibit 13-13)

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information		Site Information	
Analyst	*LRCB*	Highway/Direction of Travel	*I-95 Northbound*
Agency or Company		From/To	*PGA EB Off to PGA WB Off*
Date Performed	*3/26/2015*	Jurisdiction	*FDOT D4*
Analysis Time Period	*AM Peak*	Analysis Year	*2040*

Project Description *Alt 3: I-95 NB Basic EB PGA Off to WB PGA (N4 - N5)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*5485*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1178*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*16.8*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*PM Peak*

Site Information

Highway/Direction of Travel	*I-95 Northbound*
From/To	*PGA EB Off to PGA WB Off*
Jurisdiction	*FDOT D4*
Analysis Year	*2040*

Project Description *Alt 3: I-95 NB Basic EB PGA Off to WB PGA (N4 - N5)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*6107*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1311*	pc/h/ln
S	*69.9*	mph
D = v_p / S	*18.8*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Northbound
Agency or Company		Junction	WB PGA Off-Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	AM Peak	Analysis Year	2040

Project Description: Alt 3: I-95 NB Diverge at WB PGA Off-Ramp (N5 - N6)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 5	☐ Yes ☐ On
☑ No ☐ Off	Ramp Number of Lanes, N: 1	☑ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A:	L_{down} = ft
V_u = veh/h	Deceleration Lane Length L_D: 500	V_D = veh/h
	Freeway Volume, V_F: 5485	
	Ramp Volume, V_R: 951	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	5485	0.95	Level	4	0	0.980	1.00	5889
Ramp	951	0.92	Level	3	0	0.985	1.00	1049
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.436 using Equation (Exhibit 13-7)

V_{12} = 2774 pc/h

V_3 or V_{av34} 1116 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	5006	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	3957	Exhibit 13-8	9600	No
V_R	1049	Exhibit 13-10	2000	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	2774	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 23.6 (pc/mi/ln)

LOS = C (Exhibit 13-2)

Speed Determination

D_s = 0.522 (Exhibit 13-12)

S_R = 55.4 mph (Exhibit 13-12)

S_0 = 76.3 mph (Exhibit 13-12)

S = 63.1 mph (Exhibit 13-13)

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Northbound
Agency or Company		Junction	WB PGA Off-Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	PM Peak	Analysis Year	2040

Project Description: Alt 3: I-95 NB Diverge at WB PGA Off-Ramp (N5 - N6)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 5	☐ Yes ☐ On
☑ No ☐ Off	Ramp Number of Lanes, N: 1	☑ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A:	L_{down} = ft
V_u = veh/h	Deceleration Lane Length L_D: 500	V_D = veh/h
	Freeway Volume, V_F: 6107	
	Ramp Volume, V_R: 909	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	6107	0.95	Level	4	0	0.980	1.00	6557
Ramp	909	0.92	Level	3	0	0.985	1.00	1003
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.436 using Equation (Exhibit 13-7)

V_{12} = 2996 pc/h

V_3 or V_{av34} 1289 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	5574	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	4571	Exhibit 13-8	9600	No
V_R	1003	Exhibit 13-10	2000	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	2996	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 25.5 (pc/mi/ln)

LOS = C (Exhibit 13-2)

Speed Determination

D_s = 0.518 (Exhibit 13-12)

S_R = 55.5 mph (Exhibit 13-12)

S_0 = 75.7 mph (Exhibit 13-12)

S = 63.3 mph (Exhibit 13-13)

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*AM Peak*

Site Information

Highway/Direction of Travel	*I-95 Northbound*
From/To	*WB PGA Off to EB PGA On*
Jurisdiction	*FDOT D4*
Analysis Year	*2040*

Project Description *Alt 3: I-95 NB WB PGA Off to EB PGA On (N6 - N7)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4534*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*974*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*13.9*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*PM Peak*

Site Information

Highway/Direction of Travel	*I-95 Northbound*
From/To	*WB PGA Off to EB PGA On*
Jurisdiction	*FDOT D4*
Analysis Year	*2040*

Project Description *Alt 3: I-95 NB WB PGA Off to EB PGA On (N6 - N7)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*5198*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1116*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*15.9*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

FREEWAY WEAVING WORKSHEET

General Information

Analyst	LRCB
Agency/Company	
Date Performed	8/20/15
Analysis Time Period	AM

Site Information

Freeway/Dir of Travel	Northbound
Weaving Segment Location	PGA-On to Central-CD-Off
Analysis Year	2040

Project Description Alt 3: I-95 PGA Blvd - NB PGA-On to Central-CD-Off - N7 to N8

Inputs

Weaving configuration	One-Sided	Segment type	Freeway
Weaving number of lanes, N	6	Freeway minimum speed, S_{MIN}	15
Weaving segment length, L_S	2850ft	Freeway maximum capacity, C_{IFL}	2350
Freeway free-flow speed, FFS	70 mph	Terrain type	Level

Conversions to pc/h Under Base Conditions

	V (veh/h)	PHF	Truck (%)	RV (%)	E_T	E_R	f_{HV}	f_p	v (pc/h)
V_{FF}	3308	0.95	4	0	1.5	1.2	0.980	1.00	3552
V_{RF}	173	0.92	3	0	1.5	1.2	0.985	1.00	191
V_{FR}	1226	0.92	3	0	1.5	1.2	0.985	1.00	1353
V_{RR}	0	0.94	0	0	1.5	1.2	1.000	1.00	0
V_{NW}	3552							V =	5096
V_W	1544								
VR	0.303								

Configuration Characteristics

Minimum maneuver lanes, N_{WL}	3 lc	Minimum weaving lane changes, LC_{MIN}	191 lc/h
Interchange density, ID	0.8 int/mi	Weaving lane changes, LC_W	1326 lc/h
Minimum RF lane changes, LC_{RF}	1 lc/pc	Non-weaving lane changes, LC_{NW}	1121 lc/h
Minimum FR lane changes, LC_{FR}	0 lc/pc	Total lane changes, LC_{ALL}	2447 lc/h
Minimum RR lane changes, LC_{RR}	lc/pc	Non-weaving vehicle index, I_{NW}	810

Weaving Segment Speed, Density, Level of Service, and Capacity

Weaving segment flow rate, v	5003 veh/h	Weaving intensity factor, W	0.200
Weaving segment capacity, c_w	11325 veh/h	Weaving segment speed, S	63.4 mph
Weaving segment v/c ratio	0.442	Average weaving speed, S_W	60.8 mph
Weaving segment density, D	13.4 pc/mi/ln	Average non-weaving speed, S_{NW}	64.5 mph
Level of Service, LOS	B	Maximum weaving length, L_{MAX}	4050 ft

Notes

a. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments".
b. For volumes that exceed the weaving segment capacity, the level of service is "F".

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

FREEWAY WEAVING WORKSHEET

General Information

Analyst	LRCB
Agency/Company	
Date Performed	8/20/15
Analysis Time Period	PM

Site Information

Freeway/Dir of Travel	Northbound
Weaving Segment Location	PGA-On to Central-CD-Off
Analysis Year	2040

Project Description Alt 3: I-95 PGA Blvd - NB PGA-On to Central-CD-Off - N7 to N8

Inputs

Weaving configuration	One-Sided	Segment type	Freeway
Weaving number of lanes, N	6	Freeway minimum speed, S_{MIN}	15
Weaving segment length, L_S	2850ft	Freeway maximum capacity, C_{IFL}	2350
Freeway free-flow speed, FFS	70 mph	Terrain type	Level

Conversions to pc/h Under Base Conditions

	V (veh/h)	PHF	Truck (%)	RV (%)	E_T	E_R	f_{HV}	f_p	v (pc/h)
V_{FF}	3850	0.95	4	0	1.5	1.2	0.980	1.00	4134
V_{RF}	810	0.92	3	0	1.5	1.2	0.985	1.00	894
V_{FR}	1348	0.92	3	0	1.5	1.2	0.985	1.00	1487
V_{RR}	0	0.94	0	0	1.5	1.2	1.000	1.00	0
V_{NW}	4134							V =	6515
V_W	2381								
VR	0.365								

Configuration Characteristics

Minimum maneuver lanes, N_{WL}	3 lc	Minimum weaving lane changes, LC_{MIN}	894 lc/h
Interchange density, ID	0.8 int/mi	Weaving lane changes, LC_W	2029 lc/h
Minimum RF lane changes, LC_{RF}	1 lc/pc	Non-weaving lane changes, LC_{NW}	1241 lc/h
Minimum FR lane changes, LC_{FR}	0 lc/pc	Total lane changes, LC_{ALL}	3270 lc/h
Minimum RR lane changes, LC_{RR}	lc/pc	Non-weaving vehicle index, I_{NW}	943

Weaving Segment Speed, Density, Level of Service, and Capacity

Weaving segment flow rate, v	6399 veh/h	Weaving intensity factor, W	0.252
Weaving segment capacity, c_w	9389 veh/h	Weaving segment speed, S	58.6 mph
Weaving segment v/c ratio	0.681	Average weaving speed, S_W	58.9 mph
Weaving segment density, D	18.5 pc/mi/ln	Average non-weaving speed, S_{NW}	58.4 mph
Level of Service, LOS	B	Maximum weaving length, L_{MAX}	4731 ft

Notes

a. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments".
b. For volumes that exceed the weaving segment capacity, the level of service is "F".

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*4/2/2015*
Analysis Time Period	*AM Peak*

Site Information

Highway/Direction of Travel	*I-95 Northbound*
From/To	*Central-CD_Off_to_MT-CD-On*
Jurisdiction	*FDOT D4*
Analysis Year	*2040*

Project Description *Alt 3: I-95 PGA Blvd - Bet Central-Off_to_MT-On N8 to N9*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3481*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*747*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*10.7*	pc/mi/ln
LOS	*A*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*4/2/2015*
Analysis Time Period	*PM Peak*

Site Information

Highway/Direction of Travel	*I-95 Northbound*
From/To	*Central-CD_Off_to_MT-CD-On*
Jurisdiction	*FDOT D4*
Analysis Year	*2040*

Project Description *Alt 3: I-95 PGA Blvd - Bet Central-Off_to_MT-On N8 to N9*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4660*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1001*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*14.3*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Northbound
Agency or Company		Junction	at MT/CD On-Ramp
Date Performed	4/2/2015	Jurisdiction	FDOT D4
Analysis Time Period	AM	Analysis Year	2040

Project Description: Alt 3: I-95 NB Merge at MT On-Ramp (N9 - N10)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 5	☐ Yes ☐ On
☑ No ☐ Off	Ramp Number of Lanes, N: 1	☑ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A: 400	L_{down} = ft
V_u = veh/h	Deceleration Lane Length L_D:	V_D = veh/h
	Freeway Volume, V_F: 3481	
	Ramp Volume, V_R: 178	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 50.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	3481	0.95	Level	4	0	0.980	1.00	3737
Ramp	178	0.92	Level	3	0	0.985	1.00	196
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 0.282 using Equation (Exhibit 13-6)

V_{12} = 823 pc/h

V_3 or V_{av34} = 1046 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes, V_{12a} = 1166 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	3111	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	1362	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = 13.5 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination

M_S = 0.296 (Exibit 13-11)

S_R = 61.7 mph (Exhibit 13-11)

S_0 = 68.7 mph (Exhibit 13-11)

S = 65.4 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R = mph (Exhibit 13-12)

S_0 = mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	1082	Freeway/Dir of Travel	I-95 Northbound
Agency or Company		Junction	at MT/CD On-Ramp
Date Performed	4/2/2015	Jurisdiction	FDOT D4
Analysis Time Period	PM	Analysis Year	2040

Project Description: Alt 3: I-95 NB Merge at MT On-Ramp (N9 - N10)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 5	☐ Yes ☐ On
☑ No ☐ Off	Ramp Number of Lanes, N: 1	☑ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A: 400	L_{down} = ft
V_u = veh/h	Deceleration Lane Length L_D:	V_D = veh/h
	Freeway Volume, V_F: 4660	
	Ramp Volume, V_R: 1082	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 50.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	4660	0.95	Level	4	0	0.980	1.00	5003
Ramp	1082	0.92	Level	3	0	0.985	1.00	1194
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 0.069 using Equation (Exhibit 13-6)

V_{12} = 268 pc/h

V_3 or V_{av34} = 1817 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes, V_{12a} = 1561 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	5097	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	2755	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = 23.9 (pc/mi/ln)

LOS = C (Exhibit 13-2)

Speed Determination

M_S = 0.342 (Exibit 13-11)

S_R = 60.4 mph (Exhibit 13-11)

S_0 = 67.6 mph (Exhibit 13-11)

S = 63.5 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R = mph (Exhibit 13-12)

S_0 = mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*4/2/2015*
Analysis Time Period	*AM Peak*

Site Information

Highway/Direction of Travel	*I-95 Northbound*
From/To	*Military_Tr_On_to_Central_On*
Jurisdiction	*FDOT D4*
Analysis Year	*2040*

Project Description *Alt 3: I-95 PGA Boulevard - Military_Tr_On_to_Central_On*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3659*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*786*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*11.2*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*4/2/2015*
Analysis Time Period	*PM Peak*

Site Information

Highway/Direction of Travel	*I-95 Northbound*
From/To	*Military_Tr_On_to_Central_On*
Jurisdiction	*FDOT D4*
Analysis Year	*2040*

Project Description *Alt 3: I-95 PGA Boulevard - Military_Tr_On_to_Central_On*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*5742*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1233*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*17.6*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

FREEWAY WEAVING WORKSHEET

General Information

Analyst	LRCB
Agency/Company	
Date Performed	8/20/15
Analysis Time Period	AM

Site Information

Freeway/Dir of Travel	Nortbound
Weaving Segment Location	Central to DRoss
Analysis Year	2040

Project Description Alt 3: I-95 PGA Blvd - NB Central to DRoss - N11 to N12

Inputs

Weaving configuration	One-Sided	Segment type	Freeway
Weaving number of lanes, N	6	Freeway minimum speed, S_{MIN}	15
Weaving segment length, L_S	4940ft	Freeway maximum capacity, C_{IFL}	2350
Freeway free-flow speed, FFS	70 mph	Terrain type	Level

Conversions to pc/h Under Base Conditions

	V (veh/h)	PHF	Truck (%)	RV (%)	E_T	E_R	f_{HV}	f_p	v (pc/h)
V_{FF}	2507	0.95	4	0	1.5	1.2	0.980	1.00	2692
V_{RF}	375	0.92	3	0	1.5	1.2	0.985	1.00	414
V_{FR}	1152	0.92	3	0	1.5	1.2	0.985	1.00	1271
V_{RR}	0	0.94	0	0	1.5	1.2	1.000	1.00	0
V_{NW}	2692							V =	4377
V_W	1685								
VR	0.385								

Configuration Characteristics

Minimum maneuver lanes, N_{WL}	3 lc	Minimum weaving lane changes, LC_{MIN}	414 lc/h
Interchange density, ID	0.8 int/mi	Weaving lane changes, LC_W	1945 lc/h
Minimum RF lane changes, LC_{RF}	1 lc/pc	Non-weaving lane changes, LC_{NW}	2076 lc/h
Minimum FR lane changes, LC_{FR}	0 lc/pc	Total lane changes, LC_{ALL}	4021 lc/h
Minimum RR lane changes, LC_{RR}	lc/pc	Non-weaving vehicle index, I_{NW}	1064

Weaving Segment Speed, Density, Level of Service, and Capacity

Weaving segment flow rate, v	4299 veh/h	Weaving intensity factor, W	0.192
Weaving segment capacity, c_w	8913 veh/h	Weaving segment speed, S	62.6 mph
Weaving segment v/c ratio	0.482	Average weaving speed, S_W	61.1 mph
Weaving segment density, D	11.7 pc/mi/ln	Average non-weaving speed, S_{NW}	63.5 mph
Level of Service, LOS	B	Maximum weaving length, L_{MAX}	4947 ft

Notes

a. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments".
b. For volumes that exceed the weaving segment capacity, the level of service is "F".

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

FREEWAY WEAVING WORKSHEET

General Information

Analyst	LRCB
Agency/Company	
Date Performed	8/20/15
Analysis Time Period	PM

Site Information

Freeway/Dir of Travel	Nortbound
Weaving Segment Location	Central to DRoss
Analysis Year	2040

Project Description Alt 3: I-95 PGA Blvd - NB Central to DRoss - N11 to N12

Inputs

Weaving configuration	One-Sided	Segment type	Freeway
Weaving number of lanes, N	6	Freeway minimum speed, S_{MIN}	15
Weaving segment length, L_S	4500ft	Freeway maximum capacity, C_{IFL}	2350
Freeway free-flow speed, FFS	70 mph	Terrain type	Level

Conversions to pc/h Under Base Conditions

	V (veh/h)	PHF	Truck (%)	RV (%)	E_T	E_R	f_{HV}	f_p	v (pc/h)
V_{FF}	4069	0.95	4	0	1.5	1.2	0.980	1.00	4369
V_{RF}	425	0.92	3	0	1.5	1.2	0.985	1.00	469
V_{FR}	1673	0.92	3	0	1.5	1.2	0.985	1.00	1846
V_{RR}	0	0.94	0	0	1.5	1.2	1.000	1.00	0
V_{NW}	4369							V =	6684
V_W	2315								
VR	0.346								

Configuration Characteristics

Minimum maneuver lanes, N_{WL}	3 lc	Minimum weaving lane changes, LC_{MIN}	469 lc/h
Interchange density, ID	0.8 int/mi	Weaving lane changes, LC_W	1925 lc/h
Minimum RF lane changes, LC_{RF}	1 lc/pc	Non-weaving lane changes, LC_{NW}	2385 lc/h
Minimum FR lane changes, LC_{FR}	0 lc/pc	Total lane changes, LC_{ALL}	4310 lc/h
Minimum RR lane changes, LC_{RR}	lc/pc	Non-weaving vehicle index, I_{NW}	1573

Weaving Segment Speed, Density, Level of Service, and Capacity

Weaving segment flow rate, v	6564 veh/h	Weaving intensity factor, W	0.218
Weaving segment capacity, c_w	9907 veh/h	Weaving segment speed, S	60.9 mph
Weaving segment v/c ratio	0.663	Average weaving speed, S_W	60.1 mph
Weaving segment density, D	18.3 pc/mi/ln	Average non-weaving speed, S_{NW}	61.3 mph
Level of Service, LOS	B	Maximum weaving length, L_{MAX}	4520 ft

Notes

a. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments".
b. For volumes that exceed the weaving segment capacity, the level of service is "F".

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

FREEWAY WEAVING WORKSHEET

General Information

Analyst	LRCB
Agency/Company	
Date Performed	8/22/15
Analysis Time Period	AM

Site Information

Freeway/Dir of Travel	Southbound
Weaving Segment Location	DRoss to Central
Analysis Year	2040

Project Description Alt 3: I-95 PGA Boulevard - SB DRoss to Central - S1-S2

Inputs

Weaving configuration	One-Sided	Segment type	Freeway
Weaving number of lanes, N	6	Freeway minimum speed, S_{MIN}	15
Weaving segment length, L_S	4095ft	Freeway maximum capacity, C_{IFL}	2350
Freeway free-flow speed, FFS	70 mph	Terrain type	Level

Conversions to pc/h Under Base Conditions

	V (veh/h)	PHF	Truck (%)	RV (%)	E_T	E_R	f_{HV}	f_p	v (pc/h)
V_{FF}	4150	0.95	4	0	1.5	1.2	0.980	1.00	4456
V_{RF}	1552	0.92	3	0	1.5	1.2	0.985	1.00	1712
V_{FR}	240	0.92	3	0	1.5	1.2	0.985	1.00	265
V_{RR}	0	0.94	0	0	1.5	1.2	1.000	1.00	0
V_{NW}	4456							V =	6433
V_W	1977								
VR	0.307								

Configuration Characteristics

Minimum maneuver lanes, N_{WL}	3 lc	Minimum weaving lane changes, LC_{MIN}	265 lc/h
Interchange density, ID	0.8 int/mi	Weaving lane changes, LC_W	1649 lc/h
Minimum RF lane changes, LC_{RF}	0 lc/pc	Non-weaving lane changes, LC_{NW}	2154 lc/h
Minimum FR lane changes, LC_{FR}	1 lc/pc	Total lane changes, LC_{ALL}	3803 lc/h
Minimum RR lane changes, LC_{RR}	lc/pc	Non-weaving vehicle index, I_{NW}	1460

Weaving Segment Speed, Density, Level of Service, and Capacity

Weaving segment flow rate, v	6317 veh/h	Weaving intensity factor, W	0.213
Weaving segment capacity, c_w	11165 veh/h	Weaving segment speed, S	62.1 mph
Weaving segment v/c ratio	0.566	Average weaving speed, S_W	60.3 mph
Weaving segment density, D	17.3 pc/mi/ln	Average non-weaving speed, S_{NW}	62.9 mph
Level of Service, LOS	B	Maximum weaving length, L_{MAX}	4097 ft

Notes

a. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments".
b. For volumes that exceed the weaving segment capacity, the level of service is "F".

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

FREEWAY WEAVING WORKSHEET

General Information

Analyst	LRCB
Agency/Company	
Date Performed	8/22/15
Analysis Time Period	PM

Site Information

Freeway/Dir of Travel	Southbound
Weaving Segment Location	DRoss to Central
Analysis Year	2040

Project Description Alt 3: I-95 PGA Boulevard - SB DRoss to Central - S1-S2

Inputs

Weaving configuration	One-Sided	Segment type	Freeway
Weaving number of lanes, N	6	Freeway minimum speed, S_{MIN}	15
Weaving segment length, L_S	4880ft	Freeway maximum capacity, C_{IFL}	2350
Freeway free-flow speed, FFS	70 mph	Terrain type	Level

Conversions to pc/h Under Base Conditions

	V (veh/h)	PHF	Truck (%)	RV (%)	E_T	E_R	f_{HV}	f_p	v (pc/h)
V_{FF}	2749	0.95	4	0	1.5	1.2	0.980	1.00	2952
V_{RF}	1125	0.92	3	0	1.5	1.2	0.985	1.00	1241
V_{FR}	511	0.92	3	0	1.5	1.2	0.985	1.00	564
V_{RR}	0	0.94	0	0	1.5	1.2	1.000	1.00	0
V_{NW}	2952							V =	4757
V_W	1805								
VR	0.379								

Configuration Characteristics

Minimum maneuver lanes, N_{WL}	3 lc	Minimum weaving lane changes, LC_{MIN}	564 lc/h
Interchange density, ID	0.8 int/mi	Weaving lane changes, LC_W	2085 lc/h
Minimum RF lane changes, LC_{RF}	0 lc/pc	Non-weaving lane changes, LC_{NW}	2097 lc/h
Minimum FR lane changes, LC_{FR}	1 lc/pc	Total lane changes, LC_{ALL}	4182 lc/h
Minimum RR lane changes, LC_{RR}	lc/pc	Non-weaving vehicle index, I_{NW}	1152

Weaving Segment Speed, Density, Level of Service, and Capacity

Weaving segment flow rate, v	4672 veh/h	Weaving intensity factor, W	0.200
Weaving segment capacity, c_w	9043 veh/h	Weaving segment speed, S	61.6 mph
Weaving segment v/c ratio	0.517	Average weaving speed, S_W	60.8 mph
Weaving segment density, D	12.9 pc/mi/ln	Average non-weaving speed, S_{NW}	62.1 mph
Level of Service, LOS	B	Maximum weaving length, L_{MAX}	4886 ft

Notes

a. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments".
b. For volumes that exceed the weaving segment capacity, the level of service is "F".

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*AM Peak*

Site Information

Highway/Direction of Travel	*I-95 Southbound*
From/To	*Central-Off to MT_CD*
Jurisdiction	*FDOT D4*
Analysis Year	*2040*

Project Description *Alt 3: I-95 PGA Boulevard - SB Central-Off to MT S2 to S3*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*5702*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1224*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*17.5*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*PM Peak*

Site Information

Highway/Direction of Travel	*I-95 Southbound*
From/To	*Central-Off to MT_CD*
Jurisdiction	*FDOT D4*
Analysis Year	*2040*

Project Description *Alt 3: I-95 PGA Boulevard - SB Central-Off to MT S2 to S3*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3874*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*832*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*11.9*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Southbound
Agency or Company		Junction	PGA Off Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	AM Peak	Analysis Year	2040

Project Description: Alt 3: I-95 PGA Boulevard - Military Rd-Off S3 to S4

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 5	☐ Yes ☐ On
☑ No ☐ Off	Ramp Number of Lanes, N: 1	☑ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A:	L_{down} = ft
V_u = veh/h	Deceleration Lane Length L_D: 500	V_D = veh/h
	Freeway Volume, V_F: 5702	
	Ramp Volume, V_R: 905	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 50.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	5702	0.95	Level	4	0	0.980	1.00	6122
Ramp	905	0.92	Level	3	0	0.985	1.00	998
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.436 using Equation (Exhibit 13-7)

V_{12} = 2832 pc/h

V_3 or V_{av34} 1186 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	5204	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	4206	Exhibit 13-8	9600	No
V_R	998	Exhibit 13-10	2100	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	2832	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 24.1 (pc/mi/ln)

LOS = C (Exhibit 13-2)

Speed Determination

D_s = 0.323 (Exhibit 13-12)

S_R = 61.0 mph (Exhibit 13-12)

S_0 = 76.1 mph (Exhibit 13-12)

S = 67.0 mph (Exhibit 13-13)

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Southbound
Agency or Company		Junction	PGA Off Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	PM Peak	Analysis Year	2040

Project Description: Alt 3: I-95 PGA Boulevard - Military Rd-Off S3 to S4

Inputs

Upstream Adj Ramp		Freeway Number of Lanes, N	5	Downstream Adj Ramp	
☐ Yes	☐ On	Ramp Number of Lanes, N	1	☐ Yes	☐ On
☑ No	☐ Off	Acceleration Lane Length, L_A		☑ No	☐ Off
L_{up} =	ft	Deceleration Lane Length L_D	500	L_{down} =	ft
V_u =	veh/h	Freeway Volume, V_F	3874	V_D =	veh/h
		Ramp Volume, V_R	316		
		Freeway Free-Flow Speed, S_{FF}	70.0		
		Ramp Free-Flow Speed, S_{FR}	50.0		

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	3874	0.95	Level	4	0	0.980	1.00	4159
Ramp	316	0.92	Level	3	0	0.985	1.00	349
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.436 using Equation (Exhibit 13-7)

V_{12} = 1829 pc/h

V_3 or V_{av34} 957 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	3744	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	3395	Exhibit 13-8	9600	No
V_R	349	Exhibit 13-10	2100	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	1829	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 15.5 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination

D_s = 0.264 (Exhibit 13-12)

S_R = 62.6 mph (Exhibit 13-12)

S_0 = 76.8 mph (Exhibit 13-12)

S = 69.1 mph (Exhibit 13-13)

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*AM Peak*

Site Information

Highway/Direction of Travel	*I-95 Southbound*
From/To	*MT-CD_Off to Central-CD-On*
Jurisdiction	*FDOT D4*
Analysis Year	*2040*

Project Description *Alt 3: I-95 PGA Blvd - Bet SB MT_Off to Central On S4 to S5*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4797*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1030*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*14.7*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*PM Peak*

Site Information

Highway/Direction of Travel	*I-95 Southbound*
From/To	*MT-CD_Off to Central-CD-On*
Jurisdiction	*FDOT D4*
Analysis Year	*2040*

Project Description *Alt 3: I-95 PGA Blvd - Bet SB MT_Off to Central On S4 to S5*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3558*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*764*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*10.9*	pc/mi/ln
LOS	*A*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

FREEWAY WEAVING WORKSHEET

General Information

Analyst	LRCB
Agency/Company	
Date Performed	8/20/15
Analysis Time Period	AM

Site Information

Freeway/Dir of Travel	Southbound
Weaving Segment Location	Central-CD_to_PGA Off Ramp
Analysis Year	2040

Project Description Alt 3: I-95 PGA Blvd - Central-CD_to_PGA Off Ramp - S5-S6

Inputs

Weaving configuration	One-Sided	Segment type	Freeway
Weaving number of lanes, N	6	Freeway minimum speed, S_{MIN}	15
Weaving segment length, L_S	2800ft	Freeway maximum capacity, C_{IFL}	2350
Freeway free-flow speed, FFS	70 mph	Terrain type	Level

Conversions to pc/h Under Base Conditions

	V (veh/h)	PHF	Truck (%)	RV (%)	E_T	E_R	f_{HV}	f_p	v (pc/h)
V_{FF}	3768	0.95	4	0	1.5	1.2	0.980	1.00	4046
V_{RF}	1348	0.92	3	0	1.5	1.2	0.985	1.00	1487
V_{FR}	1029	0.92	3	0	1.5	1.2	0.985	1.00	1135
V_{RR}	0	0.94	0	0	1.5	1.2	1.000	1.00	0
V_{NW}	4046							V =	6668
V_W	2622								
VR	0.393								

Configuration Characteristics

Minimum maneuver lanes, N_{WL}	3 lc	Minimum weaving lane changes, LC_{MIN}	0 lc/h
Interchange density, ID	0.8 int/mi	Weaving lane changes, LC_W	1123 lc/h
Minimum RF lane changes, LC_{RF}	0 lc/pc	Non-weaving lane changes, LC_{NW}	1195 lc/h
Minimum FR lane changes, LC_{FR}	0 lc/pc	Total lane changes, LC_{ALL}	2318 lc/h
Minimum RR lane changes, LC_{RR}	lc/pc	Non-weaving vehicle index, I_{NW}	906

Weaving Segment Speed, Density, Level of Service, and Capacity

Weaving segment flow rate, v	6551 veh/h	Weaving intensity factor, W	0.195
Weaving segment capacity, c_w	8726 veh/h	Weaving segment speed, S	63.2 mph
Weaving segment v/c ratio	0.751	Average weaving speed, S_W	61.0 mph
Weaving segment density, D	17.6 pc/mi/ln	Average non-weaving speed, S_{NW}	64.7 mph
Level of Service, LOS	B	Maximum weaving length, L_{MAX}	5039 ft

Notes

a. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments".
b. For volumes that exceed the weaving segment capacity, the level of service is "F".

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

FREEWAY WEAVING WORKSHEET

General Information

Analyst	LRCB
Agency/Company	
Date Performed	8/20/15
Analysis Time Period	PM

Site Information

Freeway/Dir of Travel	Southbound
Weaving Segment Location	Central-CD_to_PGA Off Ramp
Analysis Year	2040

Project Description Alt 3: I-95 PGA Blvd - Central-CD_to_PGA Off Ramp - S5-S6

Inputs

Weaving configuration	One-Sided	Segment type	Freeway
Weaving number of lanes, N	6	Freeway minimum speed, S_{MIN}	15
Weaving segment length, L_S	2800ft	Freeway maximum capacity, C_{IFL}	2350
Freeway free-flow speed, FFS	70 mph	Terrain type	Level

Conversions to pc/h Under Base Conditions

	V (veh/h)	PHF	Truck (%)	RV (%)	E_T	E_R	f_{HV}	f_p	v (pc/h)
V_{FF}	3277	0.95	4	0	1.5	1.2	0.980	1.00	3518
V_{RF}	1232	0.92	3	0	1.5	1.2	0.985	1.00	1359
V_{FR}	281	0.92	3	0	1.5	1.2	0.985	1.00	310
V_{RR}	0	0.94	0	0	1.5	1.2	1.000	1.00	0
V_{NW}	3518							V =	5187
V_W	1669								
VR	0.322								

Configuration Characteristics

Minimum maneuver lanes, N_{WL}	3 lc	Minimum weaving lane changes, LC_{MIN}	0 lc/h
Interchange density, ID	0.8 int/mi	Weaving lane changes, LC_W	1123 lc/h
Minimum RF lane changes, LC_{RF}	0 lc/pc	Non-weaving lane changes, LC_{NW}	1087 lc/h
Minimum FR lane changes, LC_{FR}	0 lc/pc	Total lane changes, LC_{ALL}	2210 lc/h
Minimum RR lane changes, LC_{RR}	lc/pc	Non-weaving vehicle index, I_{NW}	788

Weaving Segment Speed, Density, Level of Service, and Capacity

Weaving segment flow rate, v	5095 veh/h	Weaving intensity factor, W	0.188
Weaving segment capacity, c_w	10664 veh/h	Weaving segment speed, S	64.3 mph
Weaving segment v/c ratio	0.478	Average weaving speed, S_W	61.3 mph
Weaving segment density, D	13.4 pc/mi/ln	Average non-weaving speed, S_{NW}	65.9 mph
Level of Service, LOS	B	Maximum weaving length, L_{MAX}	4253 ft

Notes

a. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments".
b. For volumes that exceed the weaving segment capacity, the level of service is "F".

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information		Site Information	
Analyst	*LRCB*	Highway/Direction of Travel	*I-95 Southbound*
Agency or Company		From/To	*PGA-Off to WB_PGA On*
Date Performed	*3/26/2015*	Jurisdiction	*FDOT D4*
Analysis Time Period	*AM Peak*	Analysis Year	*2040*

Project Description *Alt 3: I-95 SB Basic PGA-Off to WB PGA-On (S6 - S7)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*5116*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1099*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*15.7*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*PM Peak*

Site Information

Highway/Direction of Travel	*I-95 Southbound*
From/To	*PGA-Off to WB_PGA On*
Jurisdiction	*FDOT D4*
Analysis Year	*2040*

Project Description *Alt 3: I-95 SB Basic PGA-Off to WB PGA-On (S6 - S7)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4509*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*968*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*13.8*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Southbound
Agency or Company		Junction	WB PGA SB On Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	AM	Analysis Year	2040

Project Description: Alt 3: I-95 SB Merge at WB PGA On-Ramp (S7 - S8)

Inputs

Upstream Adj Ramp		Freeway Number of Lanes, N	5	Downstream Adj Ramp	
☐ Yes	☐ On	Ramp Number of Lanes, N	1	☐ Yes	☐ On
☑ No	☐ Off	Acceleration Lane Length, L_A	400	☑ No	☐ Off
L_{up} =	ft	Deceleration Lane Length L_D		L_{down} =	ft
V_u =	veh/h	Freeway Volume, V_F	5116	V_D =	veh/h
		Ramp Volume, V_R	1351		
		Freeway Free-Flow Speed, S_{FF}	70.0		
		Ramp Free-Flow Speed, S_{FR}	40.0		

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	5116	0.95	Level	4	0	0.980	1.00	5493
Ramp	1351	0.92	Level	3	0	0.985	1.00	1491
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 0.031 using Equation (Exhibit 13-6)

V_{12} = 135 pc/h

V_3 or V_{av34} = 2075 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes, V_{12a} = 1714 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	5776	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	3205	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = 27.3 (pc/mi/ln)

LOS = C (Exhibit 13-2)

Speed Determination

M_S = 0.385 (Exibit 13-11)

S_R = 59.2 mph (Exhibit 13-11)

S_0 = 67.2 mph (Exhibit 13-11)

S = 62.5 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R = mph (Exhibit 13-12)

S_0 = mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Southbound
Agency or Company		Junction	WB PGA SB On Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	PM	Analysis Year	2040

Project Description: Alt 3: I-95 SB Merge at WB PGA On-Ramp (S7 - S8)

Inputs

Upstream Adj Ramp		Freeway Number of Lanes, N	5	Downstream Adj Ramp
☐ Yes	☐ On	Ramp Number of Lanes, N	1	☐ Yes ☐ On
☑ No	☐ Off	Acceleration Lane Length, L_A	400	☑ No ☐ Off
L_{up} =	ft	Deceleration Lane Length L_D		L_{down} = ft
V_u =	veh/h	Freeway Volume, V_F	4509	V_D = veh/h
		Ramp Volume, V_R	2593	
		Freeway Free-Flow Speed, S_{FF}	70.0	
		Ramp Free-Flow Speed, S_{FR}	40.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	4509	0.95	Level	4	0	0.980	1.00	4841
Ramp	2593	0.92	Level	3	0	0.985	1.00	2861
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = -0.140 using Equation (Exhibit 13-6)

V_{12} = -527 pc/h

V_3 or V_{av34} = 2151 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes, V_{12a} = 1510 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	6637	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	4371	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = 35.7 (pc/mi/ln)

LOS = E (Exhibit 13-2)

Speed Determination

M_S = 0.598 (Exibit 13-11)

S_R = 53.3 mph (Exhibit 13-11)

S_0 = 67.7 mph (Exhibit 13-11)

S = 57.5 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R = mph (Exhibit 13-12)

S_0 = mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*AM Peak*

Site Information

Highway/Direction of Travel	*I-95 Southbound*
From/To	*WB PGA On to EB PGA On*
Jurisdiction	*FDOT D4*
Analysis Year	*2040*

Project Description *Alt 3: I-95 SB Basic WB PGA On to EB PGA On (S8 - S9)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*6467*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1389*	pc/h/ln
S	*69.6*	mph
D = v_p / S	*20.0*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*PM Peak*

Site Information

Highway/Direction of Travel	*I-95 Southbound*
From/To	*WB PGA On to EB PGA On*
Jurisdiction	*FDOT D4*
Analysis Year	*2040*

Project Description *Alt 3: I-95 SB Basic WB PGA On to EB PGA On (S8 - S9)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*7102*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1525*	pc/h/ln
S	*68.8*	mph
D = v_p / S	*22.2*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Southbound
Agency or Company		Junction	EB PGA SB On Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	AM	Analysis Year	2040

Project Description: Alt 3: I-95 SB Merge at WB PGA On-Ramp (S9 - S10)

Inputs

Upstream Adj Ramp		Freeway / Ramp		Downstream Adj Ramp	
☐ Yes	☐ On	Freeway Number of Lanes, N	5	☐ Yes	☐ On
☑ No	☐ Off	Ramp Number of Lanes, N	1	☑ No	☐ Off
L_{up} =	ft	Acceleration Lane Length, L_A	400	L_{down} =	ft
V_u =	veh/h	Deceleration Lane Length L_D		V_D =	veh/h
		Freeway Volume, V_F	6467		
		Ramp Volume, V_R	1406		
		Freeway Free-Flow Speed, S_{FF}	70.0		
		Ramp Free-Flow Speed, S_{FR}	50.0		

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	6467	0.95	Level	4	0	0.980	1.00	6944
Ramp	1406	0.92	Level	3	0	0.985	1.00	1551
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 0.024 using Equation (Exhibit 13-6)

V_{12} = 121 pc/h

V_3 or V_{av34} = 2474 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes, V_{12a} = 2028 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	6621	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	3579	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = 30.2 (pc/mi/ln)

LOS = D (Exhibit 13-2)

Speed Determination

M_S = 0.421 (Exibit 13-11)

S_R = 58.2 mph (Exhibit 13-11)

S_0 = 66.3 mph (Exhibit 13-11)

S = 61.7 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R = mph (Exhibit 13-12)

S_0 = mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Southbound
Agency or Company		Junction	EB PGA SB On Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	PM	Analysis Year	2040

Project Description: Alt 3: I-95 SB Merge at WB PGA On-Ramp (S9 - S10)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 5	☐ Yes ☐ On
☑ No ☐ Off	Ramp Number of Lanes, N: 1	☑ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A: 400	L_{down} = ft
V_u = veh/h	Deceleration Lane Length L_D:	V_D = veh/h
	Freeway Volume, V_F: 7102	
	Ramp Volume, V_R: 1733	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 50.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	7102	0.95	Level	4	0	0.980	1.00	7625
Ramp	1733	0.92	Level	3	0	0.985	1.00	1912
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = -0.021 using Equation (Exhibit 13-6)

V_{12} = -115 pc/h

V_3 or V_{av34} = 2783 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☑ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes, V_{12a} = 2180 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	7364	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	4092	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = 34.0 (pc/mi/ln)

LOS = D (Exhibit 13-2)

Speed Determination

M_S = 0.514 (Exibit 13-11)

S_R = 55.6 mph (Exhibit 13-11)

S_0 = 65.9 mph (Exhibit 13-11)

S = 59.8 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R = mph (Exhibit 13-12)

S_0 = mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*AM Peak*

Site Information

Highway/Direction of Travel	*I-95 Southbound*
From/To	*EB PGA On to NLake Off*
Jurisdiction	*FDOT D4*
Analysis Year	*2040*

Project Description *Alt 3: I-95 SB - EB-PGA_On_to_NLake_SB_Off (S10 - S11)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*7873*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1691*	pc/h/ln
S	*67.2*	mph
D = v_p / S	*25.2*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*LRCB*
Agency or Company	
Date Performed	*3/26/2015*
Analysis Time Period	*PM Peak*

Site Information

Highway/Direction of Travel	*I-95 Southbound*
From/To	*EB PGA On to NLake Off*
Jurisdiction	*FDOT D4*
Analysis Year	*2040*

Project Description *Alt 3: I-95 SB - EB-PGA_On_to_NLake_SB_Off (S10 - S11)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*8835*	veh/h	Peak-Hour Factor, PHF	*0.95*
AADT		veh/day	%Trucks and Buses, P_T	*4*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.980*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1897*	pc/h/ln
S	*64.4*	mph
D = v_p / S	*29.5*	pc/mi/ln
LOS	*D*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Southbound
Agency or Company		Junction	Nlake Off Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	AM Peak	Analysis Year	2040

Project Description: Alt 3: I-95 SB Diverge at Nlake Off-Ramp (S11 - S12)

Inputs

Upstream Adj Ramp		Freeway Number of Lanes, N	5	Downstream Adj Ramp	
☐ Yes	☐ On	Ramp Number of Lanes, N	2	☐ Yes	☐ On
☑ No	☐ Off	Acceleration Lane Length, L_A		☑ No	☐ Off
L_{up} =	ft	Deceleration Lane Length L_D	500	L_{down} =	ft
V_u =	veh/h	Freeway Volume, V_F	7873	V_D =	veh/h
		Ramp Volume, V_R	1282		
		Freeway Free-Flow Speed, S_{FF}	70.0		
		Ramp Free-Flow Speed, S_{FR}	50.0		

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	7873	0.95	Level	4	0	0.980	1.00	8453
Ramp	1282	0.92	Level	3	0	0.985	1.00	1414
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.260 using Equation (Exhibit 13-7)

V_{12} = 2805 pc/h

V_3 or V_{av34} 1979 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	6763	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	5349	Exhibit 13-8	9600	No
V_R	1414	Exhibit 13-10	4200	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	2805	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 14.9 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination

D_s = 0.360 (Exhibit 13-12)

S_R = 59.9 mph (Exhibit 13-12)

S_0 = 73.0 mph (Exhibit 13-12)

S = 66.9 mph (Exhibit 13-13)

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APPENDIX AM - ALTERNATIVE 3 HCS REPORTS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	LRCB	Freeway/Dir of Travel	I-95 Southbound
Agency or Company		Junction	Nlake Off Ramp
Date Performed	3/26/2015	Jurisdiction	FDOT D4
Analysis Time Period	PM Peak	Analysis Year	2040

Project Description: Alt 3: I-95 SB Diverge at Nlake Off-Ramp (S11 - S12)

Inputs

Upstream Adj Ramp		Freeway Number of Lanes, N	5	Downstream Adj Ramp	
☐ Yes	☐ On	Ramp Number of Lanes, N	2	☐ Yes	☐ On
☑ No	☐ Off	Acceleration Lane Length, L_A		☑ No	☐ Off
L_{up} =	ft	Deceleration Lane Length L_D	500	L_{down} =	ft
V_u =	veh/h	Freeway Volume, V_F	8835	V_D =	veh/h
		Ramp Volume, V_R	1494		
		Freeway Free-Flow Speed, S_{FF}	70.0		
		Ramp Free-Flow Speed, S_{FR}	50.0		

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	8835	0.95	Level	4	0	0.980	1.00	9486
Ramp	1494	0.92	Level	3	0	0.985	1.00	1648
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.260 using Equation (Exhibit 13-7)

V_{12} = 3193 pc/h

V_3 or V_{av34} 2198 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	7589	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	5941	Exhibit 13-8	9600	No
V_R	1648	Exhibit 13-10	4200	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	3193	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 18.2 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination

D_s = 0.381 (Exhibit 13-12)

S_R = 59.3 mph (Exhibit 13-12)

S_0 = 72.1 mph (Exhibit 13-12)

S = 66.1 mph (Exhibit 13-13)

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APPENDIX AN

FDOT AND PALM BEACH COUNTY TRAFFIC COUNTS

APPENDIX AN - FDOT & PBC TRAFFIC COUNTS

COUNTY: 93
STATION: 2206
DESCRIPTION: SR 9/I-95 - N OF PGA BLVD (COUNTY LINK: 2610)
START DATE: 04/17/2013
START TIME: 2345

	DIRECTION: N					DIRECTION: S					COMBINED
TIME	1ST	2ND	3RD	4TH	TOTAL	1ST	2ND	3RD	4TH	TOTAL	TOTAL
0000	191	131	103	101	526	71	67	52	44	234	760
0100	91	65	59	79	294	61	44	49	48	202	496
0200	60	69	64	39	232	30	43	49	31	153	385
0300	53	65	71	70	259	54	60	79	79	272	531
0400	87	84	120	130	421	92	124	143	177	536	957
0500	163	213	247	253	876	210	280	328	398	1216	2092
0600	375	491	575	583	2024	535	751	905	886	3077	5101
0700	733	813	803	782	3131	866	877	925	918	3586	6717
0800	739	807	761	689	2996	898	883	889	642	3312	6308
0900	674	626	707	697	2704	592	587	589	552	2320	5024
1000	775	702	725	767	2969	545	527	527	457	2056	5025
1100	774	725	731	736	2966	569	486	486	466	2007	4973
1200	725	823	795	689	3032	442	484	449	425	1800	4832
1300	582	681	1114	882	3259	454	470	469	451	1844	5103
1400	0	0	0	956	956	492	462	517	516	1987	2943
1500	1008	1041	1163	1255	4467	495	542	497	502	2036	6503
1600	1304	1322	1363	1436	5425	537	548	543	524	2152	7577
1700	1672	1391	1288	1178	5529	581	566	518	451	2116	7645
1800	1142	927	845	684	3598	438	375	378	309	1500	5098
1900	718	622	583	576	2499	271	278	256	234	1039	3538
2000	583	548	527	467	2125	208	226	190	162	786	2911
2100	441	447	429	383	1700	178	193	149	135	655	2355
2200	394	304	276	267	1241	155	111	137	127	530	1771
2300	224	199	171	157	751	147	109	110	69	435	1186
24-HOUR TOTALS:					53980					35851	89831

PEAK VOLUME INFORMATION

	DIRECTION: N		DIRECTION: S		COMBINED DIRECTIONS	
	HOUR	VOLUME	HOUR	VOLUME	HOUR	VOLUME
A.M.	715	3137	730	3624	715	6755
P.M.	1630	5862	1630	2214	1630	8076
DAILY	1630	5862	730	3624	1630	8076

TRUCK PERCENTAGE 8.18 12.04 9.72

CLASSIFICATION SUMMARY DATABASE

DIR	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TOTTRK	TOTVOL
N	33	43295	6235	393	1093	93	17	870	1829	29	57	32	4	0	0	4417	53980
S	45	22456	9034	352	797	120	12	878	2055	18	50	32	2	0	0	4316	35851

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APPENDIX AN - FDOT & PBC TRAFFIC COUNTS

COUNTY: 93
STATION: 2214
DESCRIPTION: SR 9/I-95 - N OF MILITARY TRL & PGA BLVD (COUNTY L
START DATE: 04/23/2013
START TIME: 2345

	DIRECTION: N					DIRECTION: S					COMBINED
TIME	1ST	2ND	3RD	4TH	TOTAL	1ST	2ND	3RD	4TH	TOTAL	TOTAL
0000	149	116	93	64	422	112	84	73	55	324	746
0100	65	71	57	64	257	66	58	53	60	237	494
0200	48	45	43	51	187	46	64	51	51	212	399
0300	56	51	59	66	232	60	87	102	98	347	579
0400	64	83	109	133	389	139	172	206	233	750	1139
0500	149	192	244	276	861	278	393	455	563	1689	2550
0600	390	402	445	529	1766	769	1079	1181	1247	4276	6042
0700	640	779	720	779	2918	1244	1228	1278	1215	4965	7883
0800	710	680	692	562	2644	1285	1372	1296	999	4952	7596
0900	587	586	591	603	2367	934	907	893	803	3537	5904
1000	588	645	601	620	2454	810	774	807	687	3078	5532
1100	597	613	603	674	2487	758	726	750	695	2929	5416
1200	606	653	659	644	2562	654	714	682	629	2679	5241
1300	694	708	716	746	2864	710	694	676	684	2764	5628
1400	768	805	824	803	3200	710	714	736	717	2877	6077
1500	939	987	940	920	3786	726	813	769	766	3074	6860
1600	978	950	1162	1154	4244	828	819	866	874	3387	7631
1700	1253	1245	1103	967	4568	917	920	780	706	3323	7891
1800	1042	854	758	726	3380	694	569	567	465	2295	5675
1900	641	593	564	508	2306	434	386	373	362	1555	3861
2000	497	538	459	466	1960	331	321	279	268	1199	3159
2100	499	428	355	316	1598	265	268	222	205	960	2558
2200	293	306	291	293	1183	224	166	200	186	776	1959
2300	248	217	188	165	818	202	135	133	94	564	1382
24-HOUR TOTALS:					49453					52749	102202

PEAK VOLUME INFORMATION

	DIRECTION: N		DIRECTION: S		COMBINED DIRECTIONS	
	HOUR	VOLUME	HOUR	VOLUME	HOUR	VOLUME
A.M.	715	2988	745	5168	730	8039
P.M.	1630	4814	1630	3577	1630	8391
DAILY	1630	4814	745	5168	1630	8391

TRUCK PERCENTAGE 7.81 9.22 8.54

CLASSIFICATION SUMMARY DATABASE

DIR	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TOTTRK	TOTVOL
N	181	35898	9513	204	874	112	47	772	1703	37	51	35	26	0	0	3861	49453
S	14	41027	6845	390	1214	130	13	818	2165	21	67	41	4	0	0	4863	52749

GENERATED BY SPS 5.0.21

COUNTY: 93
STATION: 2214
DESCRIPTION: SR 9/I-95 - N OF MILITARY TRL & PGA BLVD (COUNTY L
START DATE: 04/23/2013
START TIME: 2345

	DIRECTION: N					DIRECTION: S					COMBINED
TIME	1ST	2ND	3RD	4TH	TOTAL	1ST	2ND	3RD	4TH	TOTAL	TOTAL
0000	149	116	93	64	422	112	84	73	55	324	746
0100	65	71	57	64	257	66	58	53	60	237	494
0200	48	45	43	51	187	46	64	51	51	212	399
0300	56	51	59	66	232	60	87	102	98	347	579
0400	64	83	109	133	389	139	172	206	233	750	1139
0500	149	192	244	276	861	278	393	455	563	1689	2550
0600	390	402	445	529	1766	769	1079	1181	1247	4276	6042
0700	640	779	720	779	2918	1244	1228	1278	1215	4965	7883
0800	710	680	692	562	2644	1285	1372	1296	999	4952	7596
0900	587	586	591	603	2367	934	907	893	803	3537	5904
1000	588	645	601	620	2454	810	774	807	687	3078	5532
1100	597	613	603	674	2487	758	726	750	695	2929	5416
1200	606	653	659	644	2562	654	714	682	629	2679	5241
1300	694	708	716	746	2864	710	694	676	684	2764	5628
1400	768	805	824	803	3200	710	714	736	717	2877	6077
1500	939	987	940	920	3786	726	813	769	766	3074	6860
1600	978	950	1162	1154	4244	828	819	866	874	3387	7631
1700	1253	1245	1103	967	4568	917	920	780	706	3323	7891
1800	1042	854	758	726	3380	694	569	567	465	2295	5675
1900	641	593	564	508	2306	434	386	373	362	1555	3861
2000	497	538	459	466	1960	331	321	279	268	1199	3159
2100	499	428	355	316	1598	265	268	222	205	960	2558
2200	293	306	291	293	1183	224	166	200	186	776	1959
2300	248	217	188	165	818	202	135	133	94	564	1382
24-HOUR TOTALS:					49453					52749	102202

PEAK VOLUME INFORMATION

	DIRECTION: N		DIRECTION: S		COMBINED DIRECTIONS	
	HOUR	VOLUME	HOUR	VOLUME	HOUR	VOLUME
A.M.	715	2988	745	5168	730	8039
P.M.	1630	4814	1630	3577	1630	8391
DAILY	1630	4814	745	5168	1630	8391

TRUCK PERCENTAGE 7.81 9.22 8.54

CLASSIFICATION SUMMARY DATABASE

DIR	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TOTTRK	TOTVOL
N	181	35898	9513	204	874	112	47	772	1703	37	51	35	26	0	0	3861	49453
S	14	41027	6845	390	1214	130	13	818	2165	21	67	41	4	0	0	4863	52749

GENERATED BY SPS 5.0.21

COUNTY: 93
STATION: 4077
DESCRIPTION: I-95 NB OFF RAMP TO NORTHLAKE BLVD
START DATE: 02/12/2013
START TIME: 1000

DIRECTION: N

TIME	1ST	2ND	3RD	4TH	TOTAL
0000	39	36	30	27	132
0100	28	24	25	23	100
0200	20	12	14	9	55
0300	11	10	18	16	55
0400	7	13	22	27	69
0500	22	51	62	73	208
0600	46	73	135	220	474
0700	247	300	350	423	1320
0800	310	360	343	326	1339
0900	259	253	270	262	1044
1000	259	244	261	289	1053
1100	275	302	282	323	1182
1200	301	312	306	291	1210
1300	322	304	290	323	1239
1400	295	299	326	360	1280
1500	353	344	370	415	1482
1600	398	394	396	442	1630
1700	412	499	452	409	1772
1800	391	335	329	337	1392
1900	284	239	180	165	868
2000	160	150	138	130	578
2100	129	153	145	119	546
2200	97	97	111	91	396
2300	77	73	48	45	243
24-HOUR TOTALS:					19667

PEAK VOLUME INFORMATION

	HOUR	VOLUME
A.M.	730	1443
P.M.	1645	1805
DAILY	1645	1805

GENERATED BY SPS 5.0.21

COUNTY: 93
STATION: 4078
DESCRIPTION: I-95 NB ON RAMP FROM NORTHLAKE BLVD
START DATE: 06/18/2013
START TIME: 0000

DIRECTION: N

TIME	1ST	2ND	3RD	4TH	TOTAL
0000	20	24	24	12	80
0100	7	8	18	5	38
0200	5	5	6	7	23
0300	8	10	13	5	36
0400	6	10	14	29	59
0500	16	21	28	73	138
0600	56	73	118	129	376
0700	146	192	194	269	801
0800	218	236	264	274	992
0900	207	188	176	215	786
1000	156	171	189	197	713
1100	189	202	193	231	815
1200	217	237	229	219	902
1300	248	239	208	251	946
1400	215	205	244	251	915
1500	225	237	264	263	989
1600	270	252	280	291	1093
1700	339	336	295	299	1269
1800	285	248	223	202	958
1900	169	147	160	154	630
2000	134	146	132	127	539
2100	117	104	91	85	397
2200	69	52	55	43	219
2300	35	38	26	32	131
24-HOUR TOTALS:					13845

PEAK VOLUME INFORMATION

	HOUR	VOLUME
A.M.	800	992
P.M.	1700	1269
DAILY	1700	1269

GENERATED BY SPS 5.0.45P

COUNTY: 93
STATION: 4079
DESCRIPTION: I-95 SB OFF RAMP TO NORTHLAKE BLVD
START DATE: 02/19/2013
START TIME: 0000

DIRECTION: S

TIME	1ST	2ND	3RD	4TH	TOTAL
0000	31	10	15	12	68
0100	12	9	11	9	41
0200	3	6	8	7	24
0300	6	8	15	10	39
0400	6	12	13	18	49
0500	13	35	30	39	117
0600	42	71	96	126	335
0700	123	176	205	232	736
0800	230	222	228	246	926
0900	160	157	171	200	688
1000	195	182	191	187	755
1100	171	199	205	222	797
1200	215	225	230	217	887
1300	207	211	203	219	840
1400	204	202	224	213	843
1500	226	205	254	211	896
1600	252	216	258	219	945
1700	248	220	251	250	969
1800	163	202	178	178	721
1900	167	128	106	113	514
2000	107	105	94	91	397
2100	77	109	83	66	335
2200	69	60	32	43	204
2300	45	35	39	20	139
24-HOUR TOTALS:					12265

PEAK VOLUME INFORMATION

	HOUR	VOLUME
A.M.	800	926
P.M.	1700	969
DAILY	1700	969

GENERATED BY SPS 5.0.21

COUNTY: 93
STATION: 4080
DESCRIPTION: I-95 SB ON RAMP FROM NORTHLAKE BLVD
START DATE: 02/19/2013
START TIME: 0000

DIRECTION: S

TIME	1ST	2ND	3RD	4TH	TOTAL
0000	38	28	24	16	106
0100	25	9	7	10	51
0200	15	12	17	6	50
0300	11	13	14	14	52
0400	16	20	31	41	108
0500	28	47	78	84	237
0600	104	158	212	215	689
0700	283	366	415	380	1444
0800	368	396	350	316	1430
0900	282	291	236	217	1026
1000	259	255	254	273	1041
1100	268	293	268	258	1087
1200	298	257	275	300	1130
1300	300	337	274	287	1198
1400	300	290	293	294	1177
1500	308	312	273	305	1198
1600	285	277	326	336	1224
1700	389	351	373	296	1409
1800	300	324	239	195	1058
1900	227	209	169	142	747
2000	155	125	133	133	546
2100	130	102	90	96	418
2200	94	78	82	62	316
2300	59	41	42	27	169
24-HOUR TOTALS:					17911

PEAK VOLUME INFORMATION

	HOUR	VOLUME
A.M.	730	1559
P.M.	1645	1449
DAILY	730	1559

GENERATED BY SPS 5.0.21

COUNTY: 93
STATION: 4081
DESCRIPTION: I-95 NB OFF RAMP TO EB SR 786/PGA BLVD
START DATE: 02/12/2013
START TIME: 1100

DIRECTION: N

TIME	1ST	2ND	3RD	4TH	TOTAL
0000	31	26	26	19	102
0100	14	13	13	14	54
0200	15	4	5	8	32
0300	4	2	9	8	23
0400	6	12	14	22	54
0500	26	31	43	89	189
0600	72	82	129	189	472
0700	196	272	365	422	1255
0800	337	360	335	354	1386
0900	278	269	214	226	987
1000	181	225	211	241	858
1100	233	248	249	281	1011
1200	255	266	248	262	1031
1300	231	250	267	278	1026
1400	219	198	220	257	894
1500	302	250	277	297	1126
1600	252	256	255	264	1027
1700	269	293	279	286	1127
1800	260	293	209	184	946
1900	169	166	140	140	615
2000	96	97	82	78	353
2100	91	101	69	73	334
2200	58	67	66	66	257
2300	52	64	38	34	188
24-HOUR TOTALS:					15347

PEAK VOLUME INFORMATION

	HOUR	VOLUME
A.M.	730	1484
P.M.	1700	1127
DAILY	730	1484

GENERATED BY SPS 5.0.21

COUNTY: 93
STATION: 4082
DESCRIPTION: I-95 NB ON RAMP FROM SR 786/PGA BLVD
START DATE: 06/18/2013
START TIME: 0000

DIRECTION: N

TIME	1ST	2ND	3RD	4TH	TOTAL
0000	10	15	5	4	34
0100	2	6	2	3	13
0200	7	2	2	2	13
0300	4	3	1	4	12
0400	4	3	2	3	12
0500	6	4	5	6	21
0600	14	15	22	30	81
0700	22	39	39	53	153
0800	40	45	53	55	193
0900	56	51	68	45	220
1000	53	55	58	56	222
1100	64	51	49	79	243
1200	72	71	64	80	287
1300	82	64	88	94	328
1400	90	95	99	82	366
1500	100	100	93	138	431
1600	110	115	129	146	500
1700	181	173	173	140	667
1800	112	114	86	90	402
1900	79	72	68	64	283
2000	67	64	66	59	256
2100	55	67	57	44	223
2200	41	42	24	20	127
2300	23	21	9	15	68
24-HOUR TOTALS:					5155

PEAK VOLUME INFORMATION

	HOUR	VOLUME
A.M.	845	230
P.M.	1645	673
DAILY	1645	673

GENERATED BY SPS 5.0.45P

COUNTY: 93
STATION: 4083
DESCRIPTION: I-95 SB OFF RAMP TO SR 786/PGA BLVD
START DATE: 02/19/2013
START TIME: 0000

DIRECTION: S

TIME	1ST	2ND	3RD	4TH	TOTAL
0000	6	11	7	6	30
0100	1	7	2	1	11
0200	3	2	1	1	7
0300	4	2	4	5	15
0400	4	4	3	8	19
0500	13	16	19	36	84
0600	25	41	55	96	217
0700	89	162	219	252	722
0800	173	196	198	179	746
0900	159	149	116	95	519
1000	96	106	128	133	463
1100	104	98	104	97	403
1200	97	108	103	79	387
1300	99	117	102	106	424
1400	96	107	98	105	406
1500	94	85	108	107	394
1600	107	81	83	84	355
1700	98	115	100	116	429
1800	109	74	63	72	318
1900	55	47	44	47	193
2000	26	23	23	26	98
2100	22	18	28	18	86
2200	10	19	14	10	53
2300	7	8	12	2	29
24-HOUR TOTALS:					6408

PEAK VOLUME INFORMATION

	HOUR	VOLUME
A.M.	730	840
P.M.	1715	440
DAILY	730	840

GENERATED BY SPS 5.0.21

COUNTY: 93
STATION: 4084
DESCRIPTION: I-95 SB ON RAMP FROM EB SR 786/PGA BLVD
START DATE: 02/19/2013
START TIME: 0000

DIRECTION: S

TIME	1ST	2ND	3RD	4TH	TOTAL
0000	17	13	13	8	51
0100	4	15	11	1	31
0200	2	5	7	6	20
0300	4	4	4	9	21
0400	10	12	19	18	59
0500	14	32	45	44	135
0600	52	64	100	120	336
0700	150	181	218	240	789
0800	246	243	217	183	889
0900	172	166	175	161	674
1000	146	138	143	125	552
1100	152	144	162	177	635
1200	152	153	162	173	640
1300	157	171	151	170	649
1400	144	151	140	156	591
1500	162	124	182	158	626
1600	169	152	177	172	670
1700	213	252	309	227	1001
1800	202	160	131	120	613
1900	121	87	101	68	377
2000	94	58	61	63	276
2100	56	51	50	54	211
2200	74	47	42	37	200
2300	28	35	34	22	119
24-HOUR TOTALS:					10165

PEAK VOLUME INFORMATION

	HOUR	VOLUME
A.M.	730	947
P.M.	1700	1001
DAILY	1700	1001

GENERATED BY SPS 5.0.21

COUNTY: 93
STATION: 4085
DESCRIPTION: I-95 NB OFF RAMP TO DONALD ROSS RD
START DATE: 02/12/2013
START TIME: 1300

DIRECTION: N

TIME	1ST	2ND	3RD	4TH	TOTAL
0000	32	33	28	25	118
0100	13	13	15	9	50
0200	7	7	10	9	33
0300	11	7	5	6	29
0400	10	11	11	10	42
0500	11	12	27	36	86
0600	41	53	84	133	311
0700	138	214	266	256	874
0800	213	300	264	242	1019
0900	185	175	189	183	732
1000	165	145	167	179	656
1100	180	183	157	195	715
1200	173	166	172	165	676
1300	187	190	182	186	745
1400	175	203	214	253	845
1500	230	215	287	309	1041
1600	245	285	303	312	1145
1700	366	394	372	344	1476
1800	325	260	249	245	1079
1900	168	194	155	133	650
2000	120	137	128	132	517
2100	111	129	104	94	438
2200	77	60	67	69	273
2300	49	47	46	36	178
24-HOUR TOTALS:					13728

PEAK VOLUME INFORMATION

	HOUR	VOLUME
A.M.	730	1035
P.M.	1700	1476
DAILY	1700	1476

GENERATED BY SPS 5.0.21

COUNTY: 93
STATION: 4086
DESCRIPTION: I-95 NB ON RAMP FROM DONALD ROSS RD
START DATE: 02/13/2013
START TIME: 0900

DIRECTION: N

TIME	1ST	2ND	3RD	4TH	TOTAL
0000	10	13	4	2	29
0100	5	0	7	3	15
0200	1	3	1	5	10
0300	1	0	2	2	5
0400	2	4	3	7	16
0500	10	11	15	20	56
0600	31	34	56	54	175
0700	68	94	120	105	387
0800	108	91	91	71	361
0900	76	72	74	81	303
1000	72	81	77	68	298
1100	71	77	86	81	315
1200	81	92	70	99	342
1300	76	83	92	87	338
1400	94	123	92	115	424
1500	108	133	158	150	549
1600	150	176	172	161	659
1700	229	261	215	173	878
1800	157	106	119	87	469
1900	81	65	67	65	278
2000	37	51	41	35	164
2100	59	48	43	41	191
2200	32	26	22	16	96
2300	23	15	6	8	52
24-HOUR TOTALS:					6410

PEAK VOLUME INFORMATION

	HOUR	VOLUME
A.M.	715	427
P.M.	1700	878
DAILY	1700	878

GENERATED BY SPS 5.0.21

COUNTY: 93
STATION: 4087
DESCRIPTION: I-95 SB OFF RAMP TO DONALD ROSS RD
START DATE: 02/13/2013
START TIME: 0000

DIRECTION: S

TIME	1ST	2ND	3RD	4TH	TOTAL
0000	9	6	4	5	24
0100	5	5	5	0	15
0200	2	2	0	0	4
0300	8	1	0	2	11
0400	0	4	4	9	17
0500	10	15	19	27	71
0600	25	53	67	101	246
0700	137	158	166	221	682
0800	153	162	165	135	615
0900	106	96	81	65	348
1000	58	66	70	66	260
1100	82	73	60	58	273
1200	67	62	76	67	272
1300	62	81	80	77	300
1400	65	87	80	55	287
1500	73	85	83	79	320
1600	93	89	76	81	339
1700	82	86	92	86	346
1800	111	80	72	75	338
1900	65	50	40	49	204
2000	45	52	36	41	174
2100	33	33	26	23	115
2200	27	15	15	18	75
2300	15	13	6	8	42
24-HOUR TOTALS:					5378

PEAK VOLUME INFORMATION

	HOUR	VOLUME
A.M.	730	702
P.M.	1715	375
DAILY	730	702

GENERATED BY SPS 5.0.21

COUNTY: 93
STATION: 4088
DESCRIPTION: I-95 SB ON RAMP FROM DONALD ROSS RD
START DATE: 06/18/2013
START TIME: 0000

DIRECTION: S

TIME	1ST	2ND	3RD	4TH	TOTAL
0000	16	15	13	12	56
0100	6	4	9	12	31
0200	3	1	7	5	16
0300	5	2	9	4	20
0400	17	17	27	11	72
0500	23	32	49	66	170
0600	76	101	147	190	514
0700	195	252	316	362	1125
0800	348	317	338	306	1309
0900	219	179	176	187	761
1000	146	140	141	137	564
1100	143	148	153	177	621
1200	144	136	172	142	594
1300	141	158	153	126	578
1400	158	141	173	163	635
1500	132	150	200	158	640
1600	180	185	184	192	741
1700	194	258	253	213	918
1800	182	180	165	124	651
1900	116	82	81	76	355
2000	72	71	63	61	267
2100	57	74	57	57	245
2200	52	41	29	21	143
2300	28	26	24	8	86
24-HOUR TOTALS:					11112

PEAK VOLUME INFORMATION

	HOUR	VOLUME
A.M.	745	1365
P.M.	1700	918
DAILY	745	1365

GENERATED BY SPS 5.0.45P

COUNTY: 93
STATION: 4088
DESCRIPTION: I-95 SB ON RAMP FROM DONALD ROSS RD
START DATE: 06/18/2013
START TIME: 0000

DIRECTION: S

TIME	1ST	2ND	3RD	4TH	TOTAL
0000	16	15	13	12	56
0100	6	4	9	12	31
0200	3	1	7	5	16
0300	5	2	9	4	20
0400	17	17	27	11	72
0500	23	32	49	66	170
0600	76	101	147	190	514
0700	195	252	316	362	1125
0800	348	317	338	306	1309
0900	219	179	176	187	761
1000	146	140	141	137	564
1100	143	148	153	177	621
1200	144	136	172	142	594
1300	141	158	153	126	578
1400	158	141	173	163	635
1500	132	150	200	158	640
1600	180	185	184	192	741
1700	194	258	253	213	918
1800	182	180	165	124	651
1900	116	82	81	76	355
2000	72	71	63	61	267
2100	57	74	57	57	245
2200	52	41	29	21	143
2300	28	26	24	8	86
24-HOUR TOTALS:					11112

PEAK VOLUME INFORMATION

	HOUR	VOLUME
A.M.	745	1365
P.M.	1700	918
DAILY	745	1365

GENERATED BY SPS 5.0.45P

COUNTY: 93
STATION: 4096
DESCRIPTION: I-95 SB OFF RAMP TO MILITARY TRAIL
START DATE: 02/19/2013
START TIME: 0000

DIRECTION: S

TIME	1ST	2ND	3RD	4TH	TOTAL
0000	9	6	2	4	21
0100	1	6	1	3	11
0200	1	2	2	2	7
0300	4	2	2	2	10
0400	1	1	7	6	15
0500	4	5	15	15	39
0600	13	29	41	54	137
0700	43	68	102	117	330
0800	109	96	84	88	377
0900	58	47	49	78	232
1000	44	43	51	46	184
1100	40	40	44	56	180
1200	43	47	56	61	207
1300	39	36	62	52	189
1400	59	39	64	52	214
1500	44	59	46	51	200
1600	51	48	57	66	222
1700	68	74	72	75	289
1800	48	63	64	57	232
1900	34	41	23	30	128
2000	25	20	26	21	92
2100	31	18	20	24	93
2200	9	12	13	14	48
2300	6	7	11	5	29
24-HOUR TOTALS:					3486

PEAK VOLUME INFORMATION

	HOUR	VOLUME
A.M.	730	424
P.M.	1700	289
DAILY	730	424

GENERATED BY SPS 5.0.21

COUNTY: 93
STATION: 4581
DESCRIPTION: I-95 NB OFF RAMP TO WB SR 786/PGA BLVD
START DATE: 06/18/2013
START TIME: 0000

DIRECTION: N

TIME	1ST	2ND	3RD	4TH	TOTAL
0000	13	24	15	15	67
0100	18	10	3	9	40
0200	1	9	3	5	18
0300	1	4	3	6	14
0400	6	7	4	15	32
0500	3	16	23	37	79
0600	18	39	67	99	223
0700	84	111	131	196	522
0800	138	157	149	173	617
0900	126	140	93	127	486
1000	94	104	97	107	402
1100	100	95	107	122	424
1200	116	117	136	132	501
1300	129	113	101	112	455
1400	112	134	109	134	489
1500	129	143	143	126	541
1600	133	153	152	198	636
1700	195	226	202	192	815
1800	193	168	154	132	647
1900	123	116	90	88	417
2000	90	67	67	57	281
2100	49	65	55	51	220
2200	55	52	35	32	174
2300	30	32	17	24	103
24-HOUR TOTALS:					8203

PEAK VOLUME INFORMATION

	HOUR	VOLUME
A.M.	745	640
P.M.	1645	821
DAILY	1645	821

GENERATED BY SPS 5.0.45P

COUNTY: 93
STATION: 4584
DESCRIPTION: I-95 SB ON RAMP FROM WB SR 786/PGA BLVD
START DATE: 02/19/2013
START TIME: 0000

DIRECTION: S

TIME	1ST	2ND	3RD	4TH	TOTAL
0000	21	14	10	7	52
0100	4	9	1	7	21
0200	4	4	3	6	17
0300	6	2	6	4	18
0400	10	13	22	23	68
0500	25	28	35	38	126
0600	48	64	101	110	323
0700	139	148	191	208	686
0800	247	294	195	167	903
0900	158	139	134	138	569
1000	128	158	161	186	633
1100	177	179	162	161	679
1200	163	184	188	162	697
1300	194	165	161	189	709
1400	203	196	191	177	767
1500	219	212	214	212	857
1600	262	316	311	242	1131
1700	297	387	413	324	1421
1800	212	238	168	160	778
1900	166	134	123	101	524
2000	116	113	113	107	449
2100	123	109	88	84	404
2200	76	59	87	68	290
2300	46	37	33	30	146
24-HOUR TOTALS:					12268

PEAK VOLUME INFORMATION

	HOUR	VOLUME
A.M.	745	944
P.M.	1700	1421
DAILY	1700	1421

GENERATED BY SPS 5.0.45P

COUNTY: 93
STATION: 4594
DESCRIPTION: I-95 NB ON RAMP FROM EB MILITARY TRAIL
START DATE: 06/18/2013
START TIME: 0000

DIRECTION: N

TIME	1ST	2ND	3RD	4TH	TOTAL
0000	16	6	7	1	30
0100	2	0	3	1	6
0200	2	0	0	1	3
0300	0	2	1	1	4
0400	1	1	2	0	4
0500	3	2	6	6	17
0600	2	18	12	18	50
0700	22	26	23	30	101
0800	25	39	37	45	146
0900	28	38	36	42	144
1000	26	28	19	37	110
1100	29	36	39	35	139
1200	34	30	35	47	146
1300	27	44	32	43	146
1400	36	41	54	63	194
1500	49	37	38	60	184
1600	73	71	70	97	311
1700	127	134	114	130	505
1800	93	86	66	56	301
1900	42	40	45	45	172
2000	36	33	37	33	139
2100	18	30	25	20	93
2200	30	21	18	10	79
2300	11	8	11	11	41
24-HOUR TOTALS:					3065

PEAK VOLUME INFORMATION

	HOUR	VOLUME
A.M.	815	149
P.M.	1700	505
DAILY	1700	505

GENERATED BY SPS 5.0.45P

PALM BEACH COUNTY
TRAFFIC DIVISION
HISTORIC TRAFFIC GROWTH TABLE

CURRENT YEAR – 2013
(For use after June 1, 2013)

This document was developed as supporting data to be used in traffic impact studies seeking to demonstrate compliance with Article 12 of the Unified Land Development Code, the Traffic Performance Standards. This table shows historical peak season daily traffic counts from 2008 to 2013 as well as a calculated growth rate for each count station. A 3-year timeframe was used to calculate the growth rate shown.

For the purposes of this report, the default time frame should be 2010 – 2013. Where a growth trend other than a compounded rate appears to be appropriate for a given count station, this may be proposed and will be considered for use in a traffic impact study on a case-by-case basis.

Engineering judgment should be exercised in the use of the growth rates presented, particularly in the following cases:

1. Where negative growth rates were caused by opening parallel road facilities, construction activity, or other extraordinary circumstances.
2. Where extraordinarily high growth rates resulted from new road improvements, opening of a high traffic generator (e.g. a regional mall), or a low initial count.
3. For projects with a lengthy build out period (5 years or more), an area-wide growth rate may be considered per Article 12 of the ULDC.

UPDATED 12/2/2013

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Palm Beach County
2013 Historic Traffic Growth Table

STA	ROAD	FROM	TO	LANES	DAILY TRAFFIC VOLUMES					2013 DAILY			2013 AM PEAK HOUR			2013 PM PEAK HOUR		
					2008	2009	2010	2011	2012	DATE	VOL	GR	2-WAY	NB/EB	SB/WB	2-WAY	NB/EB	SB/WB
4677	2ND AVE NW	Lake Worth Rd	Congress Ave	2	5844	5636	5594	5610	5493	2/13/2013	6047	2.63%	415	260	171	533	240	308
4679	2ND AVE NW	Congress Ave	Boutwell Rd	2	4640	4329	4127	4268	4158	1/14/2013	4176	0.39%	316	196	123	448	209	250
6843	2ND ST	Boca Raton Blvd	NE 5th Ave	2	5878	5521	4993	4991	5376	1/23/2013	7037	12.12%	614	276	338	694	304	390
6890	4TH AVE (NW)	4 Diagonal NW	Palmetto Park Rd	2	6851	7477	8306	8597	9366	1/30/2013	11507	11.48%	1259	789	489	1057	406	685
6826	4TH AVE (NW)	Glades Rd	4 Diagonal NW	2	8055	8138	8558	8640	8728	1/23/2013	9065	1.94%	1016	682	334	851	370	496
6820	4TH AVE (NW)	20th St NW	Glades Rd	2	9148	9317	8853	8631	8769	3/20/2013	9817	3.51%	991	463	528	890	379	514
6842	4TH AVE (SW)	Palmetto Park Rd	Camino Real	2	5020	5284	6006	6270	5750	1/30/2013	4606	-8.47%	404	196	208	578	273	305
6894	5TH AVE NE	Federal Hwy	S of Federal Hwy	2	6034	5804	5971	6518	6575	1/23/2013	7001	5.45%	552	288	264	652	322	330
6892	5TH AVE NW	Spanish River Blvd	NW 20th St	2	6879	6537	6390	6665	7024	1/23/2013	7613	6.01%	970	504	469	636	350	286
4631	6TH AVE S	Congress Ave	Sunset Ave	4D	24681	26889	28972	26345	29595	1/16/2013	29188	0.25%	2482	1425	1057	2499	1063	1454
4205	6TH AVE S	Sunset Ave	I-95	4D	26665	32908	37165	34338	34273	3/11/2013	33837	-3.08%	2759	1452	1398	2844	1252	1697
4307	6TH AVE S	I-95	SR 805 (Dixie Hwy)	4D	21646	25776	26868	26405	26931	1/16/2013	27394	0.65%	1953	901	1117	2242	1255	1006
6902	7TH AVE (NW)	NW 12th Ave	NW 13th St	2	8315	7450	7424	8112	7866	3/20/2013	7672	1.10%	615	320	320	596	305	310
6840	9TH AVE (SW)	Palmetto Park Rd	SW 13th St	2	2664	2230	2232	2343	2108	1/16/2013	2062	-2.61%	308	207	101	195	92	103
6883	10TH AVE	Glades Rd	NW 15th St	2	7324	6880	6615	6153	8803	1/16/2013	9570	13.10%	825	533	357	930	481	456
4643	10TH AVE N	Jog Rd	Haverhill Rd	4D	15411	15331	14782	14139	13882	3/13/2013	14539	-0.55%	1084	509	576	1217	578	639
4601	10TH AVE N	Haverhill Rd	Military Tr	5	22360	25742	21819	21229	21682	3/13/2013	21808	-0.02%	1710	920	790	1732	768	964
4603	10TH AVE N	Military Tr	Kirk Rd	5	26933	26808	26022	25842	26602	2/13/2013	27381	1.71%	1660	928	732	2057	1001	1084

STA	ROAD	FROM	TO	LANES	DAILY TRAFFIC VOLUMES					2013 DAILY			2013 AM PEAK HOUR			2013 PM PEAK HOUR		
					2008	2009	2010	2011	2012	DATE	VOL	GR	2-WAY	NB/EB	SB/WB	2-WAY	NB/EB	SB/WB
4653	10TH AVE N	Kirk Rd	Congress Ave	5	31603	31001	30129	29690	31204	3/13/2013	31836	1.85%	1810	1225	632	2430	1005	1396
4203	10TH AVE N	Congress Ave	I-95	5	40102	40225	44530	41960	40405	1/14/2013	41274	-2.50%	3105	1653	1567	3184	1527	1686
4303	10TH AVE N	I-95	'A' St	5	30881	27000	30251	29966	30166	1/14/2013	31913	1.80%	2462	1107	1361	2627	1461	1171
4805	10TH AVE N	'A' St	US 1	5	21141		20149	19605	20450	1/14/2013	21429	2.07%	1629	782	847	1752	924	836
6896	12TH AVE	Camino Gardens Blvd	18th St SW	2	7005	7034	6776	6687	6911	1/16/2013	6633	-0.71%	637	406	252	669	256	414
6856	12TH AVE	Palmetto Park Rd	13th St SW	2	11426	10874	10606	11215	11278	1/16/2013	11659	3.21%	1014	688	337	1101	429	730
6830	12TH AVE	N of Palmetto Park Rd	Palmetto Park Rd	4	18333	18390	18175	18750	19832	1/16/2013	20740	4.50%	2008	1388	645	1899	705	1262
4309	12TH AVE S	'A' Ave	Lake Osborne Dr	2	6492	5767	6042	5672	5387	1/16/2013	5034	-5.90%	425	231	211	542	280	263
6829	13TH ST	Glades Rd	10th Ave NW	4D	14054	13217	12815	13599	13536	1/16/2013	13949	2.87%	1156	601	580	1199	647	557
6898	15TH AVE	Glades Rd	NW 7th St	2	13962	13599	13384	13425	12903	1/16/2013	15232	4.41%	1530	716	834	1402	920	592
4301	17TH AVE N	'A' Ave N	Pinetree Ln	2	1625	1732	1701	1578	1605	3/20/2013	1511	-3.87%	124	88	37	120	54	69
6885	19TH ST	Butts Rd	Military Tr	2	8850	9027	9291	9473	8441	1/16/2013	8217	-4.01%	701	349	361	742	412	362
6819	20TH ST	5th Ave NW	FAU	4D	5823	6065	6695	6723	8049	1/23/2013	8837	9.69%	673	357	438	758	458	351
6823	20TH ST	US 1	Old Dixie Hwy	4D	11522	11052	10865	11655	11793	1/23/2013	12134	3.75%	1007	533	474	1104	557	578
5621	23RD AVE	Military Tr	E Country Rd	2	11067	11051	11294	11246	11124	1/28/2013	10671	-1.87%	1060	685	375	918	403	530
5617	23RD AVE	E Country Rd	Congress Ave	2	13174	12869	13050	12459	12815	1/28/2013	12425	-1.62%	1169	799	394	1037	477	590
5603	23RD AVE	Congress Ave	I-95	2	13861	13416	13341	12719	12999	1/28/2013	12362	-2.51%	1202	662	540	1043	495	567
5305	23RD AVE	I-95	Seacrest Blvd	2	15144	14617	14506	14088	13957	1/28/2013	13204	-3.09%	1275	724	551	1112	478	663
5811	23RD AVE	Seacrest Blvd	US-1	2	8588	8359	8556	8358	7977	1/28/2013	7750	-3.24%	599	296	303	657	301	363
3201	45TH ST	Jog Rd	Haverhill Rd	2	4170	4736	4392			2/20/2013	3964	-3.36%	306	147	240	398	276	133
3607	45TH ST	Haverhill Rd	Military Tr	4D	27302	25805	24892	24316	24340	2/20/2013	25424	0.71%	2031	1231	810	2213	920	1293
3665	45TH ST	Military Tr	Village Blvd	6D	38572	38966	39096	39327	39910	2/20/2013	40806	1.44%	3251	2012	1239	3268	1346	1933

					DAILY TRAFFIC VOLUMES					2013 DAILY			2013 AM PEAK HOUR			2013 PM PEAK HOUR		
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3203	45TH ST	Village Blvd	I-95	6D	58700	52888	55134	58408	57832	2/20/2013	57066	1.15%	2622	2445	2179	4608	2243	2372
3301	45TH ST	I-95	Congress Ave	6D	54000	49970	53333	53760	56808	2/20/2013	57898	2.78%	4714	3002	1723	4513	1710	2853
3843	45TH ST	Congress Ave	Australian Ave	6D	44580	42442	42367	42493	43433	3/4/2013	44629	1.75%	3836	2398	1531	3541	1486	2060
3801	45TH ST	Australian Ave	Greenwood Ave	4D	29023	26116	25475	26669	25951	3/4/2013	25375	-0.13%	2030	1200	830	2158	898	1273
3845	45TH ST	Greenwood Ave	Broadway (WPB)	3	14498	13545	12717	13842	13833	3/4/2013	13609	2.29%	1138	649	489	1115	519	597
6314	A1A	Broward County Line	Camino Real	2	10924	10010	9357	9786	10030	1/23/2013	11884	8.30%	847	458	401	1049	476	574
6800	A1A	Camino Real	Palmetto Park Rd	2	12289	10432	10248	10780	11309	1/23/2013	11908	5.13%	793	467	398	1119	460	727
6816	A1A	Palmetto Park Rd	Spanish River Park Ent	2	12583	12769	10966	10596	12027	1/30/2013	11121	0.47%	843	462	421	1000	475	527
6316	A1A	Spanish River Blvd	Highland Beach	2	16797	16141	13625	14225	16158	2/11/2013	14824	2.85%	947	399	581	1244	609	659
6308	A1A	Highland Beach	Delray Beach	2	10698	11081	10009	9396	10741	2/11/2013	10590	1.90%	662	308	354	881	476	447
5836	A1A	Delray Beach	Linton Blvd	2	13667	13227	12573	11688	13470	2/11/2013	13215	1.67%	820	408	412	1066	575	517
5834	A1A	Linton Blvd	Atlantic Ave	2	9641	9475	8984	8942	10866	2/11/2013	10076	3.90%	554	273	293	864	450	414
5832	A1A	Atlantic Ave	Seaspray Ave	2	7143	10187	8117	9296	8056	2/11/2013	8766	2.60%	567	268	309	796	415	381
5814	A1A	Seaspray Ave	George Bush Blvd	2	6784	8483	7506	8046	7196	2/11/2013	7793	1.26%	566	198	381	718	306	436
5826	A1A	George Bush Blvd	Woolbright Rd	2	7846	9059	8717	8731	7927	2/11/2013	8654	-0.24%	637	305	335	778	407	379
5820	A1A	Woolbright Rd	Ocean Ave (Boynton)	2	6802	8856	7355	8005	7560	1/28/2013	8413	4.58%	580	284	319	728	400	328
4302	A1A	Phipps Ocean Park Ent	Sloans Curve	2	9702	8925	9051	9291	8269	1/14/2013	6754	-9.30%	379	256	123	637	256	391
2801	A1A	US 1	S Harbor Dr	4D	18297	16162	14700	14500		1/14/2013	17837	6.66%	1097	553	544	1540	755	785
2846	A1A	S Harbor Dr	Bimini Ln	2	13008	12335	10085	8900		1/14/2013	11579	4.71%	689	315	374	952	450	502
2809	A1A	Lost Tree Village	US 1	2	15414	11200	16729	15364		2/6/2013	15727	-2.04%	1033	544	489	1294	600	703
1314	A1A	Donald Ross Rd	Marcinski Rd	2	5229	4788	5466	5151	4716	2/6/2013	5807	2.04%	379	193	194	559	338	231
1818	A1A	Marcinski Rd	Ocean Way	2				6255	6006	3/20/2013	6071		327	154	183	519	286	234

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1812	A1A	Ocean Way	Indiantown Rd	2	8778	8129	7801	8378	7665	3/20/2013	7653	-0.64%	427	187	240	643	330	313
1804	A1A	Indiantown Rd	US 1	2	9526	9588	10087	10215	10289	3/20/2013	10707	2.01%	538	252	286	970	515	460
1809	A1A	US 1	Jupiter Inlet Colony	2	6852	6484	6920	7254	7632	3/18/2013	6545	-1.84%	443	238	214	580	239	354
1306	A1A	Jupiter Inlet Colony	Martin County Line	2	2376	2912	2341	2463	2384	3/18/2013	1927	-6.28%	159	128	32	185	80	107
6880	AIRPORT RD	Glades Rd	Spanish River Blvd	2	7857	8517	8060	8400	8507	1/16/2013	8906	3.38%	637	367	281	851	422	448
5403	ATLANTIC AVE	SR 7	Lyons Rd	2	13141	12486	13478	13386	13689	1/14/2013	14334	2.07%	1311	818	510	1141	493	701
5101	ATLANTIC AVE	Lyons Rd	Turnpike	4D	18237	16651	18619	18258	19944	2/20/2013	22421	6.39%	1696	907	860	1862	966	944
5209	ATLANTIC AVE	Turnpike	Hagen Ranch Rd	4D	29887	28613	32206	29915	31738	3/12/2013	35338	3.14%	3211	1905	1358	3071	1400	1725
5643	ATLANTIC AVE	Hagen Ranch Rd	Jog Rd	4D	27872	30750	32777	31934	31684	3/12/2013	30335	-2.55%	2592	1708	884	2645	1128	1514
5631	ATLANTIC AVE	Jog Rd	El Clair Ranch Rd	6D	36188	31204	33426	33388	34221	3/13/2013	37261	3.69%	2496	1534	965	3033	1404	1673
5637	ATLANTIC AVE	El Clair Ranch Rd	Military Tr	6D	39604	35596	40649	37316	38241	3/12/2013	39328	-1.10%	2654	1518	1176	2959	1450	1533
5609	ATLANTIC AVE	Military Tr	Barwick Rd	6D	41694	42901	43812	36336	39485	3/12/2013	42193	-1.25%	2923	1445	1478	3182	1593	1600
5659	ATLANTIC AVE	Barwick Rd	Congress Ave	6D	37935	38140	40012	39380	40089	3/12/2013	41097	0.90%	2868	1577	1310	3008	1492	1574
5211	ATLANTIC AVE	Congress Ave	I-95	6D	44724	43881	44769	46345	45755	3/13/2013	46908	1.57%	3170	1517	1704	3437	1838	1602
5309	ATLANTIC AVE	I-95	8th Ave SW	4D	38825	37389	34662	39184	41848	3/13/2013	44994	9.09%	3065	1684	1381	3313	1683	1677
5815	ATLANTIC AVE	8th Ave SW	Swinton Ave	4D	23964	22814	23780	24664	26620	3/18/2013	25113	1.83%	1624	824	819	1826	870	962
5817	ATLANTIC AVE	Swinton Ave	US-1	2	11580	13072	13213	12082	13046	3/18/2013	12458	-1.94%	671	355	316	887	413	482
5805	ATLANTIC AVE	US-1	A1A	4	14362	14943	15267	14259	14515	3/18/2013	14231	-2.32%	713	384	343	1128	521	607
3658	AUSTRALIAN AVE	Southern Blvd	PBIA (Turnage Blvd)	6D	39193	35051	34200	31869	31298	1/30/2013	30977	-3.25%	3010	2224	786	3005	1060	1990
3610	AUSTRALIAN AVE	PBIA (Turnage Blvd)	Belvedere Rd	6D	37730	34365	30963	30453	29429	1/22/2013	30141	-0.89%	3194	2419	775	3038	1067	1981
3309	AUSTRALIAN AVE	Belvedere Rd	Okeechobee Bl	4D	31435		25329	21016	22910	1/30/2013	23586	-2.35%	2294	1593	726	2330	859	1471
3850	AUSTRALIAN AVE	Okeechobee Bl	Banyan Blvd	6D	37832	36200	33311	31273	30704	3/18/2013	30332	-3.07%	3048	2109	943	3163	892	2280

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3924	AUSTRALIAN AVE	Banyan Blvd	Palm Beach Lakes Blvd	4D	29608	26569	23928	23845	21012	3/18/2013	19886	-5.98%	1780	947	833	1819	765	1054
3816	AUSTRALIAN AVE	15th St	25th St	4D	30160	29213	22669	27388	23120	3/4/2013	22644	-0.04%	1847	985	862	1997	889	1108
3810	AUSTRALIAN AVE	25th St	36th St	4D	26491	26626	23739	21107	20412	3/4/2013	21027	-3.96%	1651	825	843	1866	901	967
3802	AUSTRALIAN AVE	36th St	45th St	4D	27490	21850	24411	22209	21657	3/4/2013	20942	-4.98%	1626	855	773	1879	959	920
2306	AUSTRALIAN AVE	45th St	Port Rd (SR 710)	4D	20269	19390	17287	15780	15520	3/4/2013	16173	-2.20%	1134	564	570	1481	833	648
2834	AUSTRALIAN AVE	Port Rd (SR 710)	Blue Heron Blvd	4D	14188	14507	12805	11495	11948	2/20/2013	13205	1.03%	989	452	561	1171	727	446
7027	AVE 'E'	SR 715	Main St	4	9242	8235	8345	7304	7920	2/4/2013	7384	-4.00%	425	217	215	684	383	305
5628	BARWICK RD	Lake Ida Rd	Atlantic Ave	2	11132	10809	10212	9866	10122	3/12/2013	10278	0.21%	804	269	535	882	499	383
1101	BEELINE HWY	Martin County Line	Indiantown Rd	2	8164	6823	7411	7663	6454	1/28/2013	7631	0.98%	602	395	243	526	229	306
1401	BEELINE HWY	Indiantown Rd	Pratt-Whitney Rd	2	6539	5272	6109	5638		1/28/2013	6036	-0.40%	456	293	181	415	173	246
1411	BEELINE HWY	Pratt-Whitney Rd	Caloosa	4D				11787	11965	1/28/2013	12690		1271	594	693	955	599	356
2109	BEELINE HWY	Caloosa	N County Airport	4D				10561	12341	1/28/2013	12904		1112	470	668	995	619	394
2101	BEELINE HWY	N County Airport	PGA Blvd	4D	13385	12476	12585	12945	13132	1/28/2013	13392	2.09%	1148	467	702	1056	644	412
2403	BEELINE HWY	PGA Blvd	Northlake Blvd	4D	11494	10481	10561	9295	10558	1/28/2013	11899	4.06%	1002	418	615	911	597	323
2419	BEELINE HWY	Northlake Blvd	Jog Rd	4D	24572	23808	22948	23845		2/20/2013	26204	4.52%	2578	1749	904	2288	890	1421
3427	BELVEDERE RD	SR 7	Sansbury's Way	6D	23535	22204	21895	20094	19688	1/14/2013	18148	-6.06%	1566	974	662	1692	681	1020
3425	BELVEDERE RD	Sansbury's Way	Skees Rd	6D	29657	26483	24314	22387	21569	1/14/2013	20206	-5.98%	1778	1044	741	1863	883	990
3211	BELVEDERE RD	Skees Rd	Jog Rd	6D	30130	30073	26517	23936	22603	1/14/2013	22051	-5.96%	1796	966	848	2084	972	1119
3679	BELVEDERE RD	Jog Rd	Drexel Rd	4D	29298	26165	24847	21699	22015	1/16/2013	19655	-7.52%	1468	767	701	1850	814	1046
3609	BELVEDERE RD	Drexel Rd	Haverhill Rd	4D	32730	28360	25737	21972	23313	3/18/2013	22257	-4.73%	1709	1115	594	2224	799	1437
3645	BELVEDERE RD	Haverhill Rd	Military Tr	4D	31526	27449	26071	23549	22282	3/18/2013	21660	-5.99%	1734	1199	535	2068	758	1332
3623	BELVEDERE RD	Military Tr	Congress Ave	6D	30094	27184	24665	22181	22969	2/5/2013	21152	-4.99%	1615	1131	527	1886	648	1239

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3605	BELVEDERE RD	Congress Ave	Australian Ave	6D	41671	36772	32739	30986	32334	1/30/2013	29855	-3.03%	2147	1277	942	2606	1292	1322
3213	BELVEDERE RD	Australian Ave	I-95	6D	36558	34305	33640	29243	30168	1/22/2013	28874	-4.96%	2368	1435	976	2512	1246	1266
3311	BELVEDERE RD	I-95	Parker Ave	4D	29229	27495	26896	25311	26343	1/22/2013	25373	-1.92%	2360	1470	890	2316	956	1370
3821	BELVEDERE RD	Parker Ave	Dixie Hwy	4D	17788	17052	16040	15658	16458	3/4/2013	15308	-1.54%	1289	867	425	1417	531	911
3416	BENOIST FARMS RD	Southern Blvd	Belvedere Rd	2	4900	3979	4547	4509	4912	1/14/2013	4321	-1.69%	331	190	141	344	151	196
3456	BENOIST FARMS RD	Belvedere Rd	Okeechobee Bl	2	4425	4474	4685	5149	5531	1/14/2013	5782	7.26%	552	307	245	413	209	218
3422	BIG BLUE TRACE	Wellington Trace	Southern Blvd	2	11216	11521	11579	12014	11407	2/27/2013	13708	5.79%	1157	676	487	1323	315	1034
3436	BINKS FOREST DR	Greenview Shores Bl	Southern Blvd	4D	8620	9067	8336	9186	9114	2/27/2013	9589	4.78%	1019	661	371	792	418	434
2601	BLUE HERON BLVD	Bee Line Hwy	Military Tr	4D	17743	17042	18029	19533	18506	1/9/2013	19138	2.01%	1479	808	743	1644	697	962
2211	BLUE HERON BLVD	Military Tr	I-95	6D	33600	30838	33088	34093	32622	1/9/2013	34552	1.45%	2798	1440	1374	2716	1273	1512
2311	BLUE HERON BLVD	I-95	Congress Ave	6D	41889	42353	51117	44710	46320	1/9/2013	45943	-3.49%	3467	1928	1565	3607	1434	2191
2607	BLUE HERON BLVD	Congress Ave	Australian Ave	6D	33234	32599	34095	33656	32149	1/9/2013	34684	0.57%	2543	1517	1004	2688	1119	1572
2823	BLUE HERON BLVD	Australian Ave	Old Dixie Hwy	6D	32600	27437	29652	28888	27686	1/9/2013	29124	-0.60%	2064	1100	965	2316	1053	1263
2811	BLUE HERON BLVD	Old Dixie Hwy	US 1	5	18912	18446	20196		19045	1/9/2013	20141	-0.09%	1273	719	554	1517	729	819
6832	BOCA RATON BLVD	Palmetto Park Rd	Glades Rd	4D	9817	8600	8494	8691	9070	1/23/2013	9283	3.01%	763	522	396	816	377	488
6822	BOCA RATON BLVD	Glades Rd	20th St NW	4D	18495	16764	15939	16453	18188	1/23/2013	19055	6.13%	1452	757	713	1840	693	1167
6818	BOCA RATON BLVD	20th St NW	28th St NW	5	17676	17102	16509	16936	17356	1/23/2013	18121	3.15%	1417	696	741	1818	878	976
6886	BOCA RATON BLVD	28th St NW	Yamato Rd	4D	27493	21594	17861	17851	17927	1/30/2013	19032	2.14%	1409	685	743	1816	908	908
6884	BOCA RATON BLVD	Yamato Rd	Clint Moore Rd	2	18009	15521	16732	18211	18144	1/30/2013	17224	0.97%	1451	556	924	1720	893	827
6882	BOCA RATON BLVD	Clint Moore Rd	Hidden Valley Blvd	2	12736	11200	11454	11579	12939	1/30/2013	13687	6.12%	1415	659	763	1308	422	403
6302	BOCA RATON BLVD	Hidden Valley Blvd	C-15 Canal	2	4419	3611	3804	3853	3729	1/9/2013	3756	-0.42%	327	151	179	383	236	147
6418	BOCA RIO RD	SW 18th St	Palmetto Park Rd	2	11957	11424	12511	12148	11607	1/28/2013	11678	-2.27%	1147	672	475	1166	489	688

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6408	BOCA RIO RD	Palmetto Park Rd	Glades Rd	2	15590	15879	16883	15974	16046	2/4/2013	15563	-2.68%	1215	759	487	1516	725	791
4676	BOUTWELL RD	2nd Ave N	10th Av N	2	9146	8667	8559	8936	8854	1/14/2013	9404	3.19%	772	474	322	882	323	594
5401	BOYNTON BEACH BLVD	SR 7	Lyons Rd	4D	14959	14486	13721	15557	15683	2/25/2013	15744	4.69%	1341	733	608	1272	693	596
5103	BOYNTON BEACH BLVD	Lyons Rd	Turnpike	6D	33054	30775	33023	32221	35566	2/25/2013	37336	4.18%	3192	2115	1077	2950	1337	1659
5201	BOYNTON BEACH BLVD	Turnpike	Hagen Ranch Rd	6D	48083	41146	42542	44754	42696	2/25/2013	45665	2.39%	3975	1967	2043	4082	2194	1911
5641	BOYNTON BEACH BLVD	Hagen Ranch Rd	Jog Rd	6D	39741	39417	37786	40740	39112	2/27/2013	41599	3.26%	3604	1823	1797	3312	1844	1468
5633	BOYNTON BEACH BLVD	Jog Rd	El Clair Ranch Rd	6D	43836	40378	37450	38744	37714	2/27/2013	36849	-0.54%	3066	1377	1689	2436	1560	913
5611	BOYNTON BEACH BLVD	El Clair Ranch Rd	Military Tr	6D	44434	42158	45940		42882	2/27/2013	43958	-1.46%	3503	1695	1808	3359	1661	1720
5613	BOYNTON BEACH BLVD	Military Tr	Lawrence Rd	6D	38797	40010	42179	37263	37081	2/27/2013	37686	-3.68%	2922	1441	1481	2877	1489	1388
5601	BOYNTON BEACH BLVD	Lawrence Rd	Congress Ave	6D	41961	41248	41780	42769	40860	2/6/2013	43122	1.06%	2658	1573	1085	3556	1641	1922
5615	BOYNTON BEACH BLVD	Congress Ave	Old Boynton Rd	6D	33632	42221	43209	36990	34814	2/6/2013	32870	-8.71%	2010	1123	922	2676	1216	1468
5203	BOYNTON BEACH BLVD	Old Boynton Rd	I-95	6D	46289	44649	47361	48953	48488	2/6/2013	48886	1.06%	3251	1875	1376	3811	1554	2397
5301	BOYNTON BEACH BLVD	I-95	Seacrest Blvd	5	34414	31074	31740	33392	32367	2/6/2013	33915	2.23%	2303	1234	1069	2672	1336	1371
6906	BROWARD AVE/NW 10T	Glades Rd	Loop Rd	4D	21855			23751	24619	3/20/2013	20041		1616	1223	823	1685	813	1128
2305	BURNS RD	SR 811	Military Tr	4D	18833	20546	18214	17507	17164	1/22/2013	17294	-1.71%	1500	852	659	1597	806	791
2835	BURNS RD	Sandalwood Ct	SR-811	4D	18213	19061	18244	18324	17514	1/22/2013	17657	-1.08%	1667	910	757	1488	684	811
2839	BURNS RD	Prosperity Farms Rd	Sandalwood Cir	4D	9134	9913	8918	9119		1/22/2013	8709	-0.79%	717	293	437	793	361	432
6638	BUTTS RD	Glades Rd	Town Center Rd	2	9976	11287	10859	11286	11486	1/16/2013	11929	3.18%	1050	449	601	1092	614	596
6627	BUTTS RD	Military Tr	Glades Rd	2	9192	9025	8743	9058	9749	1/16/2013	9796	3.86%	878	449	446	1037	533	504
6422	CAIN BLVD	W Kimberly Blvd	Glades Rd	2	15276	15645	15633	15551	14911	1/8/2013	15173	-0.99%	1279	599	704	1421	764	695
6426	CAIN BLVD	Yamato Rd	W Kimberly Blvd	2	9207	9200	9253	9388	9089	1/8/2013	9235	-0.06%	821	449	393	1008	442	585
6839	CAMINO GARDENS BLV	SW 9th Ave	SW 2nd Ave	2	3944	3990	3819	4136	3815	1/16/2013	3720	-0.87%	247	180	122	421	172	249

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6619	CAMINO REAL	Powerline Rd	Camino del Mar	4D	11936	10888	10288	10425	10514	1/28/2013	10595	0.98%	1111	743	394	1064	391	683
6636	CAMINO REAL	Camino del Mar	Military Tr	4D	14032	13033	12674	12171	12638	1/9/2013	12642	-0.08%	1419	1116	342	1364	421	943
6311	CAMINO REAL	Military Tr	12th Ave SW	4D	16200	14909	14853	14656	14774	1/30/2013	15048	0.44%	1483	943	579	1549	586	1025
6849	CAMINO REAL	12th Ave SW	3rd Ave SW	4D	13636	13265	13312	12627	12218	1/23/2013	12921	-0.99%	1134	760	411	1276	473	818
6853	CAMINO REAL	3rd Ave SW	Old Dixie Hwy	4D	23539	21492	22924	22508	21434	1/16/2013	21135	-2.67%	1507	903	694	1974	965	1011
6855	CAMINO REAL	Old Dixie Hwy	US 1	4D	16634	15771	15158	15807	15383	1/16/2013	15196	0.08%	1327	905	494	1443	624	827
6857	CAMINO REAL	US 1	ICWW Bridge	4D	15455	13051	14055	13865	12761	1/23/2013	12893	-2.84%	996	536	466	1071	600	479
6859	CAMINO REAL	ICWW Bridge	A1A	2	8704	7249	8875	8546	8451	1/23/2013	8487	-1.48%	688	332	374	762	379	395
1603	CENTER ST	Indiantown Rd	Loxahatchee River Rd	2	14225	13526	14538	13924	13303	4/2/2013	15174	1.44%	1163	464	755	1413	751	662
1803	CENTER ST	Loxahatchee River Rd	Alt. A1A	2	14550	14221	14949	16042	15323	2/13/2013	16011	2.31%	1094	583	523	1510	697	830
2608	CENTRAL BLVD	PGA Blvd	Hood Rd	4D	15148	13716	14338	14670	14674	1/30/2013	14149	-0.44%	1842	915	927	1328	638	798
2210	CENTRAL BLVD	Hood Rd	Donald Ross Rd	4D	14915	15484	16373	15804	16277	2/20/2013	14298	-4.42%	1372	607	774	1332	681	691
1206	CENTRAL BLVD	Donald Ross Rd	Frederick Small Rd	4D	14916	12968	16682	17484	17394	2/20/2013	16224	-0.92%	1267	644	639	1488	859	649
1614	CENTRAL BLVD	Frederick Small Rd	Indian Creek Pkwy	4D	11751	11659	12750	12883	12866	3/11/2013	13326	1.48%	1177	465	712	1285	794	491
1606	CENTRAL BLVD	Indian Creek Pkwy	Indiantown Rd	4D	24771	25732	26285	26700	25899	2/11/2013	27405	1.40%	2202	1162	1094	2478	1413	1072
1612	CENTRAL BLVD	Indiantown Rd	Church St	2	13488	15475	13034	12298	12186	2/11/2013	15390	5.69%	1367	459	925	1455	925	542
6403	CLINT MOORE RD	SR 7	Lyons Rd	4D	17776	17077	15148	16434	16170	1/14/2013	15851	1.52%	1590	1178	412	1616	517	1124
6201	CLINT MOORE RD	Lyons Rd	Jog Rd	4D	23135	23127	21525	21580	21205	1/16/2013	21585	0.09%	2165	1576	589	2201	634	1599
6607	CLINT MOORE RD	Jog Rd	Military Tr	4D	29256	30380	28767	29341	29293	2/20/2013	29676	1.04%	2751	1936	898	2984	1005	1979
6601	CLINT MOORE RD	Military Tr	Congress Ave	6D	29954	29021	29298	29325	29418	1/9/2013	28210	-1.25%	2749	1524	1225	3120	1492	1628
6301	CLINT MOORE RD	Congress Ave	NW 2nd Ave	4D	11623	10609	10637	10168	11053	1/9/2013	10694	0.18%	1040	520	644	1231	813	443
2104	COCONUT BLVD	Persimmon Bl	Orange Bl	2	3127	2828	2791	2612	2676	2/13/2013	2859	0.81%	249	181	73	276	108	173

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2412	COCONUT BLVD	Orange Bl	Temple Blvd	2	10855	10833	10796	10743	10689	2/13/2013	11194	1.21%	1089	741	351	1059	435	639
2404	COCONUT BLVD	Temple Blvd	Northlake Blvd	2	12013	12001	11665	11384	11472	2/13/2013	11788	0.35%	1244	1018	231	1145	325	820
3641	COMMUNITY DR	Haverhill Rd	Military Tr	5	15196	15146	15110	13919	13633	2/11/2013	12988	-4.92%	905	533	372	1218	505	719
3659	COMMUNITY DR	Military Tr	Village Blvd	3	16815	15844	15076	15336	15004	2/11/2013	14785	-0.65%	1112	731	391	1296	605	704
6614	CONGRESS AVE	Yamato Rd	Clint Moore Rd	6D	26604	25673	25740	25421	27879	1/30/2013	29036	4.10%	2664	1677	1042	2542	1126	1508
6644	CONGRESS AVE	Clint Moore Rd	NW 82nd St	6D	29019	29017	28300	27996	28821	1/30/2013	28327	0.03%	2931	961	2192	3566	2623	1065
5650	CONGRESS AVE	Linton Blvd	Lowson Blvd	6D	25042	23615	23248	22101	22152	2/20/2013	22308	-1.37%	1722	584	1150	2041	1164	905
5612	CONGRESS AVE	Lowson Blvd	Atlantic Ave	6D	27585	26784	26151	26608	25777	2/20/2013	24345	-2.36%	1927	638	1316	2300	1448	891
5630	CONGRESS AVE	Atlantic Ave	Lake Ida Rd	6D	35964	33871	32658	30873	31758	2/20/2013	32430	-0.23%	2528	976	1558	2727	1536	1191
5602	CONGRESS AVE	Lake Ida Rd	35th Ave SW	6D	34011	30173	29740	28472	27878	2/20/2013	27264	-2.86%	2054	706	1377	2375	1393	990
5626	CONGRESS AVE	35th Ave SW	Golf Rd	6D	36282	35693	34332	33607	32595	1/28/2013	32933	-1.38%	2667	984	1683	2837	1770	1083
5624	CONGRESS AVE	Golf Rd	Woolbright Rd	6D	41639	37816	35627	36962	36178	1/28/2013	34227	-1.33%	2573	1037	1582	2934	1782	1167
5610	CONGRESS AVE	Woolbright Rd	Boynton Beach Blvd	6D	34736	32932	32543	33402	31803	2/6/2013	31226	-1.37%	1830	748	1120	2610	1560	1111
5658	CONGRESS AVE	Boynton Beach Blvd	Old Boynton Rd	6D	41512	47482	47139	43496	38580	2/27/2013	39094	-6.05%	2488	842	1658	3032	1898	1252
5206	CONGRESS AVE	Old Boynton Rd	Gateway Blvd	6D	38078	38655	36788	41846	43421	2/27/2013	38728	1.73%	2740	1876	878	3002	1189	1828
4610	CONGRESS AVE	Gateway Blvd	Hypoluxo Rd	6D	31949	29927	28826	32551	28605	3/11/2013	27877	-1.11%	1853	1065	846	2408	1311	1101
4600	CONGRESS AVE	Hypoluxo Rd	Lantana Rd	4D	26474	25174	25175	26016	23402	3/16/2013	23464	-2.32%	1631	921	737	2004	1047	968
4624	CONGRESS AVE	Lantana Rd	JFK Dr	6D	36252	34314	31730			1/16/2013	31708	-0.02%	2388	1022	1366	2593	1417	1178
4626	CONGRESS AVE	JFK Dr	6th Ave S	6D	38123	36467	33615	35309		1/16/2013	34916	1.27%	2715	1225	1527	2800	1583	1217
4622	CONGRESS AVE	6th Ave S	Lake Worth Rd	6D	40749	38208	35682	36067	35684	1/14/2013	35938	0.24%	2508	1007	1527	2979	1637	1401
4620	CONGRESS AVE	Lake Worth Rd	French Ave	6D	43159	40608	36622	38798	35376	1/14/2013	34031	-2.42%	2398	1032	1372	2817	1456	1361
4604	CONGRESS AVE	French Ave	10th Ave N	6D	43037	40478	39769	38759	38801	3/13/2013	39201	-0.48%	2670	1160	1510	3176	1698	1509

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4210	CONGRESS AVE	10th Ave N	Forest Hill Blvd	6D	47384	43312	36680	34771	35341	3/20/2013	34116	-2.39%	2669	1327	1366	2869	1357	1567
3644	CONGRESS AVE	Forest Hill Blvd	Summit Blvd	6D	36998	31605	29709	28223	27749	3/20/2013	26780	-3.40%	2279	1225	1054	2384	1217	1172
3674	CONGRESS AVE	Summit Blvd	Gun Club Rd	6D	45438	35860	34458	32801	32276	1/9/2013	31798	-2.64%	2931	1758	1180	2973	1224	1749
3618	CONGRESS AVE	Gun Club Rd	Southern Blvd	6D	43850	37022	34224	32312	32219	1/22/2013	32070	-2.14%	3052	1671	1381	3221	1349	1933
3668	CONGRESS AVE	Turnage Blvd (PBIA)	Belvedere Rd	2	6761	5276	5625	5292	5080	1/22/2013	5147	-2.92%	224	96	128	435	207	228
3606	CONGRESS AVE	Belvedere Rd	Okeechobee Blvd	4D	21968	19335	16624	17000	15424	1/22/2013	13978	-5.61%	921	432	490	1294	595	707
3305	CONGRESS AVE	Okeechobee Blvd	Palm Beach Lakes Blvd	4D	25300		16832	16446	15895	2/5/2013	16175	-1.32%	1168	551	617	1419	630	821
3930	CONGRESS AVE	Palm Beach Lakes Blvd	Presidential Way	5	26498	22063	18035	16459	16908	2/5/2013	15575	-4.77%	1268	523	745	1440	746	721
3928	CONGRESS AVE	Presidential Way	45th St	5	24585	21424	17424	15610	16227	3/4/2013	15622	-3.57%	1283	600	683	1559	811	748
2308	CONGRESS AVE	45th St	MLK Blvd	6D	35903	27238	25403	24360	25893	3/4/2013	23241	-2.92%	1797	880	1001	2048	1070	998
2618	CONGRESS AVE	MLK Blvd	Blue Heron Blvd	4D	23589	21211	18586	19112	18097	2/20/2013	17541	-1.91%	1170	548	633	1573	843	736
2622	CONGRESS AVE	Blue Heron Blvd	Silverbeach Rd	4D	23652	22881		20763	19469	1/9/2013	21667		1425	634	808	1841	1060	783
2620	CONGRESS AVE	Silverbeach Rd	Northlake Blvd	4D	27966	26028	24047	24148	22100	1/14/2013	23181	-1.22%	1208	558	658	1962	1067	906
7011	CR-717	State Market Rd SR-729	SR-700, US-98	2	3787	3489		2230	2391	2/4/2013	2249		181	96	95	223	91	144
7024	CR-880	Duda Rd	MLK Bl	2	6407	5625	5588	4941	4837	2/6/2013	4755	-5.24%	387	291	186	476	189	296
7001	CR-880	Airport Rd	SR-80	2	3403	3163	3037	3188	2517	2/4/2013	1645	-18.48%	137	57	88	136	105	33
4641	CRESTHAVEN BLVD	Jog Rd	Sherwood Forest Blvd	2	7668	7671	8125	8128	8063	3/18/2013	7809	-1.31%	554	200	354	631	375	267
4635	CRESTHAVEN BLVD	Haverhill Rd	Military Tr	2	8083	7614	7357	7318	7376	3/13/2013	7687	1.47%	583	427	156	624	286	344
3428	CRESTWOOD BLVD	Southern Blvd	Folsom Rd	6D	27710	25869	28340	24289	24213	2/20/2013	24702	-4.48%	1955	718	1237	2203	1308	936
3440	CRESTWOOD BLVD	Folsom Rd	Okeechobee Bl	4D	21014	17862	17994	16799	16946	2/27/2013	17641	-0.66%	1476	614	862	1596	851	745
3464	CRESTWOOD BLVD	Okeechobee Bl	Royal Palm Beach Bl	4D	16054	14894	14955	14700	14717	2/27/2013	14737	-0.49%	1431	409	1073	1315	849	492
4820	DIXIE HWY	6th Ave S	Lake/Lucerne	4	20603	18631	18135	17643	17905	1/14/2013	17243	-1.67%	1012	527	490	1443	717	737

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4800	DIXIE HWY	Lake/Lucerne	10th Ave N	4	21393	19571	19180	18350	19294	1/14/2013	19248	0.12%	1111	541	577	1592	868	734
4822	DIXIE HWY	10th Ave N	17th Ave N	4	21591	20502	19740	18411	19285	1/14/2013	17887	-3.23%	1105	551	569	1530	726	804
3866	DIXIE HWY	Monroe Dr	Belvedere Rd	4	20470	19028	18337	17482	17866	1/30/2013	17638	-1.29%	1285	703	585	1495	586	933
3862	DIXIE HWY	Belvedere Rd	Okeechobee/Lakeview	4	18431	16816	18100	20468	17165	3/4/2013	16559	-2.92%	1203	764	457	1457	570	921
3846	DIXIE HWY	Okeechobee/Lakeview	Banyan Blvd	2	6956	6675	10862	7263	7457	3/4/2013	6905	-14.02%	364		364	713		713
3834	DIXIE HWY	Banyan Blvd	Loftin St	4	8718	8196	9409	9981	8926	3/4/2013	7814	-6.00%	695	124	571	750	203	547
3828	DIXIE HWY	Loftin St	Palm Beach Lakes Blvd	4D	20055	18927	20272	22256	21076	3/4/2013	18945	-2.23%	1598	494	1149	1551	828	754
1105	DONALD ROSS RD	Jog Rd	I-95 Interchange	4D	13210	11838	12542	13576	13458	2/20/2013	13861	3.39%	1104	781	360	1194	512	705
1219	DONALD ROSS RD	I-95	Parkside Dr	6D	33649		31621	33657	33399	2/20/2013	34814	3.26%	3174	1789	1405	3316	1682	1694
1205	DONALD ROSS RD	Parkside Dr	Central Blvd	6D	30167	27880	29532	30143	29446	2/20/2013	30002	0.53%	2586	1708	896	2866	1296	1570
1211	DONALD ROSS RD	Central Blvd	SR 811	6D	30812	27796	29830	31365	28277	2/25/2013	28240	-1.81%	2397	1488	909	2487	1011	1476
1805	DONALD ROSS RD	SR 811	Prosperity Farms Rd	6D	27737	24917	27372	28320	27167	2/25/2013	27767	0.48%	2411	1437	998	2412	928	1484
1801	DONALD ROSS RD	Prosperity Farms Rd	Ellison-Wilson Rd	4D	28187	25070	26081	28716	27083	2/26/2013	27540	1.83%	2310	1445	940	2632	1000	1632
3638	DREXEL RD	Okeechobee Bl	Belvedere Rd	2	10005	10138	10286	10209	10005	3/19/2013	9975	-1.02%	805	453	352	856	410	459
5634	EL CLAIR RANCH RD	Lake Ida Rd	W Atlantic Ave	2	6299	5458	5120	4983	5364	3/4/2013	5295	1.13%	346	104	242	451	291	175
5636	EL CLAIR RANCH RD	Woolbright Rd	Piper's Glen Blvd	2	7694	7611	7414	7808	7801	2/27/2013	6963	-2.07%	426	204	222	544	288	269
5632	EL CLAIR RANCH RD	Boynton Beach Blvd	Woolbright Rd	2	5814	5344	5359	5174	5189	2/27/2013	5206	-0.96%	395	159	236	485	251	236
2844	ELLISON-WILSON RD	PGA Blvd	Universe Blvd	2	10228	10580	13804		10648	4/3/2013	10891	-7.60%	1089	641	471	1014	358	672
2304	ELLISON-WILSON RD	Universe Blvd	Donald Ross Rd	2	5883	5752	5669	6163	5853	1/10/2013	6237	3.23%	659	216	448	669	423	257
3661	ELMHURST RD	Haverhill Rd	Military Tr	2	8891	7657	7776	7443	7452	4/2/2013	8752	4.02%	608	190	417	746	433	318
6850	FAU BLVD	Glades Rd	20th St NW	4D	10418			12712	13817	1/16/2013	14081		1200	975	584	1312	562	810
6876	FAU BLVD	20th St NW	Spanish River Blvd	2	11970		13691	14222	14739	1/30/2013	13472	-0.54%	1277	540	1047	1183	762	531

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6312	FEDERAL HWY	PBC / Broward County Lin	SW 18th St	6D	30538	27310	26591	26555	29521	1/16/2013	32426	6.84%	2545	1620	1043	3003	1236	1783
6828	FEDERAL HWY	SW 18th St	Camino Real	6D	26625	25107	24981	25353	27938	2/5/2013	25795	1.07%	1939	1156	784	2522	1181	1366
6810	FEDERAL HWY	Camino Real	Palmetto Park Rd	4D	27819	24940	26191	26902	28093	2/5/2013	23957	-2.93%	1540	825	715	2281	948	1340
6806	FEDERAL HWY	Mizner Blvd	Glades Rd	6D	32836	30739	30930	33748	31085	1/23/2013	32108	1.25%	2365	1076	1336	2671	1205	1531
6804	FEDERAL HWY	Glades Rd	20th St NW	4D	32836	29950	29852	31627	31874	1/23/2013	30694	0.93%	2394	1166	1228	2520	1305	1245
6814	FEDERAL HWY	20th St NW	Spanish River Blvd	4D	32335	28499	29347	31886	31326	2/5/2013	33024	4.01%	2358	835	1523	2844	1365	1497
6802	FEDERAL HWY	Spanish River Blvd	Yamato Rd	4D	31603	29239	29825	29814	31853	1/30/2013	32480	2.88%	2425	1164	1390	2706	1441	1270
6858	FEDERAL HWY	Yamato Rd	Newcastle St	4D	28620	26347	29210	26914	28443	1/30/2013	28995	-0.25%	2055	1053	1326	2548	1477	1079
6306	FEDERAL HWY	Hidden Valley Blvd	Lindell Blvd	4D	27289	23702	24382	26027		1/30/2013	26441	2.74%	1958	967	1267	2448	1473	1012
5840	FEDERAL HWY	Lindell Blvd	Linton Blvd	4D	32764	28892	30628	29129	31604	2/25/2013	30209	-0.46%	2250	796	1454	2520	1435	1095
5838	FEDERAL HWY	Linton Blvd	Lowson Blvd	4D	32143	29539	30247	28947	31281	2/25/2013	30686	0.48%	2074	763	1311	2551	1363	1229
5822	FEDERAL HWY	Woolbright Rd	S of Woolbright Rd	4D	27430	25168	25066	26719	26488	1/28/2013	26912	2.40%	2070	710	1386	2300	1257	1043
5818	FEDERAL HWY	Ocean Ave	Woolbright Rd	4D	23821	22057	21400	21655	21775	1/28/2013	19573	-2.93%	1416	482	951	1721	975	756
4826	FEDERAL HWY	Gateway Blvd	Miner Rd	4D	16863	15929	15024	14932	15123	3/11/2013	15232	0.46%	1053	361	692	1390	810	580
4818	FEDERAL HWY	E Ocean Ave	Hypoluxo Rd	5	20990	20139	19099	18766	18001	1/16/2013	15343	-7.04%	1066	443	623	1339	720	658
4804	FEDERAL HWY	Dixie/Federal Jct	Lantana Rd	4	22524	20873	20546	19722	19862	1/16/2013	20549	0.00%	1326	598	744	1831	887	989
4802	FEDERAL HWY	6th Ave N	Lucerne Ave	2	11579	10034	9925	9671	9579	1/14/2013	11126	3.88%	759	384	391	1008	546	487
5663	FLAVOR PICT RD	Hagen Ranch Rd	Jog Rd	2	4439	5009	5343	6206	5942	3/5/2013	6490	6.70%	464	300	164	565	258	330
5654	FLAVOR PICT RD	Jog Rd	Military Tr	2	6743	6800	6947	6699	6600	3/5/2013	7252	1.44%	537	324	213	674	306	368
4212	FLORIDA MANGO RD	10th Ave N	Forest Hill Blvd	2	12600	10364	10014	9777	10100	3/20/2013	10066	0.17%	851	533	326	936	429	517
3646	FLORIDA MANGO RD	Forest Hill Blvd	Summit Blvd	2	7226	6214	6565	6190	6315	1/9/2013	6098	-2.43%	709	384	325	574	263	311
3670	FLORIDA MANGO RD	James L Turnage Blvd	Belvedere Rd	2	7669	6990	8254	7111	7793	1/22/2013	7017	-5.27%	323	206	117	538	324	214

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3438	FOLSOM RD	Crestwood Blvd	Okeechobee Bl	2	4972	4844	4492	4536	4659	2/20/2013	4944	3.25%	449	154	297	446	253	203
3402	FOREST HILL BLVD	Southern Blvd	Wellington Trace	6D	36700	35937	34180	34168	34067	3/11/2013	35910	1.66%	2863	1712	1167	3191	1414	1782
3430	FOREST HILL BLVD	Wellington Trc	South Shore Blvd	4D	33705	31073	28360	28305	27994	3/11/2013	28996	0.74%	2148	834	1314	2503	1306	1197
3407	FOREST HILL BLVD	South Shore Blvd	SR 7	6D	50665	45284	45720	44102	44786	3/12/2013	48508	1.99%	3816	2502	1339	4053	1876	2241
3423	FOREST HILL BLVD	SR-7	Lyons Rd	6D	40058	39656	34174	35938	35067	3/12/2013	37330	2.99%	2665	1370	1295	3192	1615	1578
3221	FOREST HILL BLVD	Lyons Rd	Pinehurst Dr	6D	39146	34643	34503	33657	32245	1/16/2013	35709	1.15%	2742	1405	1395	3157	1629	1604
3666	FOREST HILL BLVD	Pinehurst Dr	Jog Rd	6D	42575	37473	40490	36894	38115	1/16/2013	37757	-2.30%	2892	1526	1456	3403	1643	1760
3636	FOREST HILL BLVD	Jog Rd	Sherwood Forest Blvd	6D	41611	37052	38014	40138	38999	1/16/2013	38590	0.50%	2885	1508	1382	3231	1713	1522
3667	FOREST HILL BLVD	Sherwood Forest Blvd	Haverhill Rd	6D	41458	36486	39543	40157	40456	3/13/2013	40153	0.51%	2901	1792	1122	3149	1492	1664
3625	FOREST HILL BLVD	Haverhill Rd	Military Tr	6D	44050	41594	40932	43311	40933	3/13/2013	43400	1.97%	3229	2141	1123	3282	1488	1817
3627	FOREST HILL BLVD	Military Tr	Kirk Rd	6D	44576	41041	47216	41634	42241	3/13/2013	42265	-3.63%	3006	1815	1209	3209	1446	1765
3629	FOREST HILL BLVD	Kirk Rd	Congress Ave	6D	43168	40810	46688	41312	40654	3/20/2013	42153	-3.35%	3181	2014	1236	3342	1526	1869
3219	FOREST HILL BLVD	Congress Ave	I-95	6D	40778	37410	43416	39722	42491	3/20/2013	42204	-0.94%	3470	2220	1336	3535	1551	2003
3317	FOREST HILL BLVD	I-95	Parker Ave	5	29551	26600	26498	23204	26412	3/20/2013	26868	0.46%	2316	1240	1086	2227	1104	1125
3831	FOREST HILL BLVD	Parker Ave	Dixie Hwy	5	18044	18916	17470	16365	18298	3/20/2013	18115	1.22%	1345	677	668	1479	698	802
3841	FOREST HILL BLVD	Dixie Hwy	Olive Ave	5	5716	5122	5100	4596	4666	3/20/2013	5006	-0.62%	438	240	215	449	223	226
1217	FREDERICK SMALL RD	Military Tr	Central Blvd	4D	7884	7658	8223	9080	8452	3/11/2013	8410	0.75%	845	565	309	897	495	402
1215	FREDERICK SMALL RD	Alt A1A	Military Tr	2	9319	9390	9622	9891	9634	3/11/2013	9294	-1.15%	867	526	370	831	472	394
4663	GATEWAY BLVD	Hagen Ranch Rd	Jog Rd	2	6156	6114	6040	6081	6192	2/27/2013	5991	-0.27%	459	252	207	516	242	293
4659	GATEWAY BLVD	Jog Rd	Military Tr	4D	17900	16862	16243	17298	16733	3/11/2013	17117	1.76%	1276	825	509	1527	660	867
4649	GATEWAY BLVD	Military Tr	Lawrence Rd	6D	23363	22461	22097	23952	23754	4/3/2013	23252	1.71%	1821	886	967	2054	1113	966
4625	GATEWAY BLVD	Lawrence Rd	Congress Ave	6D	28441	28545	28728	30344	30956	3/11/2013	31021	2.59%	2242	1502	796	2623	1168	1455

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4667	GATEWAY BLVD	Congress Ave	High Ridge Rd	6D	34700	36880	34623	36880	38292	3/11/2013	38048	3.19%	2990	1748	1242	3190	1278	1973
4213	GATEWAY BLVD	High Ridge Rd	I-95	6D	44374	45377	43387	43926	43826	4/2/2013	46593	2.40%	3653	2129	1588	3650	1673	1997
4315	GATEWAY BLVD	I-95	Seacrest Blvd	6D	25000	25334	24970	24940	25335	2/27/2013	24946	-0.03%	2196	1240	956	1794	1097	704
5803	GEORGE BUSH BLVD	SR A1A	US-1	2	6771	7070	6955	6319	7150	2/11/2013	7020	0.31%	526	287	261	617	287	330
6429	GLADES RD	Palmetto Park Rd	Cain Blvd	4D	6942	7997	7000	7952	6734	1/8/2013	7632	2.92%	1061	518	543	637	355	380
6411	GLADES RD	Cain Blvd	SR-7	4D	28301	31968	28405	28104	26443	1/8/2013	29220	0.95%	2300	1482	731	2739	1318	1421
6415	GLADES RD	SR-7	Lyons Rd	6D	43073	41975	39924	39059	39649	2/6/2013	39719	-0.17%	2322	1468	864	3264	1454	1813
6413	GLADES RD	Lyons Rd	Boca Rio Rd	6D	46955	44954	46740	43525	41413	2/4/2013	41602	-3.81%	2806	1817	998	3324	1505	1821
6101	GLADES RD	Boca Rio Rd	Turnpike Entrance	6D	53285	51345	49860	50001	51145	2/4/2013	47712	-1.46%	3156	1952	1234	3797	1705	2092
6205	GLADES RD	Turnpike Entrance	Jog/Powerline Rd	6D	55626	55501	57111	51915	58051	2/4/2013	57983	0.51%	4715	3290	1464	4982	1931	3122
6615	GLADES RD	Jog/Powerline Rd	St. Andrews Blvd	6D	53681	50226	52005	51325	52054	2/4/2013	51554	-0.29%	3892	2729	1218	4267	1627	2648
6207	GLADES RD	St. Andrews Blvd	I-95	6D	67394	65410	68346	67794	67983	2/4/2013	63311	-2.52%	4035	2351	1752	5019	2463	2570
6307	GLADES RD	I-95	Perimeter Rd	6D	76538	68245	73921	69419	72385	1/16/2013	75291	0.61%	5298	3487	2811	5893	2671	2910
6821	GLADES RD	Perimeter Rd	FAU Entrance(10th Ave N	6D	62438	61289	61909	61703	60558	2/4/2013	59069	-1.55%	3706	2505	1229	4286	1923	2506
6831	GLADES RD	FAU Entrance(10th Ave N	Boca Raton Blvd	6D	40779	39903	40520	38944	38849	2/5/2013	38995	-1.27%	2569	1102	1473	3185	1742	1509
6833	GLADES RD	Boca Raton Blvd	Old Dixie Hwy	6D	27876	27275	30826	30914	30503	1/23/2013	29810	-1.11%	2187	1109	1087	2467	1374	1204
6837	GLADES RD	Old Dixie Hwy	US-1 (Federal Hwy)	6D	20801	20323	18587	20149	20950	1/23/2013	20249	2.90%	1602	884	718	1678	893	801
3432	GREENVIEW SHORES	Wellington Trc	South Shore Blvd	4D	18400	16823	16060	17959	17404	2/27/2013	18882	5.54%	1943	912	1049	1631	894	737
3649	GUN CLUB RD	Jog Rd	Haverhill Rd	2	5438	4642	4227	4077	3875	3/18/2013	3776	-3.69%	342	192	161	419	196	223
3651	GUN CLUB RD	Haverhill Rd	Military Tr	5	15663	11248	11857	10467	9838	1/22/2013	10083	-5.26%	846	608	255	1057	312	752
3653	GUN CLUB RD	Military Tr	Kirk Rd	5	14401	12023	10704	11700	10390	1/22/2013	10250	-1.43%	915	584	334	1043	362	685
3655	GUN CLUB RD	Kirk Rd	Congress Ave	5	14400	12395	11374	11413	10567	1/22/2013	10903	-1.40%	1041	472	582	1179	538	680

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5604	HAGEN RANCH RD	W Atlantic Ave	Lake Ida Rd	4D	16292	16588	18059	16100	16704	2/27/2013	15678	-4.60%	1067	342	780	1192	665	529
5646	HAGEN RANCH RD	Lake Ida Rd	Pipers Glen Blvd	4D	15388	13990	13249	13789	14194	2/27/2013	13404	0.39%	908	290	640	1024	576	448
5600	HAGEN RANCH RD	Pipers Glen Blvd	Boynton Beach Blvd	4D	20297	19573	18471	20324	19028	2/27/2013	19180	1.26%	1377	613	779	1546	992	594
5214	HAGEN RANCH RD	Boynton Beach Blvd	Gateway Blvd	2	10107	9931	9078	9981	9968	2/27/2013	9783	2.52%	886	216	685	931	652	299
4666	HAGEN RANCH RD	Gateway Blvd	Hypoluxo Rd	2	11619	10781	10728	10287	10813	2/25/2013	10286	-1.39%	1037	474	609	922	549	392
4668	HAGEN RANCH RD	Hypoluxo Rd	Lantana Rd	2	13216	12549	10361	9783	9755	3/13/2013	9788	-1.88%	908	563	364	901	497	443
4674	HAVERHILL RD	Hypoluxo Rd	Lantana Rd	2	11063	10827	10669	10015	9385	3/11/2013	10265	-1.28%	910	317	599	907	554	371
4672	HAVERHILL RD	Lantana Rd	Melaleuca Ln	2	13779	14063	13530	13418	12681	3/13/2013	13314	-0.54%	1463	730	733	1144	550	611
4646	HAVERHILL RD	Melaleuca Ln	Lake Worth Rd	2	13092	12536	12027	12868	12300	3/13/2013	12531	1.38%	943	492	460	1142	588	570
4638	HAVERHILL RD	Lake Worth Rd	10th Ave N	5	21409	18531	18363	15892	16707	3/13/2013	15967	-4.55%	1097	466	651	1400	771	629
4656	HAVERHILL RD	10th Ave N	Cresthaven Blvd	5	19119	20128	19560	19650	19864	3/13/2013	20660	1.84%	1677	865	821	1724	875	873
4642	HAVERHILL RD	Cresthaven Blvd	Purdy Ln	5	22523	24814	20299	20069	21156	3/13/2013	20569	0.44%	1795	844	951	1754	852	913
3640	HAVERHILL RD	Forest Hill Blvd	Summit Blvd	5	26049	25396	24605	23568	25206	3/13/2013	25573	1.29%	2040	1129	911	2239	1043	1208
3634	HAVERHILL RD	Summit Blvd	Southern Blvd	5	26700	21849	21199	22156	21282	3/18/2013	21075	-0.20%	1661	922	751	1995	844	1167
3608	HAVERHILL RD	Southern Blvd	Belvedere Rd	5	23698	21940	20031	18654	20557	3/18/2013	20571	0.89%	1449	763	709	1936	922	1017
3604	HAVERHILL RD	Belvedere Rd	Okeechobee Blvd	5	22549	21984	20120	19388	20793	3/18/2013	19241	-1.48%	1437	765	672	1799	791	1018
3600	HAVERHILL RD	Okeechobee Blvd	Community Dr	5	27623	27706	26156	26575	25165	2/11/2013	22595	-4.76%	1645	1059	629	1871	1181	724
3672	HAVERHILL RD	Community Dr	Roebuck Rd	5	25878	24308	22464	22088	20948	3/18/2013	19200	-5.10%	1482	783	699	1628	778	868
3622	HAVERHILL RD	Roebuck Rd	45th St	5	32616	31900	26397	25719	25896	3/4/2013	24592	-2.33%	2046	1252	764	2194	879	1340
3202	HAVERHILL RD	45th St	Beeline Hwy	2	15359	13303	14297	14655	12707	3/4/2013	13335	-2.30%	1033	563	496	1154	540	637
6861	HIDDEN VALLEY BLVD	Boca Raton Blvd	Old Dixie Hwy	4D	6583	6838	6526	7093	6660	1/30/2013	6119	-2.12%	556	284	272	601	349	275
4648	HIGH RIDGE RD	Gateway Blvd	Hypoluxo Rd	2	5749	5159	5322	6494	6529	3/11/2013	6335	5.98%	775	359	424	632	338	302

APPENDIX AN - FDOT & PBC TRAFFIC COUNTS

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2307	HOLLY DR	Military Tr	SR 811	2	6938	6754		6554	5848	1/16/2013	6572		801	341	469	651	331	320
2105	HOOD RD	Jog Road	Central Blvd	2	5831	6576	8114	7906	7427	2/26/2013	7751	-1.51%	781	498	283	621	259	368
2611	HOOD RD	Central Blvd	Military Tr	4D	10000	10013	10307	10520	10409	3/11/2013	10676	1.18%	1067	626	441	904	446	497
2213	HOOD RD	Military Tr	SR 811	4D	12208	11781	12005	13757	13898	2/26/2013	14255	5.89%	1175	779	449	1276	620	675
2613	HOOD RD	SR-811	Prosperity Farms Rd	2	5211	5200		5855	5306	2/26/2013	5512		412	156	282	435	240	234
4411	HYPOLUXO RD	SR-7	Lyons Rd	4D	3240	2993	6281	7848	8768	2/25/2013	9276	13.88%	705	290	442	859	500	363
4683	HYPOLUXO RD	Lyons Rd	Fl Turnpike	4D		4843	10207	13998	14385	2/25/2013	15248	14.32%	1148	490	665	1397	771	643
4685	HYPOLUXO RD	Fl Turnpike	Hagen Ranch Rd	4D		9846	16460	20563	20525	2/25/2013	21075	8.59%	1769	1167	663	1871	814	1058
4671	HYPOLUXO RD	Hagen Ranch Rd	Jog Rd	4D	16318	13437	20001	21263	22547	2/25/2013	23608	5.68%	2265	1432	833	2095	937	1162
4629	HYPOLUXO RD	Jog Rd	Haverhill Rd	6D	24190	23541		23922	26501	2/25/2013	27476		2445	1397	1082	2458	1142	1338
4681	HYPOLUXO RD	Haverhill Rd	Military Tr	6D	32468	32276	32830	32482	33129	3/11/2013	35378	2.52%	2966	1988	994	3096	1337	1759
4607	HYPOLUXO RD	Military Tr	Lawrence Rd	6D	38875	37919	38269	38274	39743	3/11/2013	39679	1.21%	3148	1302	1846	3406	1870	1555
4621	HYPOLUXO RD	Lawrence Rd	Congress Ave	6D	39228	37518	37042	38060	35898	3/11/2013	36229	-0.74%	2948	1885	1129	3166	1321	1845
4211	HYPOLUXO RD	Congress Ave	I-95	6D	37014	39526	38668	38228	40619	3/11/2013	40517	1.57%	3288	2179	1109	3545	1394	2235
4313	HYPOLUXO RD	I-95	Seacrest Blvd	5	32403	32753	32118	32547	32336	3/11/2013	31273	-0.88%	2070	933	1159	2533	1382	1175
4809	HYPOLUXO RD	Seacrest Blvd	Dixie Hwy	5	19565	21081	16135	15933	15913	3/11/2013	13959	-4.71%	825	386	439	1219	565	654
1605	INDIAN CREEK BLVD	Central Blvd	Military Tr	4D	11026	10411	11279	11880	12162	3/13/2013	11887	1.77%	1110	738	379	1023	412	635
1615	INDIAN CREEK BLVD	Toney Penna Dr	Maplewood Dr	4D	15381	18968	20300	20605	20027	3/11/2013	20153	-0.24%	1852	1084	789	1878	813	1072
1613	INDIAN CREEK PKWY	Central Blvd	Maplewood Dr	4D	17998	15881	17333	17130	15975	3/11/2013	16911	-0.82%	1525	946	583	1553	627	926
1405	INDIANTOWN RD	Bee Line Hwy	Pratt-Whitney Rd	2	1880	1555	1588	1688	2948	1/28/2013	1754	3.37%	170	121	80	141	69	78
1403	INDIANTOWN RD	Pratt-Whitney Rd	130th Ave N	2	4670	4650	4678	4674	4930	2/11/2013	4748	0.50%	497	157	364	406	287	137
1409	INDIANTOWN RD	130th Ave N	Alexander Run	4D				12691	12915	4/2/2013	12940		1203	797	456	1164	496	680

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1407	INDIANTOWN RD	Alexander Run	Jupiter Farms Rd	4D	22499	21075	20546	20428	21607	2/11/2013	21311	1.23%	2027	1400	657	1847	731	1130
1103	INDIANTOWN RD	Jupiter Farms Rd	Florida Turnpike	4D	30267	28740	30304	29617	29029	2/11/2013	28738	-1.75%	2729	1979	809	2588	943	1667
1213	INDIANTOWN RD	I-95 Interchange	Island Way	6D	54992	51717	52916	49165	57719	2/11/2013	57817	3.00%	5332	2849	2483	5107	2722	2486
1617	INDIANTOWN RD	Island Way	Central Blvd	6D						2/11/2013	54116		4764	2572	2192	4806	2241	2565
1203	INDIANTOWN RD	Central Blvd	Center St	6D	49375	45981	47768	46551	48214	2/13/2013	53037	3.55%	3905	2379	1526	4299	2142	2157
1601	INDIANTOWN RD	Center St	Military Tr	6D	43149	41819	44078	44864	41919	3/13/2013	45165	0.82%	2808	1774	1066	3758	1725	2052
1209	INDIANTOWN RD	Military Tr	SR 811	6D	37422	38130	40387	39935	39078	3/13/2013	41726	1.09%	2523	1588	935	3433	1826	1626
1807	INDIANTOWN RD	SR 811	US 1	6D	28665	29992	31607	30400	29823	3/18/2013	28524	-3.36%	1854	1146	708	2336	1209	1266
1811	INDIANTOWN RD	US 1	SR A1A	4	12436	15198	15450	15869	15851	3/18/2013	15678	0.49%	910	543	367	1345	697	650
2215	INVESTMENT LN	Military Tr	Garden Rd	2	9163	8967	8299	8321	7657	1/16/2013	7610	-2.85%	591	361	243	803	321	498
1620	ISLAND WAY	Indiantown Rd	Church St	4D	7166	6725	8279		8310	2/11/2013	11066	10.16%	1087	311	808	955	613	367
6618	JOG RD	Glades Rd	Potomac Rd	4D	33023	28999	27978	28529	29255	1/22/2013	28482	0.60%	2428	1337	1091	2522	1193	1329
6634	JOG RD	Potomac Rd	Yamato Rd	4D	29898	29208	27992	27622	27910	1/22/2013	28166	0.21%	2343	1127	1255	2597	1338	1280
6616	JOG RD	Yamato Rd	Clint Moore Rd	6D	31831	29956	28584	30110	29679	1/22/2013	30287	1.95%	2357	971	1386	2644	1443	1222
6200	JOG RD	Clint Moore Rd	C-15 Canal	6D	34886	32843	31497	32042	32568	1/22/2013	33680	2.26%	3054	1346	1921	2965	1696	1292
5622	JOG RD	C-15 Canal	Linton Blvd	6D	32041	31699	29888	30738	30662	1/22/2013	31536	1.81%	2847	1125	1783	2757	1633	1148
5620	JOG RD	Linton Blvd	Normandy Ln	6D	33623	37628	33935	34484	35191	1/22/2013	35794	1.79%	2985	881	2115	2926	1863	1100
5616	JOG RD	Normandy Ln	Atlantic Ave	6D	38131	37161	36423	37190	37222	1/22/2013	37238	0.74%	3071	933	2138	3068	1958	1185
5642	JOG RD	Atlantic Ave	Lake Ida Rd	6D	27471	27645	28947	28502	29646	1/22/2013	30024	1.23%	2293	654	1642	2422	1583	875
5648	JOG RD	Lake Ida Rd	Flavor Pict Rd	6D	25016	24652	23771	24961	24821	3/5/2013	25870	2.86%	2172	620	1552	2072	1325	798
5656	JOG RD	Flavor Pict Rd	Pipers Glen Blvd	6D	24234	24635	23642	25815	24138	2/27/2013	26239	3.54%	2397	656	1764	2164	1557	697
5640	JOG RD	Pipers Glen Blvd	Woolbright Rd	6D	25226	23745	23794	26784	25474	2/27/2013	24061	0.37%	2362	435	1942	1666	1003	799

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5644	JOG RD	Woolbright Rd	Boynton Beach Blvd	6D	29145	28773	28059	30197	28083	2/27/2013	29877	2.11%	2766	793	2001	2543	1745	920
5200	JOG RD	Boynton Beach Blvd	Gateway Blvd	6D	31971	32772	32795	32794	33055	2/27/2013	31876	-0.94%	3042	893	2155	2562	1961	632
4660	JOG RD	Gateway Blvd	Le Chalet Blvd	6D	39339	34958	34962	35878	35829	2/27/2013	36143	1.11%	3373	1125	2294	3065	1919	1239
4640	JOG RD	Le Chalet Blvd	Hypoluxo Rd	6D	39900	36508	36577	37323	37382	2/25/2013	38143	1.41%	3291	1370	1989	3264	1761	1535
4670	JOG RD	Hypoluxo Rd	Winston Trails Bl	6D	35927	33794	33040	33094	32889	2/25/2013	32739	-0.30%	2687	1122	1565	2710	1482	1228
4628	JOG RD	Winston Trails Bl	Lantana Rd	6D	39123	35325	35196	34216	35545	2/25/2013	34926	-0.26%	2748	1227	1521	2987	1541	1458
4612	JOG RD	Lantana Rd	Melaleuca Ln	6D	39081	37167	36287	36992	38331	1/22/2013	34331	-1.83%	2481	1173	1317	3067	1521	1546
4634	JOG RD	Melaleuca Ln	Lake Worth Rd	6D	44400	42719	41001	42629	42186	1/22/2013	39442	-1.28%	2804	1434	1373	3456	1775	1681
4616	JOG RD	Lake Worth Rd	10th Ave N	6D	37253	36429	35671	36814	36807	1/22/2013	35055	-0.58%	2433	1050	1383	3010	1611	1420
4204	JOG RD	10th Ave N	Forest Hill Blvd	6D	45796	43204	41352	42607	41586	1/16/2013	40658	-0.56%	2955	1759	1226	3579	1744	1835
3650	JOG RD	Forest Hill Blvd	Summit Blvd	6D	41295	38999	40108	38945	38696	1/22/2013	37895	-1.87%	3395	1956	1467	3401	1391	2010
3624	JOG RD	Summit Blvd	Southern Blvd	6D	37771	35571	36794	33871	33512	1/22/2013	34122	-2.48%	2853	1850	1039	3095	1239	1856
3654	JOG RD	Southern Blvd	Belvedere Rd	6D	35535	31922	31251	30531	32983	1/22/2013	29868	-1.50%	2682	1527	1155	2729	1325	1404
3220	JOG RD	Belvedere Rd	Turnpike Int	6D	28135	26306	24994	25296	26193	1/22/2013	23499	-2.03%	1958	1139	827	2094	1005	1089
3104	JOG RD	Turnpike Int	Okeechobee Blvd	6D	28974	27675	27438	26211	26486	1/22/2013	26696	-0.91%	2389	1353	1044	2331	1198	1154
3458	JOG RD	Okeechobee Bl	Roebuck Rd	4D	25618	25514	24731	22803	24296	1/22/2013	25613	1.17%	2219	1136	1083	2325	977	1388
2414	JOG RD	45th St	Beeline Hwy	2	5497	4740	5060	4809	4812	2/20/2013	5742	4.30%	447	202	273	557	340	217
2416	JOG RD	Beeline Hwy	Turnpike Int	2	13364	11933	11310	13387	13382	3/4/2013	14123	7.68%	1546	682	884	1281	740	541
2107	JOG RD	PGA Bl	Hood Rd	2			9290	9257	9172	2/20/2013	7140	-8.40%	744	269	475	670	400	278
2106	JOG RD	Hood Rd	Donald Ross Rd	2			1774	2706	3035	2/20/2013	3111	20.59%	393	166	231	313	176	138
1404	JUPITER FARMS RD	Indiantown Rd	South of Indiantown Rd	2	11164	10456	10079	10368	9960	2/11/2013	10369	0.95%	872	682	223	1022	319	703
6435	KIMBERLY BLVD	Coral Ridge Dr	Cain Blvd	2	4052	4527	4158	4299	3926	1/8/2013	3806	-2.91%	570	291	296	320	169	162

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6417	KIMBERLY BLVD	SR-7	Lyons Rd	4D	6429	6500	6423	6433	6054	1/14/2013	6057	-1.94%	382	205	181	503	256	256
4652	KIRK RD	Melaleuca Ln	Lake Worth Rd	2	7820	6933	7111	6665	7008	2/13/2013	6886	-1.07%	421	241	180	655	293	377
4630	KIRK RD	Lake Worth Rd	10th Ave N	2	9059	8329	8099	7618	7762	2/13/2013	8858	3.03%	631	248	383	805	411	394
4664	KIRK RD	10th Ave N	Purdy Ln	2	12160	11999	11348	11345	11914	3/13/2013	12297	2.71%	901	384	517	1084	565	532
4208	KIRK RD	Purdy Ln	Forest Hill Blvd	5	16166	16081	16626	15383	15300	3/13/2013	15964	-1.35%	1216	806	424	1420	609	811
3656	KIRK RD	Forest Hill Blvd	Summit Blvd	2	10128	9818	9724	9307	9452	1/9/2013	9348	-1.31%	783	422	384	921	422	505
3662	KIRK RD	Summit Blvd	Gun Club Rd	2	9055	9052	9663	9400	9825	1/9/2013	9277	-1.35%	876	450	469	887	458	432
3614	KIRK RD	Gun Club Rd	Southern Blvd	4D	6084	7428	8443	9728	10231	1/22/2013	9866	5.33%	973	518	460	996	571	440
2617	KYOTO GARDENS DR	Military Tr	Alt A1A/SR 811	4D					7650	3/4/2013	7677		497	326	174	920	293	647
2843	KYOTO GARDENS DR	Alt A1A/SR 811	Lake Victoria Gardens Ave	2					5805	3/4/2013	5747		295	216	83	560	219	345
5649	LAKE IDA RD	Hagen Ranch Rd	Jog Rd	2	8224	8252	7591	7608	8099	3/6/2013	7974	1.65%	528	278	250	683	305	417
5653	LAKE IDA RD	Jog Rd	El Clair Ranch Rd	2	11020	10888	10168	10463	10261	3/4/2013	10354	0.61%	721	342	379	932	430	504
5651	LAKE IDA RD	El Clair Ranch Rd	Military Tr	2	11639	12352	11590	10730	10496	3/5/2013	11164	-1.24%	756	401	355	981	494	492
5623	LAKE IDA RD	Military Tr	Barwick Rd	4D	20480	19675	18255	18159	18474	4/2/2013	17741	-0.95%	1373	715	658	1497	787	710
5605	LAKE IDA RD	Barwick Rd	Congress Ave	4D	26935	29382	27179	26590	25346	4/2/2013	26863	-0.39%	2151	1335	816	2309	1032	1277
5307	LAKE IDA RD	Congress Ave	Swinton Ave	4D	18144	21665	21306	19039	18714	3/4/2013	18919	-3.88%	17410	1020	718	1790	805	997
3445	LAKE WORTH RD	South Shore Blvd	120th Av	2	13575	11971	12544		11702	2/25/2013	11928	-1.66%	984	569	435	1018	463	568
4409	LAKE WORTH RD	120th Av	Isles Bl	4D	16390	14481	15106	14905	14438	2/25/2013	14670	-0.97%	1156	622	534	1350	561	856
4407	LAKE WORTH RD	Isles Bl	SR-7	4D	27150	26443	24753	27291	25757	2/25/2013	26599	2.43%	2259	1356	928	2312	989	1389
4401	LAKE WORTH RD	SR 7	Lyons Rd	6D	33664	34035	37290	32355	34225	2/25/2013	34794	-2.28%	2760	1543	1217	2981	1372	1713
4201	LAKE WORTH RD	Florida Turnpike	Pinehurst Dr	6D	38322	36136	38449	36088	35890	2/25/2013	32373	-5.57%	2347	1197	1178	2759	1526	1298
4645	LAKE WORTH RD	Pinehurst Dr	Jog Rd	6D	51104	48959	44593	45824	46319	2/25/2013	45280	0.51%	2978	1484	1534	3595	1741	1854

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4609	LAKE WORTH RD	Jog Rd	Sherwood Forest Blvd	6D	43604	45855	44260	42095	42832	2/25/2013	43942	-0.24%	2780	1452	1333	3444	1699	1745
4673	LAKE WORTH RD	Sherwood Forest Blvd	Haverhill Rd	6D	41859	40587	41648	40888	39963	3/13/2013	42056	0.33%	2718	1582	1178	3236	1598	1652
4627	LAKE WORTH RD	Haverhill Rd	Military Tr	6D	43402	42560	43493	42224	41047	3/13/2013	42285	-0.93%	2689	1648	1101	3395	1610	1800
4611	LAKE WORTH RD	Military Tr	Kirk Rd	6D	44685	44894	44687	41831	41760	2/13/2013	43355	-1.00%	2850	1714	1219	3376	1546	1923
4647	LAKE WORTH RD	Kirk Rd	Congress Ave	6D	37625	37259	37971	36874	36598	2/13/2013	39516	1.34%	2673	1651	1032	3087	1380	1738
4651	LAKE WORTH RD	Congress Ave	Boutwell Rd	4D	28080	26707	28562	25047		1/14/2013	24907	-4.46%	1769	1136	637	2125	913	1225
4815	LAKE WORTH RD	Federal Hwy (US-1)	Dixie Hwy (SR 805)	2	8489	7942	8559	8164	7923	1/14/2013	8973	1.59%	649	649		657	657	
4403	LANTANA RD	SR-7	Lyons Rd	4D	17665	16938	14775	14541	14339	3/13/2013	15127	0.79%	1141	478	663	1373	426	647
4207	LANTANA RD	Lyons Rd	Hagen Ranch Rd	4D	30526	29969	24298	24322	23744	3/13/2013	24473	0.24%	1831	864	967	2209	1136	1075
4669	LANTANA RD	Hagen Ranch Rd	Jog Rd	6D	34834	38086	32050	32732	32001	1/22/2013	30940	-1.17%	2375	1468	907	2898	1337	1576
4619	LANTANA RD	Jog Rd	Haverhill Rd	6D	39251	37237	35130	35560	36661	4/2/2013	35509	0.36%	2168	1238	950	3350	1742	1626
4675	LANTANA RD	Haverhill Rd	Military Tr	6D	41478	41349	42048	42410	40189	3/11/2013	42968	0.72%	3418	2193	1262	3707	1468	2240
4605	LANTANA RD	Military Tr	Lawrence Rd	6D	37863	42684	43783	43476	42983	2/13/2013	42888	-0.69%	3570	2413	1211	3513	1397	2120
4665	LANTANA RD	Lawrence Rd	Congress Ave	6D	44533	47330	47863	46019	43577	1/16/2013	44741	-2.22%	3767	2531	1236	3767	1573	2241
4623	LANTANA RD	Congress Ave	High Ridge Rd	6D	43470	40989	43695	43534	41581	1/16/2013	40899	-2.18%	3357	2094	1309	3413	1414	2027
4209	LANTANA RD	High Ridge Rd	I-95	4D	42015	43176	45356	44632	42602	1/16/2013	41998	-2.53%	3417	2156	1266	3387	1366	2032
4311	LANTANA RD	I-95	Redding Dr	5	37059	36674	38457	38451	36564	1/16/2013	32881	-5.09%	2711	1359	1352	2640	1324	1316
4807	LANTANA RD	Redding Dr	Federal Hwy	5	20466	19176		19282	18402	1/16/2013	14547		937	484	487	1165	610	555
5638	LAWRENCE RD	Woolbright Rd	Boynton Beach Blvd	5	7624	7448	7167	7929	7282	2/6/2013	7439	1.25%	556	194	379	715	444	286
5204	LAWRENCE RD	Boynton Beach Blvd	Gateway Blvd	5	15642	15032	13804	14934	14764	2/27/2013	14278	1.13%	1009	283	737	1335	861	475
4614	LAWRENCE RD	Gateway Blvd	Hypoluxo Rd	4D	14961	14629	14700	14552	15281	3/11/2013	15113	0.93%	1509	615	929	1406	803	619
4608	LAWRENCE RD	Hypoluxo Rd	Lantana Rd	2	11387	10666	11018	11679	11080	3/11/2013	10891	-0.39%	1007	574	438	948	516	432

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4661	LE CHALET BLVD	Jog Rd	Military Tr	4D	10548	9934	9652	10007	9771	3/11/2013	9344	-1.08%	810	452	370	836	350	486
5635	LINTON BLVD	Jog Rd	Sim Rd	4D	28557	30448	28837	28535	29961	2/26/2013	29386	0.63%	2390	1477	948	2320	1111	1209
5625	LINTON BLVD	Sim Rd	Military Tr	6D	27024	28924	27495	26852	28793	2/26/2013	27183	-0.38%	2044	1008	1036	2080	1004	1087
5607	LINTON BLVD	Military Tr	Homewood Blvd	6D	38210	40704	37464	37118	37758	2/27/2013	35670	-1.62%	2463	1257	1212	2758	1472	1324
5661	LINTON BLVD	Homewood Blvd	Congress Ave	6D	35165	37511	33652	35655	34765	2/25/2013	36859	3.08%	2766	1554	1238	2762	1450	1357
5213	LINTON BLVD	Congress Ave	I-95	6D	40387	37905	40928	39076	41567	2/25/2013	40886	-0.03%	3043	1447	1617	2986	1604	1374
5313	LINTON BLVD	I-95	10th Ave SW	6D	45508	44840	46456	44595	47730	2/25/2013	45831	-0.45%	3003	1672	1342	3381	1658	1733
5819	LINTON BLVD	10th Ave SW	Old Dixie Hwy	6D	38700	38191	38788	37853	40988	2/25/2013	39478	0.59%	2494	1517	981	2941	1418	1544
5821	LINTON BLVD	Old Dixie Hwy	US 1	6D					29152	2/25/2013	30202		1851	1031	820	2183	1027	1184
5813	LINTON BLVD	US 1	Ocean Blvd	4D	16548	15583	15872	14438	17815	2/25/2013	17000	2.31%	1041	520	523	1320	648	713
5311	LOWSON BLVD	Congress Ave	SW 10TH Ave	4	17616	15972	15139	14305	14453	3/12/2013	14771	-0.82%	1010	499	544	1272	624	677
1610	LOXAHATCHEE RIVER R	Indiantown Rd	Roebuck Rd	2	8819	8188	10099	8302	8042	2/13/2013	9602	-1.67%	799	330	504	859	513	346
1202	LOXAHATCHEE RIVER R	Roebuck Rd	PBC Boundary	2	3019	2885		2893	2774	2/13/2013	3025		216	122	94	242	171	76
6112	LYONS RD	Broward County Line	SW 18th St	4D	28257	28675	31256	28326	28660	1/16/2013	29768	-1.61%	2763	1537	1283	2911	1383	1528
6410	LYONS RD	SW 18th St	Palmetto Park Rd	4D	26097	26581	26501	26180	25984	1/16/2013	26735	0.29%	2320	1594	794	2502	1088	1414
6406	LYONS RD	Palmetto Park Rd	Glades Rd	4D	25120	24792	22599	25302	24333	1/16/2013	25974	4.75%	2063	1349	746	2498	1184	1327
6404	LYONS RD	Glades Rd	Kimberly Rd	6D	31446	31322	32163	30443	28355	1/16/2013	30523	-1.73%	2184	1134	1185	2754	1391	1387
6424	LYONS RD	Kimberly Rd	Yamato Rd	6D	25075	25301	21868	23901	23276	1/16/2013	24756	4.22%	1844	1028	900	2358	1028	1365
6416	LYONS RD	Yamato Rd	Clint Moore Rd	4D	15086	15335	16080	15182	14316	1/15/2013	15405	-1.42%	1292	772	563	1473	617	573
6114	LYONS RD	Clint Moore Rd	158 Rd S	2	7245	6348	6499	6869	7155	3/18/2013	8068	7.47%	718	310	420	674	378	314
5406	LYONS RD	158 Rd S	Atlantic Ave	2	6955	6116	6642	7030	7354	3/19/2013	10137	15.13%	778	384	448	825	512	313
5108	LYONS RD	Boynton Beach Blvd	Hypoluxo Rd	4D	18412	15198	13879	15820	15428	2/25/2013	14752	2.05%	1332	389	972	1203	781	438

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4404	LYONS RD	Hypoluxo Rd	Lantana Rd	4D	14795	11027	10176		9956	3/13/2013	9418	-2.55%	692	408	284	850	524	331
4405	LYONS RD	Lantana Rd	Lake Worth Rd	2	11345	11122	10373	10433	10717	3/13/2013	10775	1.28%	990	635	377	980	485	510
3462	LYONS RD	Stribling Way	Forest Hill Blvd	2	6677	7187	7344	7557	6492	1/16/2013	7923	2.56%	894	620	274	817	353	474
3460	LYONS RD	Forest Hill Blvd	Dillman Rd	2	9836	9188	9492	9353	10108	1/16/2013	10840	4.53%	1107	625	482	1103	443	660
3466	LYONS RD	Dillman Rd	Southern Blvd	2	10598	9537	10333	10693	11766	1/14/2013	12070	5.32%	1315	831	484	1289	464	833
1616	MAPLEWOOD DR	Indian Creek Blvd	Toney Penna Dr	2	9235	7921	8614	8885	9167	3/11/2013	9179	2.14%	1128	645	494	807	409	399
1618	MAPLEWOOD DR	Toney Penna Dr	Indiantown Rd	4D	13366	12433	12423		12538	3/20/2013	13566	2.98%	932	385	553	1191	611	581
2313	MARTIN LUTHER KING J	Military Tr	Congress Ave	4D	17734	14137	14536	17226	15748	3/13/2013	16090	3.44%	1731	1084	647	1339	459	889
2813	MARTIN LUTHER KING J	Australian Ave	Old Dixie Hwy	2	10526	8668	9012	8122	7353	2/20/2013	8070	-3.61%	549	294	255	663	288	389
2825	MARTIN LUTHER KING J	Port Rd	US 1	5	3128	3704	4031	3633	3848	2/20/2013	3775	-2.16%	250	162	107	259	89	170
2616	MC ARTHUR BLVD	Northlake Blvd	Holly Dr	2	8438	8452	7787	8800	7531	3/4/2013	7213	-2.52%	536	250	357	756	421	335
4615	MELALEUCA LA	Jog Rd	Haverhill Rd	5	13906	14127	14559	13598	14133	3/13/2013	14384	-0.40%	944	437	507	1308	632	707
4657	MELALEUCA LA	Haverhill Rd	Military Tr	5	23127	23730	23670	22737	22385	3/13/2013	23619	-0.07%	1564	976	630	2171	853	1325
4617	MELALEUCA LA	Military Tr	Kirk Rd	5	22186	24782	24566	22548	22173	2/13/2013	23960	-0.83%	2041	1263	793	2102	1007	1138
4655	MELALEUCA LA	Kirk Rd	Congress Ave	5	27083	26083	28845	26976	26427	1/16/2013	25964	-3.45%	2184	1534	650	2196	883	1390
6216	MILITARY TRL	Broward Co. Line	SW 18th St	4D	26325	24837	26894	26776	25381	1/30/2013	26113	-0.98%	2418	1202	1231	2712	1404	1358
6608	MILITARY TRL	SW 18th St	Camino Real	4D	27569	24843	30195	29072	28095	1/30/2013	28679	-1.70%	2511	1652	859	3016	1277	1763
6606	MILITARY TRL	Camino Real	Palmetto Park Rd	6D	35393	32489	34289	36607	34679	1/30/2013	34557	0.26%	2972	2017	960	3569	1465	2104
6604	MILITARY TRL	Palmetto Park Rd	Town Center	6D	35849	33423	35557	36779	39419	1/30/2013	38256	2.47%	3437	2641	796	3957	1560	2404
6600	MILITARY TRL	Town Center	Butts Rd	6D	33413	31449	32164	34576	34778	1/30/2013	35242	3.09%	3312	2109	1203	3556	1336	2223
6612	MILITARY TRL	Butts Rd	Yamato Rd	6D	42466	39356	39750	42503	41701	2/6/2013	42423	2.19%	3997	2004	1993	4282	2093	2229
6630	MILITARY TRL	Yamato Rd	Clint Moore Rd	6D	36649	39678	37043	38403	37774	2/6/2013	37247	0.18%	3324	1609	1735	3801	1907	1894

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6202	MILITARY TRL	Clint Moore Rd	Linton Blvd	6D	35283	34972	33463	34286	34868	2/20/2013	32763	-0.70%	2867	881	2007	2986	1981	1143
5618	MILITARY TRL	Linton Blvd	Atlantic Ave	6D	40658	40241	36155	38364	38426	2/20/2013	39147	2.69%	3135	942	2246	3190	1996	1208
5606	MILITARY TRL	Atlantic Ave	Lake Ida Rd	6D	45049	44042	43677	40764	41902	3/4/2013	42969	-0.54%	2933	931	2002	3552	2203	1405
5652	MILITARY TRL	Lake Ida Rd	Flavor Pict Rd	6D	27234	34868	36487	32581	32046	3/4/2013	33471	-2.83%	2660	724	2006	2844	1850	1054
5614	MILITARY TRL	Flavor Pict Rd	Woolbright Rd	6D	37620	34197	38267	32105	31879	1/28/2013	31362	-6.42%	2490	873	1638	2722	1715	1038
5608	MILITARY TRL	Woolbright Rd	Boynton Beach Blvd	6D	36216	35698	34008	32204	31323	2/27/2013	33286	-0.71%	2967	829	2138	2753	1735	1018
5202	MILITARY TRL	Boynton Beach Blvd	Gateway Blvd	6D	42049	36282	35035	35133	33639	3/11/2013	33884	-1.11%	2726	788	1949	2964	1821	1143
4636	MILITARY TRL	Gateway Blvd	Hypoluxo Rd	6D	36229	32530	31728	32954	31725	3/11/2013	32946	1.26%	2970	1321	1669	2765	1494	1285
4606	MILITARY TRL	Hypoluxo Rd	Lantana Rd	6D	34670	34820	30647	31491	30535	3/11/2013	31667	1.10%	2562	1301	1261	2506	1271	1271
4632	MILITARY TRL	Lantana Rd	Melaleuca Ln	6D	42297	37812	35916	35902	36576	2/13/2013	36616	0.65%	2781	1412	1400	2935	1529	1406
4602	MILITARY TRL	Melaleuca Ln	Lake Worth Rd	6D	38868	36898	36175	34899	34205	2/13/2013	35670	-0.47%	2571	1347	1239	2770	1396	1376
4618	MILITARY TRL	Lake Worth Rd	10th Ave N	6D	44341	45025	42617	41329	40354	2/13/2013	41594	-0.81%	2639	1285	1354	3169	1676	1519
4650	MILITARY TRL	10th Ave N	Cresthaven Blvd	6D	46981	45400	43809	43621	42899	2/13/2013	44174	0.28%	2850	1507	1434	3333	1712	1641
4206	MILITARY TRL	Cresthaven Blvd	Forest Hill Blvd	6D	48381	46074	45227	45698	44851	3/13/2013	45305	0.06%	2801	1666	1136	3488	1627	1878
3642	MILITARY TRL	Forest Hill Blvd	Summit Blvd	6D	45434	43179	44576	42773	42819	3/20/2013	41440	-2.40%	2506	1506	1048	3179	1456	1727
3664	MILITARY TRL	Summit Blvd	Gun Club Rd	6D	45220	44632	45441	42749	45029	1/9/2013	41886	-2.68%	2702	1700	1008	3289	1522	1773
3612	MILITARY TRL	Gun Club Rd	Southern Blvd	6D	45500	39816	43502	39532	41541	1/9/2013	38824	-3.72%	2657	1686	971	3101	1470	1631
3628	MILITARY TRL	Southern Blvd	Belvedere Rd	6D	41662	42092	44382	42972	42512	2/5/2013	41237	-2.42%	2686	1679	1059	3252	1551	1721
3648	MILITARY TRL	Belvedere Rd	Westgate Ave	6D	44343	44331	42057	42516	42746	2/5/2013	39019	-2.47%	2481	1536	945	3059	1531	1559
3602	MILITARY TRL	Westgate Ave	Okeechobee Bl	6D	40167	40012	42578	39862	39392	1/30/2013	35177	-6.17%	2225	1188	1037	2637	1289	1373
3616	MILITARY TRL	Okeechobee Bl	Roebuck Rd	6D	35224	37557	34269	35175	35366	2/11/2013	34113	-0.15%	2080	1014	1068	2826	1404	1422
3626	MILITARY TRL	Roebuck Rd	45th St	6D	33200	31589	33207	31998	32821	2/20/2013	33187	-0.02%	2687	1744	976	2754	1087	1667

					DAILY TRAFFIC VOLUMES					2013 DAILY			2013 AM PEAK HOUR			2013 PM PEAK HOUR		
STA	ROAD	FROM	TO	LANES	2008	2009	2010	2011	2012	DATE	VOL	GR	2-WAY	NB/EB	SB/WB	2-WAY	NB/EB	SB/WB
3204	MILITARY TRL	45th St	SR-710	6D	35305	35934	34776	33142	33889	2/20/2013	32702	-2.03%	2632	1526	1145	2789	1247	1542
2612	MILITARY TRL	SR-710	Blue Heron Blvd	6D	29693	29370	27573	29318	28064	1/9/2013	28032	0.55%	2267	1325	962	2396	1184	1212
2614	MILITARY TRL	Blue Heron Blvd	Investment Lane	6D	30201	28834	27167	28303	26585	1/9/2013	26398	-0.95%	2200	1077	1124	2402	1288	1144
2602	MILITARY TRL	Investment Lane	Northlake Blvd	6D	35641	32395	30539	32060	29130	1/16/2013	28823	-1.91%	2190	1236	954	2705	1459	1246
2600	MILITARY TRL	Northlake Blvd	Holly Dr	6D	40491	36910	37391	37834	38770	1/16/2013	37207	-0.16%	2634	1477	1176	3451	1660	1791
2606	MILITARY TRL	Holly Dr	PGA Blvd	6D	42401	40293	37111	40510	37122	1/30/2013	36393	-0.65%	2871	1465	1414	3423	1813	1632
2624	MILITARY TRL	PGA Blvd	I-95	6D	37425	37784	33368	33876	34594	4/3/2013	36176	2.73%	2707	1162	1549	3229	1613	1616
2604	MILITARY TRL	I-95	Hood Rd	6D	24849	24308	24838	23316	22868	2/26/2013	24535	-0.41%	1982	976	1045	2159	1077	1096
2208	MILITARY TRL	Hood Rd	Donald Ross Rd	6D	22912	22166	24233	23623	21922	2/27/2013	24151	-0.11%	2183	954	1229	2116	975	1141
1602	MILITARY TRL	Donald Ross Rd	Frederick Small Rd	6D	34935	34733	34542	36249	34279	2/25/2013	34691	0.14%	3096	1458	1641	3017	1317	1738
1608	MILITARY TRL	Frederick Small Rd	Indian Creek Blvd	6D	31495	25707	30300	30344	30080	3/13/2013	29341	-1.07%	2378	1073	1318	2525	1299	1243
1600	MILITARY TRL	Indian Creek Blvd	Indiantown Rd	6D	22996	23636	24322	25319	23428	3/13/2013	24121	-0.28%	1739	817	977	2001	1194	851
4690	MINER RD	Congress Ave	High Ridge Rd	2				6194	6556	3/11/2013	6275		745	581	182	610	227	410
6835	MIZNER BLVD	US-1 (Federal Hwy)	Palmetto Park Rd	4D	10678	9221	9033	8527	10341	2/20/2013	10964	6.67%	796	508	324	1043	429	655
6834	MIZNER BLVD	Palmetto Park Rd	Federal Hwy	4D	10991	10763	10001	9978	11472	1/23/2013	11531	4.86%	870	578	388	967	516	555
2413	NORTHLAKE BLVD	Seminole Pratt Whitney Rd	140th Ave N	2	10530	9481	10074	9998	10085	2/11/2013	10618	1.77%	1002	814	235	862	294	620
2421	NORTHLAKE BLVD	140th Ave N	Coconut Blvd	2					15470	2/11/2013	16608		1632	1345	311	1529	378	1181
2411	NORTHLAKE BLVD	Coconut Blvd	Ibis Rd	4D	27676	26684	25889	25292	24919	2/11/2013	27078	1.51%	2809	2359	459	2635	669	2034
2407	NORTHLAKE BLVD	Ibis Rd	Beeline Hwy	4D	34555	33858	32431	32008	33300	2/11/2013	31736	-0.72%	3118	2541	615	2901	820	2117
2401	NORTHLAKE BLVD	Beeline Hwy	Ryder Cup Blvd	6D	23076	23203	21045	20680	21248	2/11/2013	21186	0.22%	1917	1426	491	1989	690	1299
2205	NORTHLAKE BLVD	Ryder Cup Blvd	Steeplechase Dr / Ballen Is	6D	34967	30485	30702	29738	30144	1/16/2013	30025	-0.74%	2515	1846	702	2708	1034	1682
2605	NORTHLAKE BLVD	Steeplechase Dr / Ballen Isl	Military Tr	6D	45045	41974		41970	42269	1/16/2013	41463		3405	2316	1122	3633	1467	2170

APPENDIX AN - FDOT & PBC TRAFFIC COUNTS

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2207	NORTHLAKE BLVD	Military Tr	I-95	6D	48816	47055	46823	44154	48207	4/3/2013	48902	1.46%	3426	2065	1403	2873	1832	2065
2309	NORTHLAKE BLVD	I-95	Congress Ave	6D	53168	57591	54580	51564	52461	1/16/2013	55036	0.28%	3601	1943	1654	4576	1988	2666
2815	NORTHLAKE BLVD	Congress Ave	SR 811	6D	48949	42438	41315	44103	42382	1/14/2013	42618	1.04%	2847	1496	1393	3483	1685	1803
2817	NORTHLAKE BLVD	Prosperity Farms Rd	Southwind Dr	6D	36100	33461	32680	34574	30338	1/14/2013	32430	-0.26%	2251	1274	977	2683	1316	1371
2819	NORTHLAKE BLVD	Southwind Dr	US-1	6D	28661	28325	28891	27028	25158	1/14/2013	24111	-5.85%	1725	1005	722	2032	941	1091
3451	OKEECHOBEE BLVD	140th	Crestwood Blvd	2	17242	14254	15734	13592	13962	2/20/2013	14243	-3.26%	1162	766	457	1210	520	730
3411	OKEECHOBEE BLVD	Crestwood Blvd	Royal Palm Beach Blvd	4D	32901	28878	26200	26811	25146	2/20/2013	27724	1.90%	2253	1438	825	2454	1000	1464
3453	OKEECHOBEE BLVD	Royal Palm Beach Blvd	Wildcat Way	6D	57061		37519	37424	38363	3/11/2013	39608	1.82%	3381	2391	990	3449	1379	2075
3401	OKEECHOBEE BLVD	Wildcat Way	SR-7	8D	56118		38508	37734	37706	3/11/2013	37653	-0.75%	3135	2166	1033	3379	1248	2131
3403	OKEECHOBEE BLVD	SR-7	Sansbury's Way	8D	50604	48000	47421	41128	42738	3/11/2013	43990	-2.47%	3727	2675	1035	3886	1264	2575
3441	OKEECHOBEE BLVD	Sansbury's Way	Benoist Farms Rd	8D	53326		45470	44613	46422	3/11/2013	49796	3.08%	4145	3026	1120	4339	1437	2902
3439	OKEECHOBEE BLVD	Benoist Farms Rd	Skees Rd	8D	56970		51110	47152	50830	3/11/2013	50527	-0.38%	4184	2889	1302	4183	1376	2827
3449	OKEECHOBEE BLVD	Skees Rd	Jog Rd	8D	64181		52669	51958	54736	3/11/2013	51971	-0.44%	4284	2966	1345	4430	1454	2976
3103	OKEECHOBEE BLVD	Jog Rd	Florida Turnpike	8D	59812	50500	51444	52208	52768	3/12/2013	56155	2.96%	4570	2983	1604	4600	2014	2622
3207	OKEECHOBEE BLVD	Florida Turnpike	Haverhill Rd	8D	67153	51500	61025	56851	61427	3/11/2013	58801	-1.23%	4619	3162	1561	4981	1903	3078
3671	OKEECHOBEE BLVD	Haverhill Rd	Military Tr	8D	66392	61368	63956	65490	63209	1/30/2013	65417	0.76%	4829	3375	1457	5114	2057	3070
3633	OKEECHOBEE BLVD	Military Tr	Palm Beach Lakes Blvd	8D	70791	63421	71364	69046	65710	1/30/2013	65758	-2.69%	4710	3222	1498	4943	2097	2875
3603	OKEECHOBEE BLVD	Palm Beach Lakes Blvd	Congress Ave	8D	52175	46805	46833	47444	48397	1/30/2013	48119	0.91%	3168	2077	1097	3865	1572	2338
3209	OKEECHOBEE BLVD	Congress Ave	I-95	8D	58381	54564	59657	56088	54769	1/30/2013	58823	-0.47%	4085	2440	1645	4625	2121	2550
3307	OKEECHOBEE BLVD	I-95	Australian Ave	8D	66685	67751	72803	70826	68970	1/30/2013	70757	-0.95%	5453	3916	1639	6035	2144	4010
3813	OKEECHOBEE BLVD	Australian Ave	Tamarind Ave	8D	61345	58355	64974	59767	57435	1/30/2013	63380	-0.82%	4722	3454	1280	5311	2118	3358
3837	OKEECHOBEE BLVD	Tamarind Ave	Dixie Hwy	8D	40153	38724	40967	42569	40069	3/4/2013	40687	-0.23%	3262	2586	704	3240	1230	2043

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5639	OLD BOYNTON RD	Military Tr	Lawrence Rd	5	16399	16564	15193	17487	15667	2/27/2013	15330	0.30%	805	499	306	1282	651	658
5627	OLD BOYNTON RD	Lawrence Rd	Congress Ave	5	21177	18548	16962	20704	18631	2/27/2013	17854	1.72%	819	506	313	1466	633	879
5629	OLD BOYNTON RD	Congress Ave	Boynton Beach Blvd	2	13042			14452	13875	2/27/2013	14413		747	287	515	1279	814	459
6310	OLD DIXIE HWY	Broward County Line	SW 18th St	4D	15694	14302	15273	14139	13957	1/16/2013	16356	2.31%	1761	1159	653	1659	628	1031
6870	OLD DIXIE HWY	Camino Real	Palmetto Park Rd	4D	21740	20900	21219	22203	20517	1/23/2013	18922	-3.75%	1715	1151	564	1940	842	1098
6900	OLD DIXIE HWY	Palmetto Park Rd	Glades Rd	5	17848	16724	17962	17507	19030	1/23/2013	22002	7.00%	1737	947	806	2059	953	1165
6866	OLD DIXIE HWY	Glades Rd	NE 20th St	4D	17629	15913	17861	16962	18798	1/23/2013	23380	9.39%	1926	1157	822	2461	1264	1197
6860	OLD DIXIE HWY	NE 20th St	Spanish River Blvd	4D	17349	16366	17346	16756	16388	1/30/2013	16897	-0.87%	1453	769	699	1800	961	874
6862	OLD DIXIE HWY	Spanish River Blvd	Yamato Rd	4D	15679	14715	15769	16566	16388	1/30/2013	15727	-0.09%	1291	608	690	1706	912	794
6304	OLD DIXIE HWY	Lindell Blvd	Hidden Valley Blvd	2	11418	11930	11986	12679	11650	1/30/2013	12161	0.48%	1106	395	715	1173	721	452
3302	OLD DIXIE HWY	45th St	MLK Jr Blvd	4	15800		11465			2/20/2013	11524	0.17%	943	395	548	989	529	472
2810	OLD DIXIE HWY	MLK Blvd	Blue Heron Blvd	5	14144	12675	11520	11204	10285	2/20/2013	12630	3.11%	1064	420	661	1213	721	513
2808	OLD DIXIE HWY	Blue Heron Blvd	Silverbeach Rd	4D	14913	14244	13667	15363	12426	1/9/2013	14353	1.65%	1102	466	649	1378	780	609
1806	OLD DIXIE HWY	SR-811/Beach Rd	Tequesta Dr	4	12554	12074	12257	12408	13402	3/18/2013	11655	-1.66%	791	337	464	950	565	399
1814	OLD DIXIE HWY	Tequesta Dr	County Line Rd	2	6335	6362	8112	6955	7081	3/18/2013	8783	2.68%	591	220	365	758	518	256
3308	OLIVE AVE	S WPB City Limit	Alhambra Pl	2	9289	7312	7044	6198	6302	3/20/2013	6408	-3.11%	527	317	210	644	269	391
3868	OLIVE AVE	Monroe Dr	Belvedere Rd	2	5450	4371	4334	4069	3594	1/30/2013	3624	-5.79%	344	231	115	326	167	159
3864	OLIVE AVE	Belvedere Rd	Okeechobee Bl	2	5591	4371	3908	3528	3578	3/4/2013	3190	-6.54%	425	383	56	226	126	105
3836	OLIVE AVE	Banyan Blvd	Loftin St	2	3562	3509	5109	4931	3268	3/4/2013	3033	-15.95%	249	249		224	224	
3830	OLIVE AVE	Loftin St	Palm Beach Lakes Blvd	2	2471	2663	2955	3234	2395	3/4/2013	2807	-1.70%	235	110	127	274	194	80
2417	ORANGE BLVD	Seminole Pratt Whitney Rd	140th Ave N	2	6534	7508	7292	7731	7608	2/13/2013	8875	6.77%	561	331	244	922	465	472
2409	ORANGE BLVD	140th Ave N	Coconut Blvd	2	7231	7148	8089	7607	8084	2/13/2013	8379	1.18%	666	490	185	748	286	469

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2415	ORANGE BLVD	Coconut Blvd	Royal Palm Beach Bl	2	11245	11475	12613	12384	12548	2/13/2013	12925	0.82%	1100	619	481	1148	519	642
6420	ORIOLE COUNTRY RD	Sandpoint Ter	SR 7	4D	10281	10353	9846	10089	9401	1/8/2013	10057	0.71%	924	677	252	1025	423	602
3601	PALM BEACH LAKES BL	Okeechobee Blvd	Village Blvd	6D	32468	30755	31840	31306	31467	2/5/2013	31653	-0.20%	2183	1286	914	2604	1011	1593
3205	PALM BEACH LAKES BL	Village Blvd	I-95	6D	51037	47045	49858	49777	43835	2/5/2013	50780	0.61%	4004	2171	1833	4193	1794	2399
3303	PALM BEACH LAKES BL	I-95	PB Mall Main Entrance	6D	48612	42994	43986	42778	47122	3/18/2013	46842	2.12%	3843	2626	1253	4050	1612	2453
3809	PALM BEACH LAKES BL	PB Mall Main Entrance	Congress Ave	6D	40725	40680	41485	41649	42279	2/5/2013	43356	1.48%	3629	2516	1174	3653	1225	2428
3847	PALM BEACH LAKES BL	Congress Ave	Australian Ave	6D	40513	39162	39526	39044	40001	2/5/2013	39788	0.22%	3382	2071	1311	3267	1328	1956
3811	PALM BEACH LAKES BL	Australian Ave	Tamarind Ave	4D	28426	28939	29121	28633	29306	3/4/2013	28249	-1.01%	2494	1666	828	2330	866	1429
3807	PALM BEACH LAKES BL	Tamarind Ave	Dixie Hwy	4D	23066	23199	22220	22891	22945	3/4/2013	21160	-1.62%	1865	1034	859	1880	881	999
6431	PALMETTO PARK RD	Glades Rd	Ponderosa Dr	4D	12871	12586	12453	12945	13017	1/8/2013	13080	1.65%	1289	810	479	1152	457	695
6409	PALMETTO PARK RD	Ponderosa Dr	SR-7	4D	23137	21642	20370	21034	21429	1/8/2013	22903	3.98%	1907	1435	500	2480	841	1755
6405	PALMETTO PARK RD	SR-7	Lyons Rd	6D	33215	32777	30358	28543	30379	1/28/2013	28897	-1.63%	2497	1607	913	2487	902	1585
6425	PALMETTO PARK RD	Lyons Rd	Boca Rio Rd	6D	43013	41759	42391	39971	41613	1/28/2013	41227	-0.92%	3646	2443	1203	3549	1228	2333
6211	PALMETTO PARK RD	Boca Rio Rd	Powerline Rd	6D	50360	47032	47599	45604	45287	1/28/2013	44644	-2.11%	3947	2641	1306	3961	1415	2546
6617	PALMETTO PARK RD	Powerline Rd	St Andrews Blvd	6D	45378	46025	47704	45070	45172	1/28/2013	44403	-2.36%	3397	2408	998	3712	1328	2389
6609	PALMETTO PARK RD	St Andrews Blvd	Military Tr	6D	52205	49249	52244	51512	53690	1/29/2013	50371	-1.21%	3966	2688	1294	4222	1636	2590
6209	PALMETTO PARK RD	Military Tr	I-95	6D	58181	57948	56384	60402	60307	4/2/2013	55945	-0.26%	4223	2667	1559	4201	1673	2528
6309	PALMETTO PARK RD	I-95	12th St	6D	55660	52726	56810	57712	54730	1/29/2013	54475	-1.39%	4188	2700	1529	4210	1959	2440
6871	PALMETTO PARK RD	12th St	Boca Raton Blvd	4D	35846	35686	34777	35491	36851	1/16/2013	38124	3.11%	2761	1675	1158	3111	1379	1834
6875	PALMETTO PARK RD	Old Dixie Hwy	Federal Hwy	4D	22031	19933	20367	19473	21663	1/23/2013	21031	1.08%	1367	898	676	1695	874	852
6877	PALMETTO PARK RD	Federal Hwy	NE 5th Ave	4D	17069	16787	15668	15946	14396	1/23/2013	15815	0.31%	1162	576	586	1444	733	792
6803	PALMETTO PARK RD	NE 5th Ave	ICWW Bridge	4D	15453	14259	14662	14639	14304	1/30/2013	14725	0.14%	1273	748	550	1321	723	627

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6817	PALMETTO PARK RD	ICWW Bridge	A1A	4D	12299	11592	14135	14995	16174	1/23/2013	16524	5.34%	1137	507	636	1503	763	773
1310	PALMWOOD AVE	Frederick Small Rd	Donald Ross Rd	2	4226	4298	4147	4549	4200	2/26/2013	4108	-0.31%	267	119	259	378	227	161
2833	PARK AVE	Federal Hwy	10TH St	2	12341	6028	5608	4960	5343	1/14/2013	4817	-4.94%	351	144	207	422	175	247
3447	PERSIMMON BLVD	130th Ave N	Royal Palm Beach Bl	2	6362	6127	5874	6006	5959	2/20/2013	6123	1.39%	609	455	162	572	255	363
2405	PGA BLVD	Bee Line Hwy	Ryder Cup Blvd (Jog Rd)	2	3568	3460	3479	3742	3896	1/28/2013	3528	0.47%	353	167	193	326	162	164
2103	PGA BLVD	Ryder Cup Blvd (Jog Rd)	Florida Turnpike	4D	22004	22839	22995	23541	21862	1/28/2013	22859	-0.20%	1995	936	1068	1933	808	1125
2201	PGA BLVD	Florida Turnpike	Central Blvd	6D	44892	41099	45217	41757	41535	1/28/2013	41271	-3.00%	3659	2096	1563	3783	1654	2129
2609	PGA BLVD	Central Blvd	Military Tr	6D	46639	45738	44296	45039	47150	1/30/2013	43414	-0.67%	3706	2166	1540	3948	1845	2103
2203	PGA BLVD	Military Tr	I-95	6D	50243	41500	46147		44991	1/30/2013	45303	-0.61%	3377	2174	1203	4049	1981	2090
2829	PGA BLVD	SR 811	Gardens Mall	6D	54026	50480	51677	63185	52067	1/30/2013	51188	-0.32%	3505	2491	1048	4167	1996	2221
2805	PGA BLVD	Gardens Mall	Prosperity Farms Rd	6D	41054	37867	38076		37764	2/4/2013	37346	-0.64%	2795	1837	966	3023	1440	1589
2803	PGA BLVD	Prosperity Farms Rd	Ellison Wilson Rd	6D	37821	38088	39880		38984	4/3/2013	39097	-0.66%	2804	1882	922	3363	1518	1855
2837	PGA BLVD	Ellison Wilson Rd	Federal Hwy	6D	25651	26650	26470	25192	26830	2/6/2013	25880	-0.75%	1546	984	563	2129	957	1193
3448	PIKE RD	Southern Blvd	Fla Turnpike Entrance	4	12609	13637	14392	13873	14297	1/16/2013	14424	0.07%	1215	634	594	1474	615	864
3450	PIKE RD	Fla Turnpike Entrance	Belvedere Rd	2	5400	4837	4703	4620	4633	1/16/2013	4942	1.67%	499	154	361	418	213	205
4214	PINE TREE LN	Forest Hill Blvd	Keller Rd	2	2134	2374	2382	2106	2156	3/20/2013	2234	-2.12%	189	147	55	212	85	128
4662	PINEHURST DR	10th Ave N	Lake Worth Rd	2	9104	9045	8789	9047	8006	2/25/2013	9111	1.21%	620	273	378	767	425	347
4202	PINEHURST DR	Forest Hill Blvd	10TH Ave N	2	10411	9655	9276	9068	9264	3/18/2013	8894	-1.39%	1062	449	613	912	420	492
5657	PIPERS GLEN BLVD	El Clair Ranch Rd	Military Tr	2	5450	5429	5429	5398	5479	1/28/2013	5073	-2.24%	346	240	106	415	197	219
6428	PONDEROSA DR	Palmetto Park Rd	Oriole Country Rd	2	4670	4495	4506	4397	4209	1/8/2013	4349	-1.18%	356	194	184	486	201	285
6423	PONDEROSA DR	Glades Rd	Palmetto Park Rd	2	4421	4159	4307	4182	3809	1/8/2013	5229	6.68%	371	183	198	803	493	320
6625	POTOMAC RD	Jog Rd	St Andrews Blvd	4D	7652	7155	7242	7637	7881	1/16/2013	7835	2.66%	931	674	290	815	297	543

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6623	POTOMAC RD	St Andrews Blvd	Military Tr	2	10546	9305	9999	9048	10902	1/16/2013	11444	4.60%	1228	892	345	1353	649	722
6210	POWERLINE RD	Broward County Line	SW 18th St	4D	33319	33680		33231	34867	1/22/2013	34431		2672	1504	1202	3248	1533	1718
6632	POWERLINE RD	SW 18th St	Camino Real	4D	31861	30590		26290	30345	1/22/2013	30307		2301	1442	876	2763	1259	1504
6626	POWERLINE RD	Camino Real	Palmetto Park Rd	4D	38847	38442		39450	40133	1/22/2013	38023		2668	1439	1229	3287	1622	1665
6622	POWERLINE RD	Palmetto Park Rd	Sunstream Blvd	4D	24830	25161		24636	27168	1/22/2013	27109		1920	1007	913	2391	1151	1240
6602	POWERLINE RD	Sunstream Blvd	Glades Rd	4D	29707	28004		32257	26031	1/22/2013	25850		2027	1199	855	2300	1039	1261
1402	PRATT-WHITNEY RD	Indiantown Rd	Bee Line Hwy	2	4070	4142	4228	4905	4382	1/28/2013	4404	1.37%	477	87	414	408	346	75
1104	PRATT-WHITNEY RD	Indiantown Rd	Martin County Line	2	2808	2920	2994	3062	3092	1/28/2013	3030	0.40%	346	67	302	255	206	52
2806	PROSPERITY FARMS RD	Northlake Blvd	Lighthouse Dr	3	16426	17352	17866	17198	17879	2/5/2013	17435	-0.81%	1432	586	846	1428	723	721
2836	PROSPERITY FARMS RD	Lighthouse Dr	Burns Rd	3	18270	18959	17850	18477	17910	2/5/2013	17814	-0.07%	1297	642	675	1515	794	722
2804	PROSPERITY FARMS RD	Burns Rd	PGA Blvd	5	21762	25285	27164	25088	26973	2/4/2013	26053	-1.38%	1939	926	1013	2252	1111	1148
2802	PROSPERITY FARMS RD	PGA Blvd	Hood Rd	4D	17590	17999	18843	18075	18564	2/4/2013	18725	-0.21%	1470	607	863	1663	960	697
2302	PROSPERITY FARMS RD	Hood Rd	Donald Ross Rd	2	8664	8404	9970	9590	8728	2/6/2013	9064	-3.13%	600	289	311	870	498	372
4637	PURDY LN	Jog Rd	Haverhill Rd	2	7751	10508	8536	6800	7132	3/18/2013	6672	-7.88%	513	126	391	619	347	283
2831	RCA BLVD	Alt A1A	Prosperity Farms Rd	2	9218	9247	9138		9755	3/4/2013	8490	-2.42%	547	302	259	809	342	475
1611	ROEBUCK RD	Loxahatchee River Rd	Central Blvd	2	5730	5113	5477	5101	4805	2/13/2013	5167	-1.92%	405	177	233	515	257	258
3107	ROEBUCK RD	Jog Rd	Haverhill Rd	2	20389	19473	17913	18386	18395	3/4/2013	18295	0.71%	1702	970	762	1765	712	1076
3681	ROEBUCK RD	Haverhill Rd	Military Trail	2	7911	8917	8588	9418	9305	3/18/2013	9334	2.82%	1037	592	445	876	410	481
3412	ROYAL PALM BEACH BL	Southern Blvd	Okeechobee Blvd	2	15814	15583	15911	14556	13640	2/20/2013	13952	-4.29%	939	426	516	1207	611	603
3410	ROYAL PALM BEACH BL	Okeechobee Blvd	RPB North City Limits	4D	34195	33607	22123		21426	2/20/2013	21996	-0.19%	1666	527	1156	1889	1091	806
3426	ROYAL PALM BEACH BL	RPB North City Limits	M Canal	4D	27834	28764	16753		14297	2/20/2013	14621	-4.44%	1074	499	585	1297	679	622
2402	ROYAL PALM BEACH BL	M Canal	Orange Blvd	2	14616	16572	15825	15912	15740	2/20/2013	16300	0.99%	1411	538	900	1491	865	638

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3414	SANSBURYS WAY	Southern Blvd	Belvedere Rd	2	8149	7281	9200	9091	9556	1/14/2013	10945	5.96%	921	540	381	1064	513	551
3454	SANSBURYS WAY	Belvedere Rd	Okeechobee Bl	2	6613	5835	7691	6170	10427	1/14/2013	6287	-6.50%	663	308	355	599	344	255
5802	SEACREST BLVD	23rd Ave	Woolbright Rd	5	20816	20784	21073	20290	20933	1/28/2013	19995	-1.74%	1675	720	955	1591	874	784
5800	SEACREST BLVD	Woolbright Rd	Boynton Beach Blvd	5	14976	12582	13982	12717	12263	2/6/2013	12680	-3.21%	821	403	435	1172	708	492
5302	SEACREST BLVD	Boynton Beach Blvd	Gateway Blvd	5	15071	13294	12733	11274	11566	2/6/2013	11621	-3.00%	780	312	471	1051	625	435
4806	SEACREST BLVD	Gateway Blvd	Hypoluxo Rd	5	12562	12072	11637	11302	12101	3/11/2013	11543	-0.27%	656	415	255	1005	535	470
3420	SEMINOLE PRATT-WHIT	Southern Blvd	Okeechobee Blvd	4D	14222	12632	14351	13133		2/13/2013	14444	0.22%	1167	370	844	1212	778	441
3442	SEMINOLE PRATT-WHIT	Sycamore Dr E	60TH ST N	4D	15809	19149	16620	16094	15382	2/13/2013	16344	-0.56%	1496	878	728	1372	781	595
2408	SEMINOLE PRATT-WHIT	60TH ST N	Orange Bl	4D	14727	15620	14772	12224	12152	2/13/2013	12959	-4.27%	1080	550	597	1102	510	592
2406	SEMINOLE PRATT-WHIT	Orange Bl	Northlake Blvd	2	11199	11736	11076	10411	10118	2/13/2013	11479	1.20%	923	487	506	981	537	465
6904	SHERATON WAY	Glades Rd	NW 19 ST	2	4286	3712	3991	3734	10271	1/16/2013	12768	47.35%	1194	484	726	1261	593	733
4644	SHERWOOD FOREST BL	Lake Worth Rd	10th Ave N	2	6790	6950	5767	6068	6461	3/13/2013	7391	8.62%	471	142	341	651	330	322
4654	SHERWOOD FOREST BL	10th Ave N	Cresthaven Blvd	2	8073	7971	7736	7794	7909	3/13/2013	8145	1.73%	591	212	379	704	381	337
2615	SILVER BEACH RD	Congress Ave	Old Dixie Hwy	2	14235	14048	13508	12629	12250	1/14/2013	11598	-4.95%	857	400	457	1101	530	571
2807	SILVER BEACH RD	Old Dixie Hwy	US-1	2	12823	12265	11591	12068	10996	1/15/2013	10795	-2.34%	749	373	381	950	509	482
3418	SKEES RD	Okeechobee Bl	Belvedere Rd	2	5102	4858	4956	4436	4743	1/14/2013	4673	-1.94%	402	231	171	411	236	179
3446	SOUTH SHORE DR	Lake Worth Rd	Greenview Shores Bl	2	16711	14176	16271			2/25/2013	15592	-1.41%	1341	537	804	1248	739	538
3429	SOUTH SHORE DR	Greenview Shores Bl	Big Blue Trace	4D	19087	18028	18470	19147	19657	2/25/2013	20364	3.31%	1672	657	1091	1643	873	770
3421	SOUTH SHORE DR	Big Blue Trace	Forest Hill Blvd	4D	25227	22287	23838	25586	25823	2/27/2013	24709	1.20%	1678	1000	684	2173	1103	1070
3101	SOUTHERN BLVD	CR 880	Lion Country Safari	4D	16198	16585	19702	15140	13813	2/4/2013	15476	-7.73%	1321	445	889	1284	811	497
3467	SOUTHERN BLVD	Lion Country Safari	Seminole Pratt Whitney Rd	4D	21535	23112	22490	18663	18500	2/13/2013	19744	-4.25%	1532	625	915	1627	1066	607
3443	SOUTHERN BLVD	Seminole Pratt Whitney Rd	Binks Forest Drive	4D	28605	32183	28630	27143	25048	2/13/2013	28400	-0.27%	2209	1195	1095	2357	1265	1105

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3431	SOUTHERN BLVD	Binks Forest Drive	Big Blue Trace	4D	30997	32120	35305	31051	33763	2/27/2013	32256	-2.97%	2748	1563	1193	2671	1339	1349
3413	SOUTHERN BLVD	Big Blue Trace	Forest Hill/Crestwood	4D	42116	43777	46881	43698	42972	4/2/2013	45548	-0.96%	3616	1997	1619	3610	1744	1893
3417	SOUTHERN BLVD	Forest Hill/Crestwood	Cypress Head	6D	48632	52215	54303	54813	53757	3/19/2013	56449	1.30%	4378	2895	1549	4615	1953	2674
3437	SOUTHERN BLVD	Cypress Head	Royal Palm Beach Blvd	6D	46769	51088	53158	55124	52734	3/18/2013	54435	0.79%	4285	2872	1495	4601	2028	2610
3409	SOUTHERN BLVD	Lamstein Ln	SR-7	8D	51800	61795	65897	61903	58568	3/18/2013	66355	0.23%	5002	3243	1856	5754	2389	3365
3415	SOUTHERN BLVD	SR 7	Sansbury's Way	8D	43500	53262	61147	60612	61843	3/18/2013	62335	0.64%	5482	3647	1890	5142	2230	2933
3105	SOUTHERN BLVD	Sansbury's Way	Pike Rd	8D	47700	54803	62010	63607	64205	3/18/2013	63709	0.91%	5474	3528	2036	5330	2125	3261
3223	SOUTHERN BLVD	Fla Turnpike Entrance	Jog Rd	8D	42908	50518	56858	56164	64470	1/16/2013	64572	4.33%	5809	3679	2188	2688	2306	3428
3643	SOUTHERN BLVD	Jog Rd	Haverhill Rd	8D	46081	56391	61432	64391	71670	3/18/2013	66973	2.92%	6444	4307	2152	5963	2309	3654
3637	SOUTHERN BLVD	Military Tr	Kirk Rd	8D	43800	48376	67701	58981	64992	2/5/2013	65389	-1.15%	6251	4396	1855	5892	2229	3671
3673	SOUTHERN BLVD	Kirk Rd	Congress Ave	8D	43264	50713	58752	59687	62292	2/5/2013	61462	1.51%	6079	4282	1797	5548	2065	3532
3217	SOUTHERN BLVD	Gem Lake	I-95	8D	40378	47271	51969	57619	59277	1/30/2013	60088	4.96%	5243	3225	2027	5352	2088	3316
3313	SOUTHERN BLVD	I-95	Parker Ave	8D	30369	27993	30776	32435	31248	1/30/2013	31008	0.25%	2564	1063	1501	2782	1639	1169
3823	SOUTHERN BLVD	Parker Ave	Dixie Hwy	5	23880	22486	22301	23955	23563	3/13/2013	23852	2.27%	1711	1087	624	2090	876	1243
3825	SOUTHERN BLVD	Dixie Hwy	Flagler Dr	5	12700	12662	11595	11178	11880	1/30/2013	12110	1.46%	1044	752	292	1138	419	719
3827	SOUTHERN BLVD	Flagler Dr	Ocean Blvd	2	13505	12289	12830	12639	12853	1/30/2013	12598	-0.61%	1140	901	239	1161	424	739
6605	SPANISH RIVER BLVD	Military Tr	IBM Access	4	23096	22427	22574	24012	24306	2/6/2013	25309	3.89%	2350	1628	729	2730	1093	1641
6305	SPANISH RIVER BLVD	IBM Access	Perimeter Rd	4	21324	22510	23173	24172	25095	1/23/2013	24839	2.34%	2386	1381	1009	2255	1005	1308
6811	SPANISH RIVER BLVD	Perimeter Rd	Old Dixie Hwy	4D	19789	18827	19254	19652	21869	1/30/2013	22441	5.24%	1737	937	900	2086	1187	922
6813	SPANISH RIVER BLVD	Old Dixie Hwy	Federal Hwy	4D	16385	15455	15945	16587	16546	1/30/2013	17185	2.53%	1392	682	710	1531	809	775
6801	SPANISH RIVER BLVD	Federal Hwy	Ocean Blvd	4D	17578	18779	18762	17097	18678	1/30/2013	18920	0.28%	1501	726	787	1580	808	796
7013	SR-15	State Market Rd SR-729	Section 20 Rd	2	8834	8106	11523	8646	10121	2/4/2013	7941	-11.67%	597	266	336	630	363	274

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6110	SR-7	Broward County Line	SW 18 St	6D	49380	51746	51995	49761	50413	1/9/2013	50835	-0.75%	4114	2173	1941	4380	2106	2274
6414	SR-7	SW 18 St	Palmetto Park Rd	6D	50071	49544	48959	47981	48967	1/14/2013	48843	-0.08%	4109	2454	1655	4187	1776	2411
6400	SR-7	Palmetto Park Rd	Glades Rd	6D	53670	51662	58187	52849	52807	1/14/2013	52539	-3.35%	4191	2277	1914	4496	2043	2481
6402	SR-7	Glades Rd	Yamato Rd	6D	43724	44934	44141	43581	43697	1/14/2013	43826	-0.24%	3411	1793	1618	3967	1966	2008
6412	SR-7	Yamato Rd	Clint Moore Rd	6D	33395	33081	31986	33322	31866	1/14/2013	34077	2.13%	3165	1587	1597	3084	1551	1533
6102	SR-7	Clint Moore Rd	Winner's Cir	6D	29398	26359	30642	28715	27539	1/14/2013	25376	-6.09%	2561	877	1704	2443	1511	940
5404	SR-7	Winner's Cir	W Atlantic Ave	4D	24783	23871	23965	23805	24166	1/14/2013	24260	0.41%	2472	866	1606	2318	1441	894
5400	SR-7	W Atlantic Ave	Lee Rd	4D	22618	22664	21746	21727	23084	1/14/2013	23010	1.90%	2413	712	1722	2256	1568	688
5402	SR-7	Lee Rd	Boynton Beach Blvd	4D	23380	22337	22402	23462	21983	2/25/2013	23639	1.81%	2426	656	1770	2232	1569	683
5102	SR-7	Boynton Beach Blvd	Hypoluxo Rd	6D	28339	26363	26203	26893	26253	2/25/2013	26364	0.20%	2591	666	1925	2344	1603	802
4402	SR-7	Hypoluxo Rd	Lantana Rd	6D	29720	27200	28880	31090	30179	4/2/2013	31546	2.99%	2924	992	1980	2832	1803	1082
4400	SR-7	Lantana Rd	Lake Worth Rd	6D	40185	38506	40402	39597	39267	3/20/2013	41864	1.19%	3410	1324	2089	3692	2208	1552
4406	SR-7	Lake Worth Rd	Stribling Way	8D	52211	53816	53939	55677	58127	3/20/2013	59916	3.57%	4417	2028	2457	5126	2842	2375
4102	SR-7	Stribling Way	Forest Hill Blvd	8D	45685	45360	43846	46586	46658	3/20/2013	47483	2.69%	3433	1516	1966	3805	1866	1984
3452	SR-7	Forest Hill Blvd	Pioneer Rd	8D	50663	51429	54731	55579	54221	3/20/2013	54973	0.15%	3585	1845	1740	4306	2297	2009
3408	SR-7	Pioneer Rd	Southern Blvd	8D	50133	51852	52008	54575	51355	3/20/2013	55870	2.42%	3710	2000	1793	4274	2082	2193
3406	SR-7	Southern Blvd	Belvedere Rd	8D	47213	44566	50065	48972	48293	3/20/2013	49924	-0.09%	2766	1269	1518	3933	2059	1874
3404	SR-7	Belvedere Rd	Okeechobee Bl	6D	35034	33319	36000	35936	37023	3/5/2013	38237	2.03%	2480	846	1666	3188	1726	1465
3468	SR-7	Okeechobee Blvd	Orange Grove Blvd	2			13661	16159	16580	3/4/2013	16657	6.83%	1548	263	1310	1520	1093	451
7004	SR-700	Hatton Hwy	SR-80	2	4251	5701		2485	3537	2/4/2013	4308		368	228	146	285	158	140
7026	SR-715	SR 80	Ave E	2	13851	13772	13540		12001	2/4/2013	12799	-1.86%	890	448	442	1123	531	606
7042	SR-715	W Canal St	Hooker Hwy	2	7877	7013	6865	6617	7043	2/4/2013	6477	-1.92%	527	214	313	530	284	248

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7029	SR-80	US 27	SR 715	4D	22622	19941	19792	18869	19132	2/4/2013	17529	-3.97%	1280	753	530	1465	694	786
7016	SR-80	Gator Blvd	Hooker Hwy	4D	12519	14648	14551	15934	15285	2/6/2013	14901	0.80%	1121	555	567	1235	607	645
7015	SR-80	N Main St	Hatton Hwy	4D	9205	10180	13531	9867	10201	2/4/2013	9777	-10.27%	823	315	550	742	436	306
2814	SR-811	Northlake Blvd	Lighthouse Dr	4D	23434	22709	22822	22473	21759	1/22/2013	21020	-2.70%	1502	763	739	1876	995	881
2828	SR-811	Lighthouse Dr	Burns Rd	4D	23813	23738	18599		21363	1/22/2013	22332	6.29%	1630	828	802	2035	1017	1018
2826	SR-811	Burns Rd	RCA Blvd	4D	26004	26332	27160	26269	25103	1/22/2013	26048	-1.38%	2067	1054	1013	2262	1223	1039
2824	SR-811	RCA Blvd	PGA Blvd	4D	26253	27372	26308	23583	24704	3/4/2013	24655	-2.14%	1896	1040	856	2294	1449	861
2820	SR-811	PGA Blvd	Hood Rd	6D	31295	39130	27845	40638		3/20/2013	41975	14.66%	3142	1119	2024	3609	1808	1821
2830	SR-811	Hood Rd	Donald Ross Rd	6D	30062	27726	30104	30178	30151	2/25/2013	29497	-0.68%	2386	1020	1387	2517	1312	1241
1308	SR-811	Donald Ross Rd	Toney Penna Dr	6D	27291	24899	25207	25494	25814	2/25/2013	26238	1.35%	2263	984	1279	2281	1222	1071
1808	SR-811	Toney Penna Dr	Indiantown Rd	6D	30334	28545	26804	27594	27409	3/13/2013	31267	5.27%	2273	1398	917	2725	1321	1451
1604	SR-811	Indiantown Rd	Center St	6D	30831	31545	31130	31532	30988	4/2/2013	32238	1.17%	2539	1060	1509	2595	1549	1046
1800	SR-811	Center St	US 1	6D	37061	36986	36517	39543	38822	3/20/2013	40441	3.46%	3112	1300	1886	3313	1918	1467
6620	ST ANDREWS BLVD	Palmetto Park Rd	Glades Rd	4D	22722	21966	20950	23185	22703	1/9/2013	23986	4.61%	1720	838	882	2178	1145	1135
6610	ST ANDREWS BLVD	Glades Rd	Potomac Rd	4D	20340	19911	20950	20719	20916	1/9/2013	21142	0.30%	1625	889	738	2072	995	1077
6624	ST ANDREWS BLVD	Potomac Rd	Yamato Rd	4D	15551	15244	15510	15165	15380	1/9/2013	15366	-0.31%	1519	875	667	1466	852	785
4415	STRIBLING WAY	Fairlane Farms	SR 7	2	6256	7210	8516	9708	10176	3/12/2013	11910	11.83%	1114	672	453	1119	604	545
4413	STRIBLING WAY	SR 7	Lyons Rd	2	3223	3366	3137	3851	3152	3/12/2013	4309	11.16%	679	332	347	410	249	161
3657	SUMMIT BLVD	Jog Rd	Haverhill Rd	4D	15331	13644	13419	12408	12669	1/9/2013	11988	-3.69%	1119	498	621	1115	549	588
3611	SUMMIT BLVD	Haverhill Rd	Military Tr	5	24936	21337	21828	19826	20600	1/9/2013	19803	-3.19%	1659	1137	533	1868	732	1136
3613	SUMMIT BLVD	Military Tr	Kirk Rd	5	28523	25562	27496	22250	20829	1/9/2013	21251	-8.23%	1742	1124	624	1979	800	1179
3615	SUMMIT BLVD	Kirk Rd	Davis Rd	5	27059	26399	25098	22979	21477	1/9/2013	19436	-8.17%	1636	1034	602	1777	657	1133

APPENDIX AN - FDOT & PBC TRAFFIC COUNTS

STA	ROAD	FROM	TO	LANES	DAILY TRAFFIC VOLUMES					2013 DAILY			2013 AM PEAK HOUR			2013 PM PEAK HOUR		
					2008	2009	2010	2011	2012	DATE	VOL	GR	2-WAY	NB/EB	SB/WB	2-WAY	NB/EB	SB/WB
3617	SUMMIT BLVD	Davis Rd	Congress Ave	5	36662	33608	29923	25910	22546	1/9/2013	23298	-8.00%	1878	1131	754	2134	885	1249
3619	SUMMIT BLVD	Congress Ave	Florida Mango Rd	5	18249	13092	13440	13110	12517	1/9/2013	11862	-4.08%	1044	562	493	1196	557	639
3621	SUMMIT BLVD	Florida Mango Rd	I-95	5	14752	13459	12673	10282	11208	1/9/2013	10236	-6.87%	964	590	387	979	427	552
3315	SUMMIT BLVD	I-95	Parker Ave	5	14421	11477	10536	9682	10122	3/18/2013	10646	0.35%	1008	640	377	1078	456	622
6401	SW 18TH ST	SR 7	Lyons Rd	4D	15848	15569	15375	15311	15798	1/9/2013	15047	-0.72%	1186	660	530	1326	554	772
6419	SW 18TH ST	Lyons Rd	Boca Rio Rd	4D	22205	21492	20920	20636	22557	1/9/2013	20966	0.07%	2258	1566	692	2124	720	1404
6213	SW 18TH ST	Boca Rio Rd	Powerline Rd	6D	25018	23770	24151	23267	23997	1/9/2013	23915	-0.33%	2400	1716	684	2414	891	1534
6613	SW 18TH ST	Powerline Rd	Military Tr	4D	24906	21763	23797	24922	23326	1/9/2013	22884	-1.30%	1954	1343	626	2295	799	1508
6313	SW 18TH ST	Military Tr	12th Ave SW	2	10820	10597	8995	8998	10750	1/9/2013	9973	3.50%	949	504	446	1188	454	734
6863	SW 18TH ST	12th Ave SW	Old Dixie Hwy	2	10795	10385	8901	8968	8687	1/16/2013	8501	-1.52%	736	524	293	869	338	533
6841	SW 18TH ST	Old Dixie Hwy	Federal Hwy	4D	10531	10452	9786	10208	10819	1/16/2013	11365	5.11%	920	457	475	1112	427	693
5808	SWINTON AVE	Atlantic Ave	10th St	2	9260	9560	9757	9891	10435	3/18/2013	9834	0.26%	691	254	437	890	453	467
5806	SWINTON AVE	Bush Blvd	Atlantic Ave	2	11045	10874	10960	11261	11673	3/18/2013	13859	8.14%	1034	429	605	1171	568	642
1607	TONEY PENNA RD	Maplewood Dr	Military Tr	2	13668	11733	11780	11942	12205	3/13/2013	11833	0.15%	951	580	371	1134	459	682
1609	TONEY PENNA RD	SR-811	Old Dixie Hwy	3	9685	9713	8775	8558	8720	3/13/2013	9171	1.48%	717	375	342	775	365	419
6629	TOWN CENTER RD	Butts Rd	Military Tr	4D	11118	10606	10252	9787	11837	1/16/2013	11650	4.35%	1043	458	585	1217	712	580
3647	TURNAGE BLVD	Australian Ave	Perimeter Rd	2	9577	6591	7279	6765	6495	1/22/2013	6686	-2.79%	239	134	96	543	343	201
3677	TURNAGE BLVD (I95 RA	PBIA	I-95	2	15610	14455	15933	15346	16185	1/22/2013	15062	-1.86%	741	271	474	1145	622	671
5844	US-1	SE 10th St	Atlantic Ave	3	13071	11938	11605	12231	12536	2/13/2013	13118	4.17%	1105		1105	992		992
5842	US-1	SE 10th St	Atlantic Ave	3	15198	13287	13268	13267	13705	2/12/2013	14298	2.52%	723	723		1288	1288	
5812	US-1	Atlantic Ave	NE 4th St	3	14379	13018	12963	13073	13133	2/12/2013	13361	1.01%	698	698		1291	1291	
5810	US-1	Atlantic Ave	NE 4th St	3	13358	12130	12453	12774	12858	2/13/2013	13083	1.66%	1120		1120	951		951

APPENDIX AN - FDOT & PBC TRAFFIC COUNTS

STA	ROAD	FROM	TO	LANES	DAILY TRAFFIC VOLUMES					2013 DAILY			2013 AM PEAK HOUR			2013 PM PEAK HOUR		
					2008	2009	2010	2011	2012	DATE	VOL	GR	2-WAY	NB/EB	SB/WB	2-WAY	NB/EB	SB/WB
5830	US-1	NE 4th St	George Bush Blvd	3	12328	11173	11137	11340	12256	2/13/2013	12881	4.97%	1242		1242	947		947
5828	US-1	NE 4th St	George Bush Blvd	3	12754	11912	12480	12252	13269	2/12/2013	13724	3.22%	709	709		1371	1371	
2800	US-1	Park Ave	Northlake Blvd	4D	29813	27109	25465	25042	24935	4/3/2013	22811	-3.60%	1458	631	827	1845	993	855
2832	US-1	Northlake Blvd	Lighthouse Dr	6D	30191	29581			24678	1/14/2013	25413		1784	931	864	2313	1126	1187
2838	US-1	Lighthouse Dr	PGA Blvd	4D	26304	25087	23420	21690	23081	2/6/2013	21822	-2.33%	1580	726	855	1838	957	911
2822	US-1	PGA Blvd	Universe Blvd	4D	31381	32139	26236	26719	31345	2/6/2013	28378	2.65%	2000	1064	951	2471	1239	1239
2840	US-1	Universe Blvd	Donald Ross Rd	4D	23028	23031	20044	21106	19833	3/20/2013	19827	-0.36%	1310	545	822	1753	1013	769
1312	US-1	Donald Ross Rd	Marcinski Rd	4D	32687	29892	28216	30665		4/2/2013	27703	-0.61%	1789	666	1168	2338	1300	1057
1816	US-1	Marcinski Rd	Ocean Way	4D				22275	20964	3/18/2013	20752		1305	622	780	1919	1128	793
1810	US-1	Ocean Way	Indiantown Rd	4D	26619	24570	25098	23452	24007	3/18/2013	24388	-0.95%	1551	660	891	2144	1204	969
1802	US-1	Indiantown Rd	Beach Rd	4D	21760	20085	20996	22845	21606	4/2/2013	20684	-0.50%	1278	442	837	1841	1107	763
1304	US-1	Beach Rd	County Line Rd	6D	23147	22445	24652	23474	23167	3/18/2013	24233	-0.57%	1822	556	1299	2381	1471	945
7032	US-27	Broward County Line	CR-827	4D	16531	12035	11425	10794	11859	2/4/2013	10996	-1.27%	837	318	580	669	394	295
7033	US-27	SR-80	Levee Rd	4D	19879	16200	17340	15475	15794	2/4/2013	19149	3.36%	1241	567	692	1208	711	515
3632	VILLAGE BLVD	Community Dr	Palm Beach Lakes Blvd	4	30400				23709	2/5/2013	24171		1666	709	1040	2017	1058	975
3660	VILLAGE BLVD	Cumberland Dr	Shenandoah Dr	4	18000				13156	2/20/2013	13315		1128	582	546	1216	653	563
3630	VILLAGE BLVD	45TH St	Cumberland Dr	4	24000				14849	2/20/2013	16152		1420	1006	414	1392	593	805
3652	WABASSO DR	Okeechobee Bl	Westgate Ave	2	6208	5402	5313	5293	5231	1/30/2013	5282	-0.19%	430	276	154	490	206	290
3435	WELLINGTON TRACE	Greenview Shores Bl	Big Blue Trace	4D	23940	23009	26296	22740	23806	2/27/2013	24475	-2.36%	1863	1056	807	2082	1045	1042
3433	WELLINGTON TRACE	Big Blue Trace	Forest Hill Blvd	4D	22153	21499		22197	21401	2/27/2013	22759		1826	1092	763	1925	943	992
3663	WESTGATE AVE	Military Tr	Wabasso Dr	5	14815	13354	13117	12887	13320	2/5/2013	12643	-1.22%	838	527	325	1170	479	692
3669	WESTGATE AVE	Wabasso Dr	Congress Ave	5	10793	9235	8495	8986	8703	2/5/2013	8534	0.15%	613	359	255	801	383	418

APPENDIX AN - FDOT & PBC TRAFFIC COUNTS

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					2008	2009	2010	2011	2012	DATE	VOL	GR	2-WAY	NB/EB	SB/WB	2-WAY	NB/EB	SB/WB
5662	WOOLBRIGHT RD	Hagen Ranch Rd	Jog Rd	4D	10802	11840	12007	14127	13796	2/27/2013	12904	2.43%	872	436	442	1084	442	652
5655	WOOLBRIGHT RD	Jog Rd	El Clair Ranch Rd	4D	17700	17219	17386	19957	18999	2/27/2013	18280	1.69%	1358	694	664	1534	662	872
5647	WOOLBRIGHT RD	El Clair Ranch Rd	Military Tr	4D	21454	21761	22396	22680	21602	1/28/2013	21493	-1.36%	1649	928	721	1776	797	1040
5645	WOOLBRIGHT RD	Military Tr	Congress Ave	4D	26247	25141	28851	25808	24137	2/27/2013	25279	-4.31%	2171	1093	1078	1976	821	1190
5205	WOOLBRIGHT RD	Congress Ave	I-95	6D	39121	44736	43173	43370	43062	1/28/2013	42817	-0.28%	3230	1559	1680	3340	1560	1793
5303	WOOLBRIGHT RD	I-95	US-1	5	38814	40572	39821	40877	41304	1/28/2013	40505	0.57%	3018	1396	1626	3256	1601	1675
5809	WOOLBRIGHT RD	US-1	Ocean Blvd	2	10785	10949	9054	10582	10494	1/28/2013	11141	7.16%	827	460	368	987	458	565
6433	YAMATO RD	Coral Ridge Dr	Cain Blvd	2	6480	6761	6424	7132	6995	1/8/2013	6700	1.41%	874	540	364	506	260	284
6427	YAMATO RD	Cain Blvd	SR 7	4D	15435	16748	16170	15941	15542	1/8/2013	15555	-1.28%	1555	997	558	1481	617	906
6421	YAMATO RD	SR 7	Lyons Rd	4D	17951	19841	18623	19960	21070	1/14/2013	19872	2.19%	1874	1366	508	1846	640	1242
6103	YAMATO RD	Lyons Rd	Boca West Dr	4D	27798	27011	26200	28363	28421	1/16/2013	28455	2.79%	2779	2170	609	2701	838	1939
6631	YAMATO RD	Boca West Dr	Jog Rd	6D	29915	35647	29117	32420	33835	2/6/2013	32822	4.07%	2915	2194	745	3102	1016	2081
6611	YAMATO RD	Jog Rd	Military Tr	6D	34874	37833	36324	37792	39351	2/6/2013	38168	1.66%	3547	2606	976	3775	1221	2558
6303	YAMATO RD	I-95	Dixie Hwy	6D	48098	46656	47857	49521	51333	1/30/2013	51339	2.37%	4337	2011	2415	4383	2347	2187
6807	YAMATO RD	Dixie Hwy	Federal Hwy	6D	24441	22813	23874	24787	25882	1/30/2013	27509	4.84%	2141	1222	970	2413	1356	1081

PALM BEACH COUNTY
TRAFFIC DIVISION
HISTORIC TRAFFIC GROWTH TABLE

CURRENT YEAR – 2014
(For use after June 1, 2014)

This document was developed as supporting data to be used in traffic impact studies seeking to demonstrate compliance with Article 12 of the Unified Land Development Code, the Traffic Performance Standards. This table shows historical peak season daily traffic counts from 2011 to 2014 as well as a calculated growth rate for each count station. A 3-year timeframe was used to calculate the growth rate shown.

For the purposes of this report, the default time frame should be 2009 – 2014. Where a growth trend other than a compounded rate appears to be appropriate for a given count station, this may be proposed and will be considered for use in a traffic impact study on a case-by-case basis.

Engineering judgment should be exercised in the use of the growth rates presented, particularly in the following cases:

1. Where negative growth rates were caused by opening parallel road facilities, construction activity, or other extraordinary circumstances.
2. Where extraordinarily high growth rates resulted from new road improvements, opening of a high traffic generator (e.g. a regional mall), or a low initial count.
3. For projects with a lengthy build out period (5 years or more), an area-wide growth rate may be considered per Article 12 of the ULDC.

UPDATED 10/7/2014

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STA	ROAD	FROM	TO	LANES	DAILY TRAFFIC VOLUMES					2014 DAILY			2014 AM PEAK HOUR			2014 PM PEAK HOUR		
					2009	2010	2011	2012	2013	DATE	VOL	GR	2-WAY	NB/EB	SB/WB	2-WAY	NB/EB	SB/WB
6609	PALMETTO PARK RD	St Andrews Blvd	Military Tr	6D	49249	52244	51512	53690	50371	1/8/2014	51342	-0.11%	4143	2948	1532	4234	1724	2647
6209	PALMETTO PARK RD	Military Tr	I-95	6D	57948	56384	60402	60307	55945	1/15/2014	58997	-0.78%	4420	2916	1806	4681	1949	2816
6309	PALMETTO PARK RD	I-95	12th St	6D	52726	56810	57712	54730	54475	4/2/2014	56015	-0.99%	4138	2454	1707	4378	2095	2410
6871	PALMETTO PARK RD	12th St	Boca Raton Blvd	4D	35686	34777	35491	36851	38124	1/15/2014	37697	2.03%	2661	1672	1181	3134	1333	1808
6873	PALMETTO PARK RD	Boca Raton Blvd	Old Dixie Hwy	4D	30370	30915	31865	32780		1/15/2014	29487	-2.55%	2007	1098	1071	2286	953	1428
6875	PALMETTO PARK RD	Old Dixie Hwy	Federal Hwy	4D	19933	20367	19473	21663	21031	1/15/2014	20798	2.22%	1308	747	668	1613	845	928
6877	PALMETTO PARK RD	Federal Hwy	NE 5th Ave	4D	16787	15668	15946	14396	15815	4/2/2014	14325	-3.51%	1055	567	507	1076	558	578
6803	PALMETTO PARK RD	NE 5th Ave	ICWW Bridge	4D	14259	14662	14639	14304	14725	1/15/2014	13533	-2.58%	983	500	489	1088	553	535
6817	PALMETTO PARK RD	ICWW Bridge	A1A	4D	11592	14135	14995	16174	16524	1/15/2014	15067	0.16%	1221	587	634	1198	646	646
1310	PALMWOOD AVE	Frederick Small Rd	Donald Ross Rd	2	4298	4147	4549	4200	4108	1/29/2014	3437	-8.92%	290	53	242	359	236	115
2833	PARK AVE	Federal Hwy	10TH St	2	6028	5608	4960	5343	4817	3/5/2014	5431	3.07%	358	207	165	532	352	198
3447	PERSIMMON BLVD	130th Ave N	Royal Palm Beach Bl	2	6127	5874	6006	5959	6123	1/27/2014	5977	-0.16%	594	427	169	563	231	345
2405	PGA BLVD	Bee Line Hwy	Ryder Cup Blvd (Jog Rd)	2	3460	3479	3742	3896	3528	1/7/2014	3518	-2.04%	344	124	218	380	219	163
2103	PGA BLVD	Ryder Cup Blvd (Jog Rd)	Florida Turnpike	4D	22839	22995	23541	21862	22859	2/19/2014	25572	2.80%	2126	912	1214	2255	1021	1234
2201	PGA BLVD	Florida Turnpike	Central Blvd	6D	41099	45217	41757	41535	41271	3/25/2014	43627	1.47%	3697	2110	1587	3855	1786	2076
2609	PGA BLVD	Central Blvd	Military Tr	6D	45738	44296	45039	47150	43414	2/19/2014	47278	1.63%	3050	1554	1639	3842	2045	2142
2203	PGA BLVD	Military Tr	I-95	6D	41500	46147		44991	45303	2/26/2014	49901		3694	2395	1328	4166	2147	2019
2303	PGA BLVD	I-95	SR 811	8D	60575	59950		62770		2/24/2014	69379		4937	3458	1474	5830	2912	2940
2829	PGA BLVD	SR 811	Gardens Mall	6D	50480	51677	63185	52067	51188	2/24/2014	54625	-4.74%	3877	2753	1124	4277	2083	2257
2805	PGA BLVD	Gardens Mall	Prosperity Farms Rd	6D	37867	38076		37764	37346	3/26/2014	41536		2828	1816	1012	3275	1559	1722
2803	PGA BLVD	Prosperity Farms Rd	Ellison Wilson Rd	6D	38088	39880		38984	39097	3/3/2014	39794		2988	1954	1043	3333	1443	1894
2837	PGA BLVD	Ellison Wilson Rd	Federal Hwy	6D	26650	26470	25192	26830	25880	3/3/2014	26974	2.30%	1744	1209	567	2128	973	1178